



Application for Participation in the Enbridge Donation Program

Request Date: March 29, 2016

Organization name: City of Albion Recreation Department

Description of organization: Government Entity

Legal address of organization: 112 W. Cass Street, Albion, MI 49224

Purpose(s) of grant: Holland Park Upgrades

Amount requested: \$35,000

Total estimated project cost: \$50,000

Requested funding date: May 1, 2016 or as soon as feasible

Estimated project completion date: Summer 2016

Person authorized to apply: Sheryl Mitchell, City Manager

Signature of authorized person: *Sheryl Mitchell*

Contact telephone and e-mail: 517.629.7176

Brief description of project/activity(ies):

Project Overview and Priorities: (1) Basketball Court - resurfacing, lights, benches: \$10,000. (2) Restroom upgrades: \$20,000. (3) Kalamazoo River Cleanup: \$5,000. Details attached.

Purpose of the program/project and intended outcome(s):

Details attached.



Will the grant be used as a match to leverage additional funding (such as state funding) or pooled with existing funds to carry out the project? If yes, please describe. Include the grant program, timing, and contact information and attach a copy of the grant application. Describe any additional funding sources.

The proposed projects will be combined with existing City of Albion resources to carry out the projects. Much of the labor for the clean up and painting is from organized volunteer organizations.

Information to be submitted with a grant application must include:

- Description of the applicant organization
- W-9
- Documentation of your tax status (nonprofit organization, government entity)
- Resolution of support for the grant application from an oversight board or committee (if applicable)
- Project cost estimates including breakdown of expenses, administrative costs and other relevant financial information
- Financial statements covering the previous two years, showing the percentage of funds allocated to overhead and administrative expenses, fundraising, and projects in furtherance of the organization's purpose

Additional information may be attached, including:

- Drawings, diagrams, illustrations, or other information describing the proposed project
- Applicant history related to the proposed project or past similar projects
- Letters of Support

Brief description of project/activity (ies):

The Albion Recreation Department would like to propose that the Tillman Cornelius basketball courts at Holland Park be resurfaced, that lighting for the basketball courts be added, that spectator bleachers be added, that the Kalamazoo River be cleared and cleaned and that the restrooms be upgraded to make them handicap accessible. Holland Park is a historical park located in the southwestern section of Albion. Holland Park is currently undergoing a Transformation, however the above noted upgrades and or additions were not included in the initial planning for the Transformation of Holland Park. It is the belief of the Albion Recreation Department that the above noted projects warrant attention and that by completing these projects the overall functionality of the park and the surrounding waterways would greatly enhanced and much more beneficial to the citizens of Albion.

The site where the basketball courts are located was originally built and used for tennis. Approximately 11 years ago the basketball courts were relocated to this location due to safety concerns associated with the designated basketball courts. The relocation of the basketball courts essentially entailed the purchase and placement of basketball supports and rims at the new location and the lining of the courts. At that time and since nothing has been done to the surface of the courts, which prior to the move sat dormant and were not maintained and in need of repair. Over the past 11+ years the playing surface has developed deep cracks in it and there is a hole in one section of the court where the original poles which supported the tennis nets were located. The only maintenance that has taken place on the courts has been the periodic filling of minor cracks on the playing surface and the lining of the courts.

The proposed lighting of the basketball courts will allow for expanded programming. The lighting of the courts will allow for the basketball courts to be used for extended periods of time during the summer hours. It will also allow for other activities which can be held on the basketball courts other than basketball, such as street dances. It will allow us to have many more options than we currently have. Further it would enhance the overall offering of the park and add a dimension that is not currently available. This would add to the theme of transformation which is already taking place in Holland Park and the surrounding Kalamazoo River riverfront

The cleanup of the Kalamazoo River which borders the Holland Park to the north would greatly expand options along the Kalamazoo River and the entire area along the river. There are several small parks along the river which to a great extent aren't utilized to their full potential. It is the belief of the Albion Recreation Department that this is due in part to the condition of the adjacent Kalamazoo River. The River is littered with trees which over the years have decayed and fallen into or across the river. Debris and other garbage has been caught on these trees and is an eyesore. The cleanup of the Kalamazoo River would greatly enhance the appearance of the waterway and the clearing would create more recreational activities and opportunities for residents such as canoeing and kayaking. The cleanup and clearing also would help in the development of a clear pathway along the Kalamazoo River between Albion and Marshall which would benefit both communities. A reciprocal benefit would be that individuals and families would have the opportunity to engage in activities in the small parks along the Kalamazoo River.

The conversion and expansion of the current restroom facilities to make them handicap accessible would greatly enhance and benefit the entire park, by allowing individuals who possess a physical handicap to engage in activities in the park that they presently may choose not to involve themselves in because of a lack of adequate facilities necessary to meet their particular needs. This would allow for those handicapped individuals to fully enjoy Holland Park and all of the surrounding area. The restrooms are located in the

center of the park and are easily accessible to those using the park facilities, the nearby walking/bike trail and those who may use the Kalamazoo River waterways. To make the current restroom facility handicap accessible would be a significant improvement to the overall park and would make the entire park and area more user friendly and will increase the potential number of people who will have the ability to use the area.

The spectator bleaching would allow for spectators who come to various events in the park to have seating. Current seating is limited to one bleacher section which holds approximately 25 people. More often than not spectators either sit on the grass, bring their own chairs or stand along the fence surrounding the basketball courts. The lack of seating is a barrier to people attending events. The Albion Recreation Department strongly believes that if we had more spectator bleachers then more people, especially seniors would be willing to support sponsored activities. Again the addition of spectator bleachers would make the park more people friendly and enhance the overall flow of the park.

Purpose of the program/Project and intended outcome(s)

The purpose of the proposed projects is to make the Transformation of Holland Park a true transformation which encompasses every aspect and segment of the park. The basketball courts has historically been the major focal point of the park and will continue to be so for many years into the future. Therefore it only makes sense that this area receives the same upgrade as other parts of the park. Combining the historical elements of the park is undoubtedly important, but the practical application of the different segments of the park are just as important. The proposed projects will bring the park to life for those who use it on a regular basis. The Kalamazoo River which flows to the north of the park and which borders the park has enormous potential to add to the vibrancy and enthusiasm associated with the Holland Park Transformation as it will expand upon the recreational offerings that we currently offer which will reach a broader segment of residents. Additionally The Kalamazoo River offers a potential means through which the communities of Albion and Marshall can tie together via the waterways. The restroom and bleachers additions would allow for us to meet the needs of all of our citizens who would use the park and/ or the nearby available recreational outlets. The ultimate outcome is that the overall flow and use of Holland Park will be enhanced and that the park will be a major attraction where residents and visitors both can actively engage in positive recreational activities.

INFORMATIONAL ITEMS



OFFICE MEMORANDUM

DATE: March 30, 2016

TO: Sheryl Mitchell,
City Manager of Albion

FROM: Brandan Maurer
Traffic & Safety and Operations Engineer, Marshall TSC

SUBJECT: Traffic and Crash Analysis
M-99 Ash Street to Michigan Avenue
Calhoun County
JN 116324
CS 13092 MP 5.750 – 6.075
PR 1296305 MP 6.805 – 7.127

Introduction

On March 21st, 2016 representatives from the Michigan Department of Transportation (MDOT) Marshall TSC and Southwest Region Office held a public open house in the City of Albion to discuss the proposed project on M-99 (Superior Street) from Ash Street to Vine Street. The project includes the reconstruction of the existing brick pavement, complete streetscape replacement, and the relocation and reconstruction of municipal utilities. With the proposed reconstruction of M-99, it has been proposed to convert the road from four lanes to a three lane roadway with one thru lane for each direction, a center left turn lane, and paved shoulders that will provide bicycle access and a buffer for the on street parking. In conjunction with the four to three lane conversion, curb bump outs have been proposed at all of the intersections and major pedestrian locations to provide a safer and more walkable community.

At the public open house, several questions were presented regarding historical traffic volumes and crash data. The following tables and figures have been developed based upon these questions to illustrate the changes in traffic volumes along M-99 between Ash Street and Michigan Avenue in comparison to the crash history.

Traffic Analysis

Table 1 below display the recorded traffic data along M-99 between Ash Street and Michigan Avenue. Annual Average Daily Traffic (AADT) Commercial Annual Average Daily Traffic (CAADT) and the percentage of commercial vehicles are all listed from 1994 to 2013.

Table 1. Annual Average Daily Traffic Report

Year	AADT	CAADT	Commercial (%)
1994	6685	210	3.14%
1995	6685	210	3.14%
1996	7007	210	3.00%
1997	7007	109	1.56%
1998	7441	109	1.46%
1999	7582	109	1.44%
2000	6979	214	3.07%
2001	7063	214	3.03%
2002	6967	214	3.07%
2003	6967	214	3.07%
2004	6188	131	2.12%
2005	6077	130	2.14%
2007	7502	142	1.89%
2008	8009	129	1.61%
2009	8001	115	1.44%
2010	6341	126	1.99%
2011	6214	124	2.00%
2012	6320	102	1.61%
2013	5426	104	1.92%

Figure 1 below takes the data presented above and puts it in a graphical form. In addition to the raw data presented in Table 1 above a linear trend line was added to help illustrate the overall change in traffic volume from 1996 to 2013. In general, the traffic volumes have fluctuated over the years, but overall, there appears to be a negative trend in both AADT and CAADT.

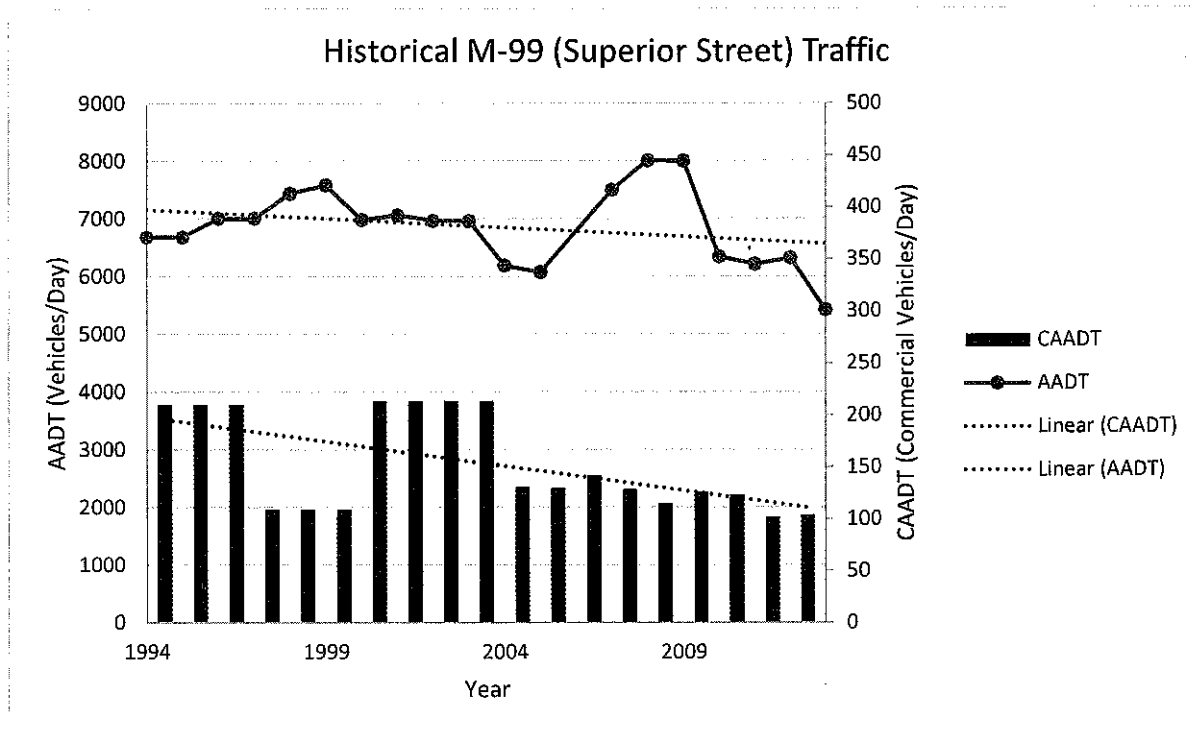


Figure 1. Historical M-99 (Superior Street) Traffic

Crash Analysis

Table 2 below display the recorded crash data along M-99 between Ash Street and Michigan Avenue from 2005 to 2015. The three highest crash types reported along this segment of M-99 were side-swipe same, parking, and rear end straight respectively. During this timeframe, there were no reported fatalities or level A injuries (high severity injuries).

Table 2. Crash Data 2005-2015

Crash Type	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Grand Total
Side-Swipe Same	2	3	1	13	1	1	2	1	5		3	32
Parking	4	3	1		2	3	2		1	3	1	20
Rear End Straight	2	4	1		1	3	1	2	2	2	1	19
Angle Straight	3	4	3	2	1			1		1	2	17
Misc. Multiple Vehicle	2	2	2	2						2		10
Backing	1	1		3		1		1			1	8
Angle Turn			1	1	1		1	2		1	1	8
Side-Swipe Opposite		2		3					1			6
Head-On Left-Turn Not Associated with Driveway	1			1		3				1		6
Bicycle			2			1		1				4
Fixed Object		1							1	2		4
Pedestrian		1		1	1					1		4
Head-on	1	1		1								3
Misc. Single Vehicle	1			1				1				3
Rear End Left Turn	1	1										2
Rear End Driveway		1							1			2
Other Object											1	1
Grand Total	18	24	11	28	7	12	6	9	11	13	10	149

Figure 2 below illustrates the crash data presented above for the four highest crash types.

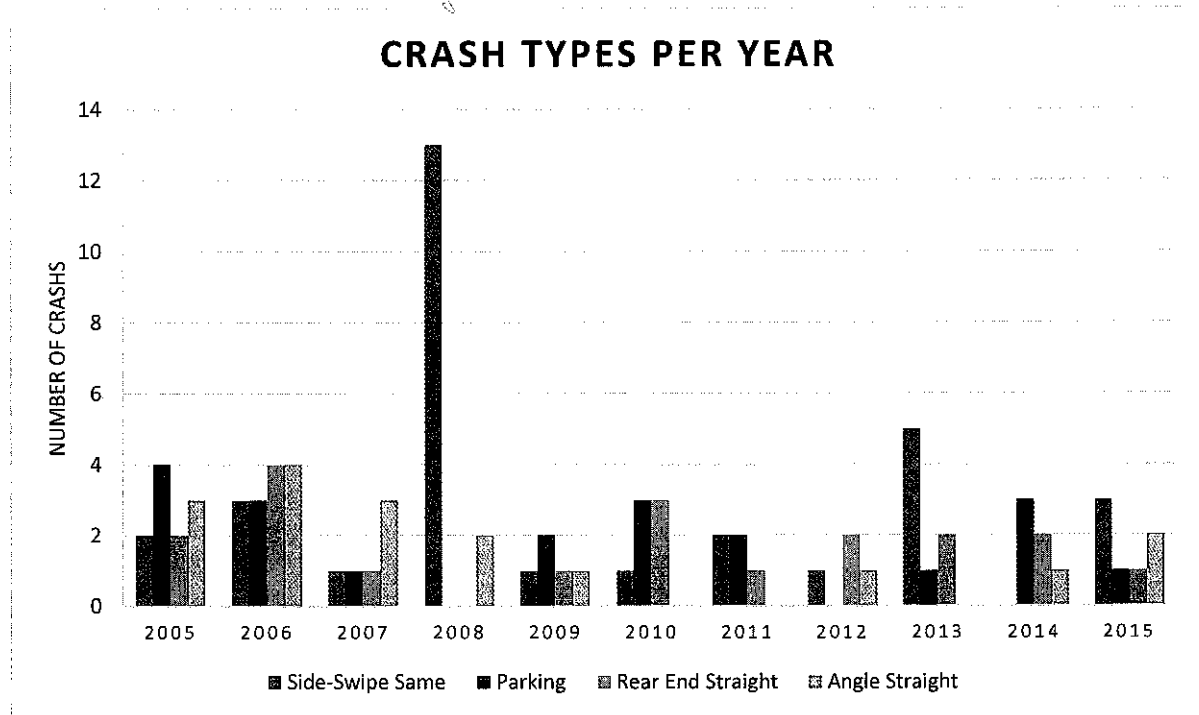


Figure 2. Top Crashes per Year 2005-2015

Having reviewed the detailed crash history and historical traffic volumes along the proposed project site, the results of this analysis show that there is no evidence that the proposed four to three lane conversion will negatively impact the safety or operational efficiency of M-99.

If you have any questions regarding this document please call me at 269-789-0560.

Brandan Maurer

Digitally signed by Brandan Maurer
 DN: cn=Brandan Maurer, o=MDOT,
 ou=Marshall TSC TSO,
 email=maurerb@michigan.gov, c=US
 Date: 2016.03.30 11:25:02 -04'00'

Brandan Maurer
 Traffic, Safety & Operations Engineer
 MDOT – Marshall TSC



OFFICE MEMORANDUM

DATE: March 24, 2016

FILE: 13043-006

TO: Mark Dionise
Marshall TSC Manager

USE RESTRICTED
23 USC 409 and/or 402(k) (1)

FROM: Paula J. Corlett, Supervising Engineer
Signal Operations Unit
Operations Field Services Division

SUBJECT: Traffic Signal Removal Memo #1
BL-94/M-99 (Michigan) at Clark Street
City of Albion, Calhoun County

We evaluated the subject location's need for traffic signal removal. An analysis based on January 2016 traffic counts revealed this traffic signal no longer met minimum vehicular volume requirement. For a traffic signal to be retained, one of the following nine traffic signal warrants of the *Michigan Manual on Uniform Traffic Control Devices* (MMUTCD) must be met:

- Warrant 1A, Eight-Hour Vehicular Volume—not met.
- Warrant 1B, Interruption of Continuous Traffic—not met.
- Warrant 2, Four-Hour Vehicular Volume—not met.
- Warrant 3, Peak Hour—not met.
- Warrant 4, Minimum Pedestrian Volume—not met.
- Warrant 5, School Crossing, not applicable.
- Warrant 6, Coordinated Signal System—not applicable.
- Warrant 7, Crash Experience— not applicable.
- Warrant 8, Roadway Network—not applicable.
- Warrant 9, Intersection Near a Grade Crossing—not applicable.

A field review of the intersection was conducted on March 3, 2016, with the Michigan State Police and MDOT personnel from the TSC and Southwest Region Office. The MDOT Geometrics Unit reviewed the intersection on a separate occasion and submitted input to the Signals Unit as well. Among all groups, a general consensus regarding intersection sight distance concern was noted, specifically for the Clark Street approaches. Based on existing sight restrictions and volumes, it was agreed upon to flash the signal as a four-way stop controlled intersection after the necessary public notice was conducted.

A Synchro analysis for the daily peak hour (5:00 p.m. – 6:00 p.m.) was conducted for the existing signalized operation and a four-way stop controlled operation.

SimTraffic Results - Level of Service (Delay - seconds/vehicle)		
PM PEAK	Signalized	4-way Stop
EB BL-94/M-99 (Michigan)	A (9.8)	A (5.1)
WB BL-94/M-99 (Michigan)	A (7.9)	A (4.3)
NB Clark Street	A (8.8)	A (4.7)
SB Clark Street	B (12.8)	A (3.6)
Overall	A (9.7)	A (4.4)

Analysis shows overall intersection delay decreases with the change from signal control to 4-way stop control.

Evaluation of crash patterns completed for the intersection showed four reported crashes for the three-year period from January 1, 2013, through December 31, 2015. The CRIS report indicated none of these crashes were right-angle type crashes (the type of crash susceptible to correction with signalization).

Since the initial review indicates the intersection might operate better under four-way stop control, a more in-depth review is necessary. According to the *Michigan Manual on Uniform Traffic Control Devices*, when a traffic signal is being considered for removal, the signal must be placed in 24-hour flash mode for a minimum of 90 days. During this 90-day period, volume data, delay data and crash information will be collected to evaluate the intersection under 4-way stop control.

The Signals Unit and Marshall TSC informed the City of Albion of the study via a meeting held at City Hall on March 16, 2016. Based on discussions with city staff, it was determined to flash as soon as possible and to continue to flash the signal as a four-way stop controlled intersection during the time students return for classes at Albion College. The final determination regarding the removal of the traffic signal will occur after college classes resume in fall of 2016. Furthermore, the Signals Unit will collect the data before Albion College adjourns for the summer.

Please inform local agencies and those concerned of our recommendations. We recommend this intersection be placed in flash operation during the time period specified above. Once under flash control, we will request a full traffic survey be done before Albion College adjourns for the summer.

Paula J. Corlett

Digitally signed by Paula J. Corlett
 DN: cn=Paula J. Corlett, o=Michigan Department
 of Transportation, ou=Traffic Signals Unit,
 email=corlett@micigan.gov, c=US
 Date: 2016.03.24 12:31:50 -0400

Supervising Engineer

Attachments

PJC:NJB:js

cc: D. Adelman
 B. Maurer Marshall TSC
 A. Hubbell, Marshall TSC
 S. Brink, Southwest Region
 K. Avery, Southwest Region

USE RESTRICTED
 23 USC 409 and/or 402(k) (1)

Summary of Warrants

Spot Number:	13043-006		
Major Street:	M-99	Minor Street:	Clark
Intersection:	M-99 at Clark		
City/Twp:	Albion		
Date Performed:	1/25/15	Performed By:	Bouvy
Date Volumes Collected:	1/6/2015		

Warrant	Condition	Is Warrant Met
Data Has Been Validated		
WARRANT 1: Eight-Hour Vehicular Volume	Condition A	
	Condition B	
	Condition A&B	
WARRANT 2: Four-Hour Vehicular Volume	(70%)	
WARRANT 3: Peak-Hour Vehicular Volume	(70%)	#N/A
	Condition A	#N/A
	Condition B	
WARRANT 4: Pedestrian Volume	(70%)	
	Four Hour	N/A
	Peak Hour	N/A
	(Threshold) HAWK	
	(Threshold) RRFB	
WARRANT 5: School Crossing		
WARRANT 6: Coordinated Signal System		0
WARRANT 7: Crash Experience	Condition A	
	Condition B	
WARRANT 8: Roadway Network		0
WARRANT 9: Intersection Near a Grade Crossing		#N/A

Issue to Be Addressed by Signalization:

Determine if signal is warranted. Note that WB has incomplete data. Relatively low number of peds.

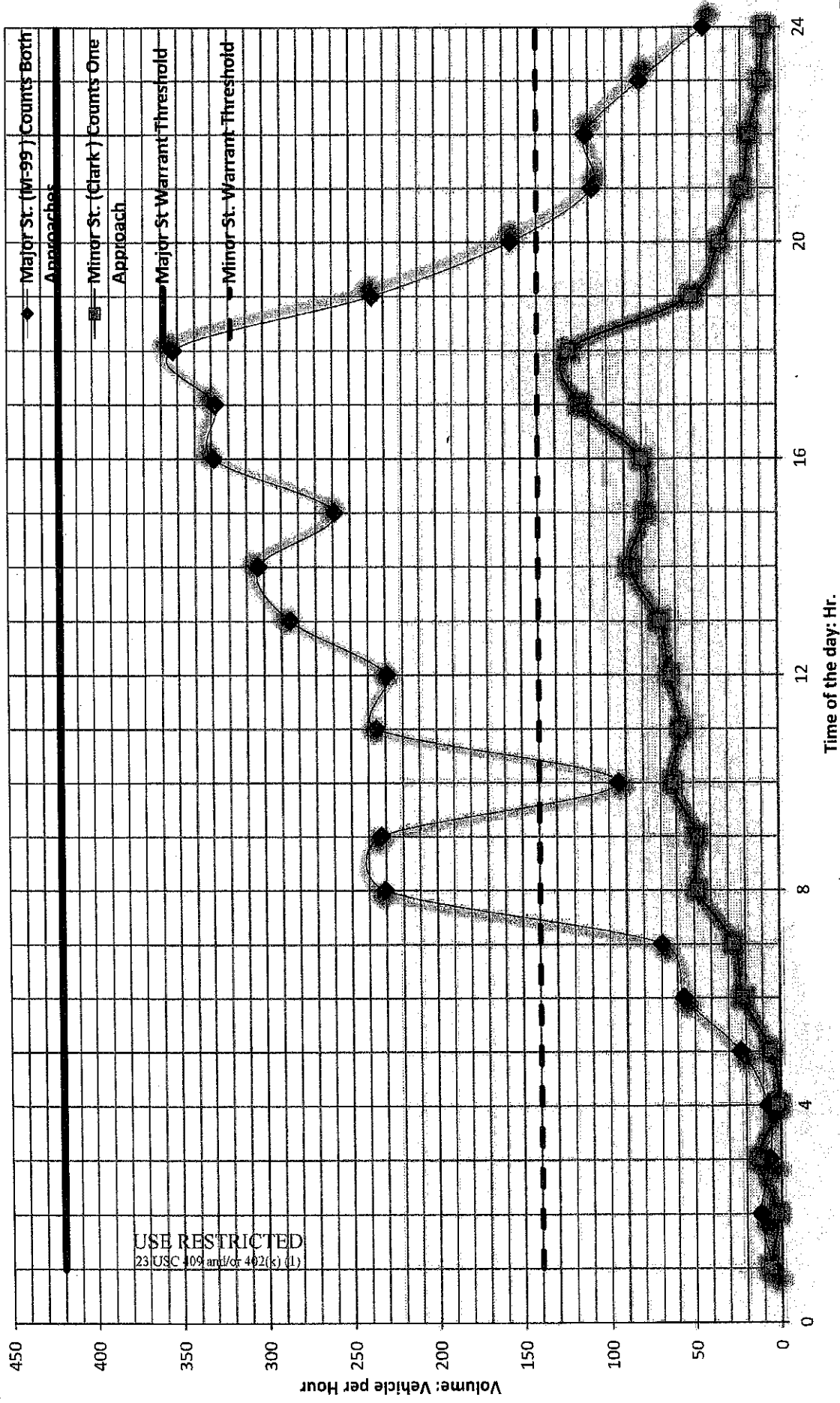


FIGURE 1: WARRANT 1A

IS THERE A REDUCTION IN THE WARRANT THRESHOLDS TO 70% ...
 1- DUE TO SPEED? NO
 2- DUE TO ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000? YES

Spot Number: 13043-006
M-99 @ Clark
 NO. OF LANES ON MAJOR ST.? 2
 NO. OF LANES ON MINOR ST.? 2

Number of Hours that met the Warrant: 0
 Does this intersection meet Warrant 1A for signal installation? NO
 Data Collection Date: 1/6/2015

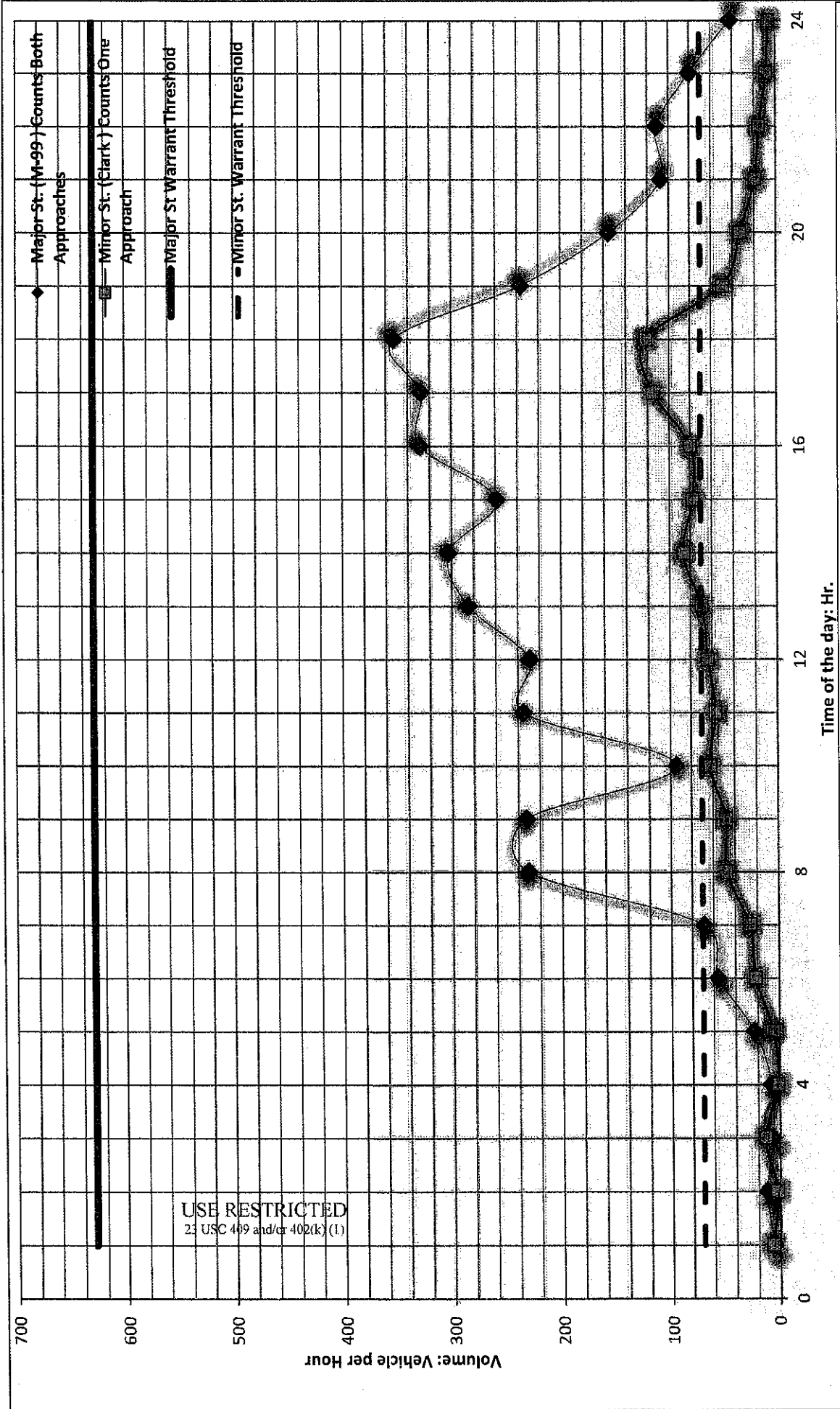


FIGURE 1: WARRANT 1B

Spot Number: 13043-006

M-99 @ Clark

NO. OF LANES ON MAJOR ST.? 2

NO. OF LANES ON MINOR ST.? 2

Number of Hours that met the Warrant: 0

Does this intersection meet Warrant 1B for signal installation? NO

IS THERE A REDUCTION IN THE WARRANT THRESHOLDS TO 70% ...

1- DUE TO SPEED? NO

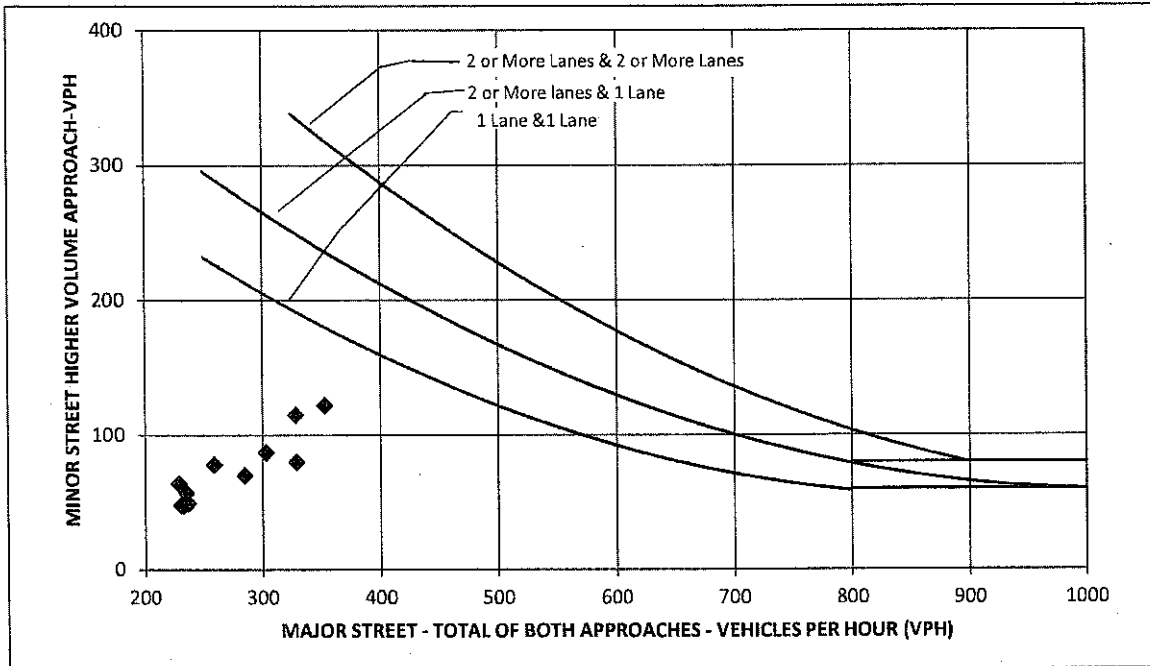
2- DUE TO ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000? YES

Data Collection Date: 1/6/2015

**Michigan Manual of Uniform Traffic Control Devices
Worksheet for Signal Warrants (Section 4C)
WARRANT 2: Four-Hour Vehicular Volume**

Spot Number:	13043-006		
Intersection:	M-99 @ Clark		
Date	1/25/15	by	Bouvy

2	: No. of Lanes on Major St.
2	: No. of Lanes on Minor St.
40	: Speed limit or 85th Percentile? (MPH)
YES	: Is the intersection within an Isolated community?
8500	: What is the population of the isolated community?



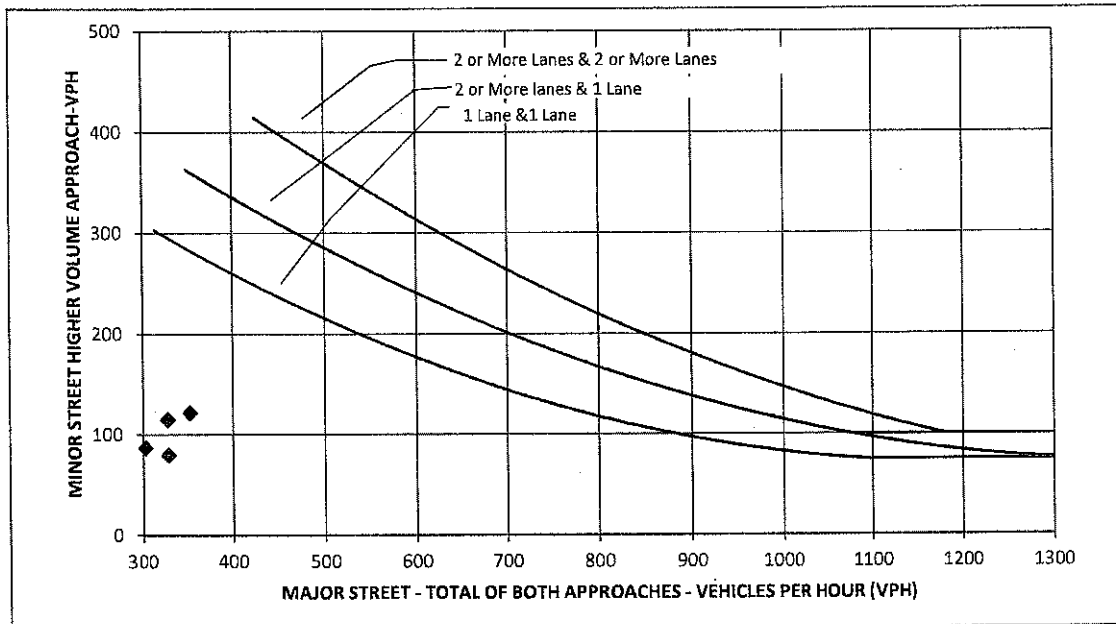
How Many Hours Are Met	0
Is Warrant (70%) Met?	NO

USE RESTRICTED
23 USC 409 and/or 402(k) (1)

**Michigan Manual of Uniform Traffic Control Devices
Worksheet for Signal Warrants (Section 4C)
WARRANT 3 B(70%): Peak-Hour Vehicular Volume**

Spot Number:	13043-006		
Intersection:	M-99 @ Clark		
Date	1/25/15	by	Bouvy

2	: No. of Lanes on Major St.
2	: No. of Lanes on Minor St.
40	: Speed limit or 85th Percentile? (MPH)
YES	: Is the intersection within an isolated community?
8500	: What is the of the population isolated community?



How Many Hours Are Met	0
Is Warrant (70%) Met?	NO

USE RESTRICTED
23 USC 409 and/or 402(k) (1)

SimTraffic Performance Report
Baseline

3/17/2016

3: Performance by approach

Denied Delay (hr)	0.0	0.0	0.1	0.0	0.1
Denied Del/Veh (s)	0.7	0.7	1.9	0.6	0.9
Total Delay (hr)	0.5	0.2	0.5	0.4	1.5
Total Del/Veh (s)	9.8	8.8	12.8	7.9	9.7

Total Network Performance

Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.8
Total Delay (hr)	1.6
Total Del/Veh (s)	10.4

USE RESTRICTED
23 USC 409 and/or 402(k) (1)

SimTraffic Performance Report

Baseline

3/17/2016

3: Performance by approach

Denied Delay (hr)	0.0	0.0	0.1	0.0	0.1
Denied Del/Veh (s)	0.6	0.6	2.0	0.6	1.0
Total Delay (hr)	0.2	0.1	0.2	0.2	0.7
Total Del/Veh (s)	5.1	4.3	4.7	3.6	4.4

Total Network Performance

Denied Delay (hr)	0.1
Denied Del/Veh (s)	1.0
Total Delay (hr)	0.8
Total Del/Veh (s)	6.1

USE RESTRICTED
23 USC 409 and/or 402(k) (1)

Michigan Department of Transportation One Line Listing Crash Report

State of Michigan

Report Module: Safety Management Analysis

Today's Date: Thursday, March 17, 2016

Dates: 1/1/2013 to 12/31/2016

Sort Order: PRNo, Milepoint, Date of Crash

Animal Crashes: Excluded

Criteria: Custom Selection

Start Date >= 1/1/2013

End Date <= 12/31/2016

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23 USC 409 and/or 402(k) (1)

Disclaimer: Crash information is conditioned upon your agreement to comply with the requirements of federal law. MDOT provides access to this information with the understanding that it will be used strictly for scientific research purposes and/or for governmental purposes by governmental units. MDOT authorizes no other use of this privileged information. MDOT does not waive any privilege based on this limited release of information.

Michigan Department of Transportation One Line Listing Crash Report

Region	Number	MP	Area	Location	Crash Type	Vehicle 1 Dir Impact	Vehicle 1 Intent	Vehicle 2 Dir Impact	Vehicle 2 Intent	Weather	Surface Condition	Day	Hour	Date	UD-10	Fatal	A	B	C	Injury	PDO	Alcohol	Drugs	Involves	
Southwest	13043	2.481	3131227	0.929	Intersection	E Front-Right	Front-Right	U Unknown	Unneeded	Snow	Snowy	SAT	NOON-04PM	12/14/2013	8807040	0	0	0	0	0	0	0	0	0	0
Southwest	13043	2.431	3131227	0.929	Intersection	Other Intscn Rel	W Rear-Cen	W Front-Cen	Go straight	Clear	Dry	TUE	09PM-10PM	11/15/2013	8766779	0	0	0	0	0	0	0	0	0	0
Southwest	13043	2.431	3131227	0.929	Intersection	Within Intscn	R-END E Front-Cen	E None	Stopped on Road	Clear	Dry	MON	05PM-06PM	8/12/2013	8704935	0	0	0	0	0	0	0	0	0	0
Southwest	13043	2.431	3131227	0.929	Intersection	Other Intscn Rel	R-END W Front-Rght	W Rear-Rght	Stopped on Road	Clear	Dry	WED	06PM-07PM	9/18/2013	8722355	0	0	0	0	0	0	0	0	0	0
Southwest	13043	2.425	3131227	0.923	Intersection	Straight Rd	OTOBJ W Front-Cen	U Unknown	Unneeded	Rain	Wet	SAT	01AM-02AM	7/20/2013	8682258	0	0	0	0	0	0	0	0	0	0
Southwest	0	0000	1313107	0.258	Midblock	Straight Rd	N Undercan	U Unknown	Unneeded	Clear	Dry	THU	06PM-07PM	02/12/2014	9028925	0	0	0	0	0	0	0	0	0	0

USE RESTRICTED
23 USC 409 and/or 402(k) (1)

Disclaimer: Crash information is conditioned upon your agreement to comply with the requirements of federal law. MDOIT provides access to this information with the understanding that it will be used strictly for scientific research purposes and/or for governmental purposes by governmental units. MDOIT authorizes no other use of this privileged information. MDOIT does not waive any privilege based on this limited release of information.

Michigan Department
Of Transportation
1776 (12/15)

TRAFFIC SURVEY REQUEST

INSTRUCTIONS: Complete and return Traffic Survey Request form to "Statewide Field Operations Supervisor", Michigan Department of Transportation, Bureau of Transportation Planning, Data Collection Section, 425 W. Ottawa, P.O. Box 30050, Lansing, MI 48909 or by "Clicking the Submit" button at the top of the page.
All fields highlighted in Red must be filled in before the request can be submitted.

DATE SUBMITTED 12-30-15	
DATE REQUEST RECEIVED (Office use only) 1/4/2016	
STUDY NUMBER (Office use only) 049	
CONTROL SECTION 13043	SPOT NUMBER 006
PR-NO 3131227	
PR MILE POINT 0.929	

LOCATION (Site map must be submitted with request)

M-99 (Michigan) @ Clark St
City of Albion, Calhoun County

Please see map attached.

<input checked="" type="checkbox"/> 24 hour vehicle volumes on each of the legs <input type="checkbox"/> 48 hours vehicle volumes on each of the legs	<input type="checkbox"/> Gap Study on _____
<input checked="" type="checkbox"/> 8 hour manual vehicle turning movements 7am to 9am 11am to 1pm 2pm to 6pm All TM's will be 3 Bin classified count unless specified.	<input type="checkbox"/> Delay Study on _____ 5-Minute Interval Method Note Time and extent of backups
<input checked="" type="checkbox"/> 8 hour manual pedestrian movements <input checked="" type="checkbox"/> Separate school children from adult	<input type="checkbox"/> Speed Studies at locations _____ shown on Drawing No. _____ <input type="checkbox"/> New <input type="checkbox"/> Recheck
<input checked="" type="checkbox"/> Notify Region Traffic and Safety Engineer of date survey is to be taken	
FULL NAME OF REQUESTOR Nathan Bouvy	INDEX CODE (if using overhead)
PHONE NUMBER 517-636-5013	PCA CODE 51000
EMAIL ADDRESS Bouvyn1@michigan.gov	PROJECT JOB NO. 129104
SPECIAL NOTES	PHASE 00

Please collect counts as weather permits and by no later than May 1, 2015. Please contact Brandan Maurer once a date is scheduled for the survey. I believe the college has spring break during March.

This request is to determine if signal is still warranted at this location.

USE RESTRICTED
23 USC 409 and/or 402(b) (1)

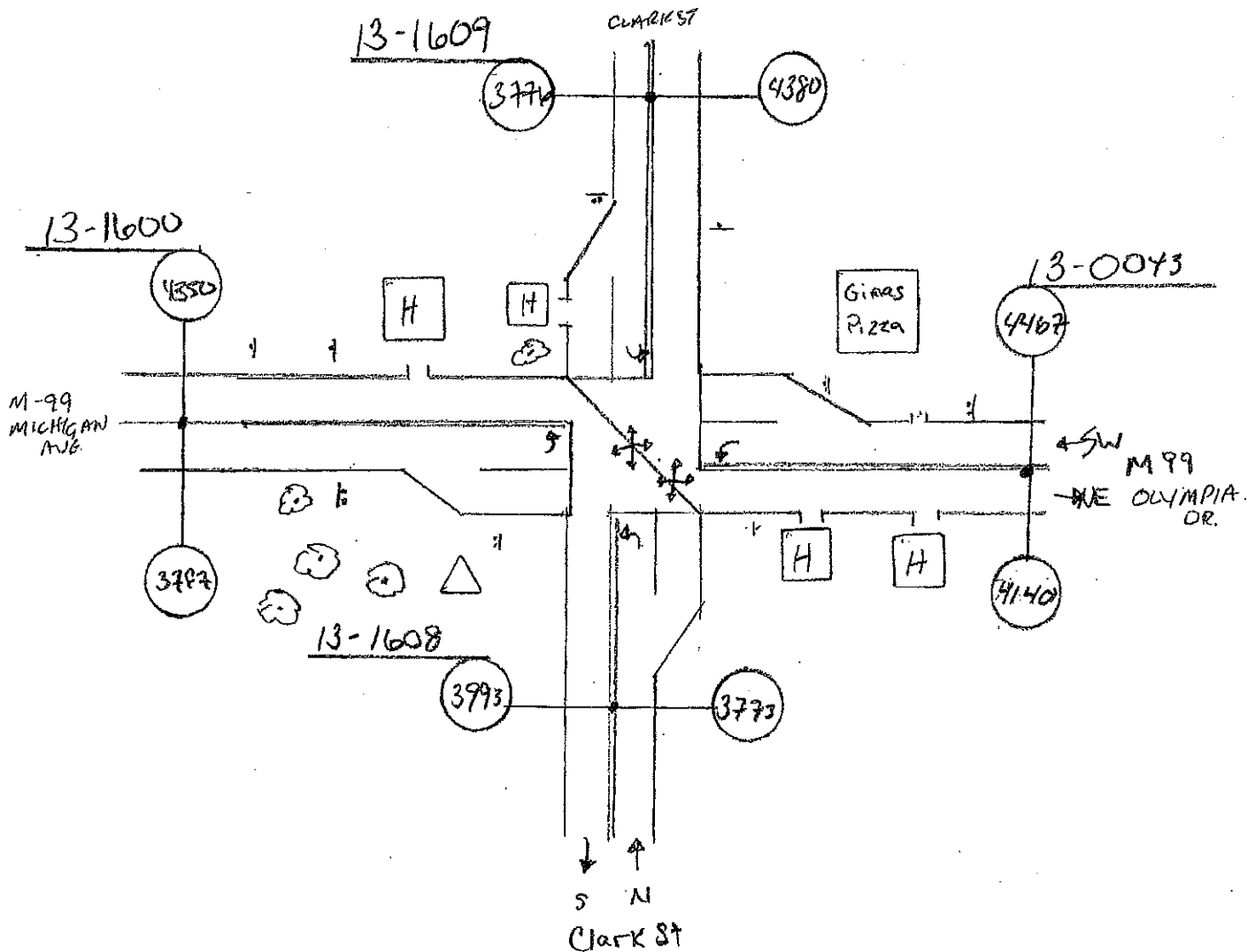
NAME AND EMAIL OF PERSON OR PERSONS TO BE NOTIFIED AFTER STUDY IS COMPLETED

Nathan Bouvy (Bouvyn1@michigan.gov) ; Brandan Maurer (MaurerB@michigan.gov)

INTERSECTION DIAGRAM
(Not to Scale)



DATE 1/6-7/16	DAY Wed - Thur	COUNTY Calhoun	TIME
TWP, VILLAGE OR CITY Albion		WEATHER	11am TO 6pm
INTERSECTION OF M-99 / Michigan @ Clark St			2pm TO 6pm 7am TO 9pm



COMMENTS

△ MOOT + Jarar Facing N

40 MPH on E M-99

35 MPH on W M-99

35 MPH on Clark

SURVEY PARTY CHIEF *Kristen Davis*

USE RESTRICTED
23 USC 409 and/or 402(k)(1)

TM#160049
M-99 / MICHIGAN
@
CLARK ST
ALBION TWP.
CALHOUN COUNTY

3776 ✓
4380 ✓

N Clark St

13-1609
N-S

4467 ✓

13-0043
NE-SW

13-1600
E-W

4350

1300

I-94-BR

~~4011~~

4140 ✓

3787 ✓

Jackson St

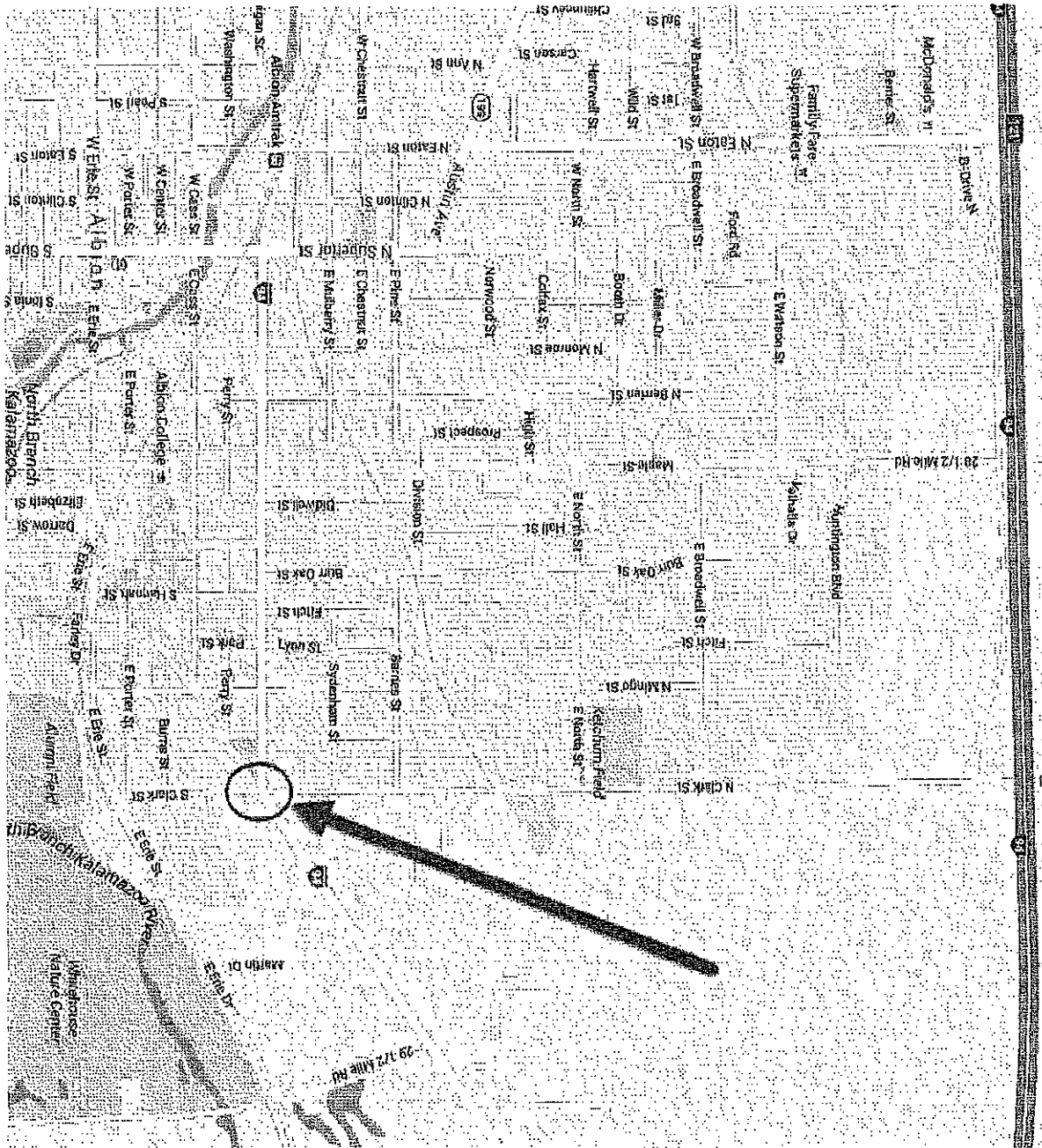
N Clark St

13-1608
N-S

3993 ✓

3773 ✓

USE RESTRICTED
23 USC 409 and/or 402(k) (1)



USE RESTRICTED
23 USC 409 and/or 402(k) (1)

MICHIGAN DEPARTMENT OF TRANSPORTATION
TRAFFIC STUDY

M-99 / MICHIGAN
@ CLARK ST
ALBION TWP.
CALHOUN COUNTY

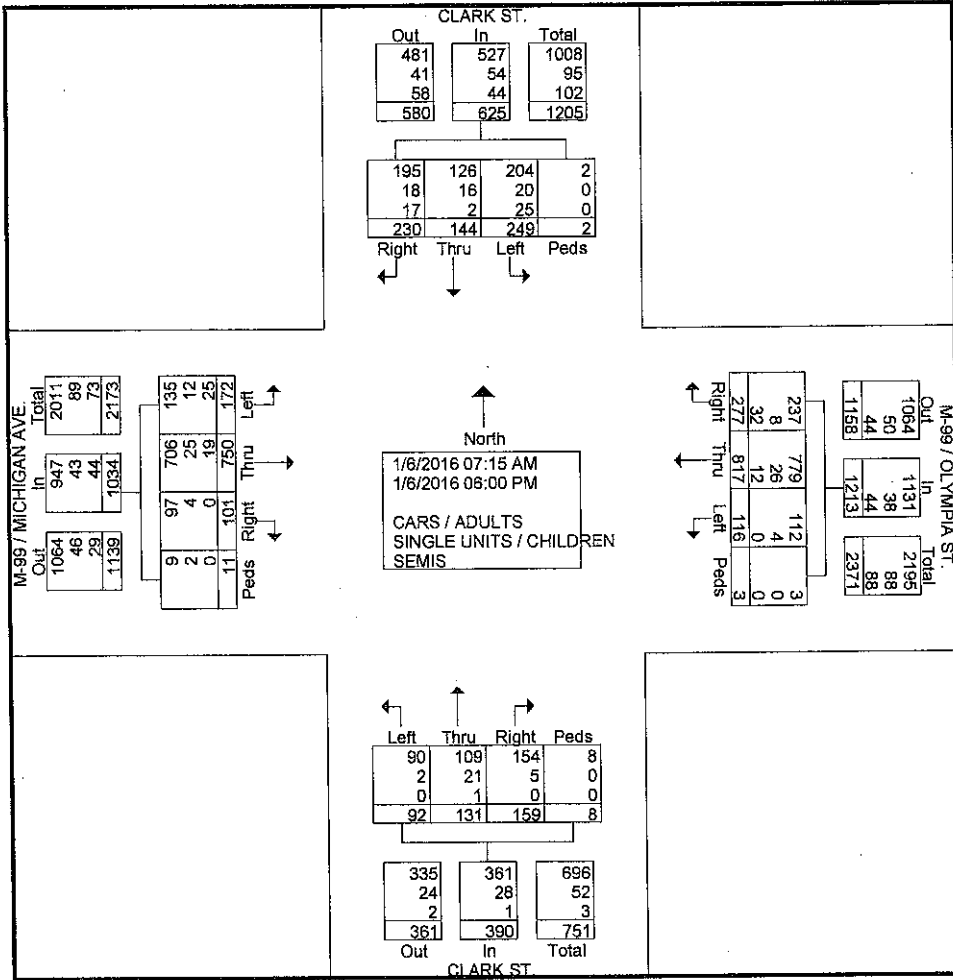
File Name : 16-0049
Site Code : 160049
Start Date : 1/6/2016
Page No : 1

USE RESTRICTED
23 USC 409 and/or 402(k) (1)

Groups Printed- CARS / ADULTS - SINGLE UNITS / CHILDREN - SEMIS

End Time	CLARK ST. Southbound					M-99 / OLYMPIA ST. Westbound					CLARK ST. Northbound					M-99 / MICHIGAN AVE. Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
07:15 AM	3	1	2	0	6	3	20	1	0	24	6	2	0	0	8	0	20	7	0	27	65
07:30 AM	8	1	4	0	13	10	21	2	0	33	6	2	0	1	9	0	18	1	0	19	74
07:45 AM	8	3	4	0	15	8	19	4	0	31	8	7	1	0	16	2	18	6	0	26	88
08:00 AM	5	3	6	0	14	15	29	4	0	48	2	2	0	0	4	2	17	4	0	23	89
Total	24	8	16	0	48	36	89	11	0	136	22	13	1	1	37	4	73	18	0	95	316
08:15 AM	5	1	0	0	6	11	17	4	0	32	1	3	1	0	5	0	23	8	0	31	74
08:30 AM	4	1	3	0	8	14	11	2	0	27	3	4	1	0	8	0	13	7	0	20	63
08:45 AM	4	7	8	0	19	8	18	3	0	29	2	1	3	0	6	2	20	5	0	27	81
09:00 AM	5	3	7	0	15	6	24	2	0	32	2	1	2	0	5	0	25	10	0	35	87
Total	18	12	18	0	48	39	70	11	0	120	8	9	7	0	24	2	81	30	0	113	305
*** BREAK ***																					
11:15 AM	5	4	6	0	15	4	18	3	0	25	3	2	4	0	9	3	20	6	0	29	78
11:30 AM	6	2	5	0	13	6	23	5	0	34	2	4	3	0	9	3	17	2	0	22	78
11:45 AM	2	7	6	0	15	11	19	4	0	34	4	2	4	0	10	4	24	4	0	32	91
12:00 PM	14	3	4	0	21	6	19	2	0	27	2	4	4	0	10	2	22	2	0	26	84
Total	27	16	21	0	64	27	79	14	0	120	11	12	15	0	38	12	83	14	0	109	331
12:15 PM	8	3	8	0	19	8	36	1	0	45	6	2	5	0	13	4	31	9	0	44	121
12:30 PM	6	3	8	0	17	5	28	1	0	34	5	1	6	0	12	4	18	3	0	25	88
12:45 PM	10	2	8	0	20	9	29	5	0	43	2	4	0	0	6	2	17	7	0	26	95
01:00 PM	5	1	8	0	14	16	25	2	0	43	1	4	6	0	11	3	18	4	0	25	93
Total	29	9	32	0	70	38	118	9	0	165	14	11	17	0	42	13	84	23	0	120	397
*** BREAK ***																					
02:15 PM	9	7	13	1	30	8	25	2	0	35	5	10	5	1	21	2	28	5	0	35	121
02:30 PM	5	1	7	0	13	4	17	2	0	23	2	2	0	0	4	7	26	4	0	37	77
02:45 PM	10	4	5	0	19	9	30	5	0	44	9	5	3	0	17	3	15	7	0	25	105
03:00 PM	7	5	4	0	16	7	25	1	0	33	3	3	1	0	7	4	20	3	0	27	83
Total	31	17	29	1	78	28	97	10	0	135	19	20	9	1	49	16	89	19	0	124	386
03:15 PM	7	7	4	1	19	12	21	2	0	35	6	1	2	0	9	5	21	6	0	32	95
03:30 PM	8	6	8	0	22	6	30	7	0	43	7	4	4	2	17	3	20	6	0	29	111
03:45 PM	10	4	12	0	26	13	42	5	3	63	6	6	5	3	20	5	29	6	3	43	152
04:00 PM	3	3	7	0	13	13	34	2	0	49	10	2	2	1	15	8	21	6	0	35	112
Total	28	20	31	1	80	44	127	16	3	190	29	13	13	6	61	21	91	24	3	139	470
04:15 PM	18	12	19	0	49	11	26	3	0	40	3	7	6	0	16	6	36	10	0	52	157
04:30 PM	5	5	10	0	20	8	25	8	0	41	8	2	3	0	13	7	14	4	2	27	101
04:45 PM	8	1	14	0	23	3	22	4	0	29	8	9	9	0	26	5	31	4	0	40	118
05:00 PM	6	11	6	0	23	7	44	6	0	57	7	10	4	0	21	4	32	6	0	42	143
Total	37	29	49	0	115	29	117	21	0	167	26	28	22	0	76	22	113	24	2	161	519
05:15 PM	15	9	18	0	42	8	29	9	0	46	10	8	2	0	20	0	48	9	0	57	165
05:30 PM	8	15	10	0	33	9	35	7	0	51	8	6	3	0	17	7	32	3	3	45	146
05:45 PM	9	8	15	0	32	15	29	7	0	51	6	7	1	0	14	2	27	3	3	35	132
06:00 PM	4	1	10	0	15	4	27	1	0	32	6	4	2	0	12	2	29	5	0	36	95
Total	36	33	53	0	122	36	120	24	0	180	30	25	8	0	63	11	136	20	6	173	538
Grand Total	230	144	249	2	625	277	817	116	3	1213	159	131	92	8	390	101	750	172	11	1034	3262
Apprch %	36.8	23	39.8	0.3		22.8	67.4	9.6	0.2		40.8	33.6	23.6	2.1		9.8	72.5	16.6	1.1		
Total %	7.1	4.4	7.6	0.1	19.2	8.5	25	3.6	0.1	37.2	4.9	4	2.8	0.2	12	3.1	23	5.3	0.3	31.7	
CARS / ADULTS	195	126	204	2	527	237	779	112	3	1131	154	109	90	8	361	97	706	135	9	947	2966
% CARS / ADULTS	84.8	87.5	81.9	100	84.3	85.6	95.3	96.6	100	93.2	96.9	83.2	97.8	100	92.6	96	94.1	78.5	81.8	91.6	90.9
SINGLE UNITS / CHILDREN	18	16	20	0	54	8	26	4	0	38	5	21	2	0	28	4	25	12	2	43	163
% SINGLE UNITS / CHILDREN	7.8	11.1	8	0	8.6	2.9	3.2	3.4	0	3.1	3.1	16	2.2	0	7.2	4	3.3	7	18.2	4.2	5
SEMIS	17	2	25	0	44	32	12	0	0	44	0	1	0	0	1	0	19	25	0	44	133
% SEMIS	7.4	1.4	10	0	7	11.6	1.5	0	0	3.6	0	0.8	0	0	0.3	0	2.5	14.5	0	4.3	4.1

MICHIGAN DEPARTMENT OF TRANSPORTATION
TRAFFIC STUDY



USE RESTRICTED
23 USC 409 and/or 402(k) (1)

MICHIGAN DEPARTMENT OF TRANSPORTATION
TRAFFIC STUDY

M-99 / MICHIGAN
@ CLARK ST
ALBION TWP.
CALHOUN COUNTY

USE RESTRICTED
23 USC 409 and/or 402(k) (1)

File Name : 16-0049
Site Code : 160049
Start Date : 1/6/2016
Page No : 1

Groups Printed- CARS / ADULTS

End Time	CLARK ST. Southbound					M-99 / OLYMPIA ST. Westbound					CLARK ST. Northbound					M-99 / MICHIGAN AVE. Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
07:15 AM	2	1	2	0	5	3	17	1	0	21	6	1	0	0	7	0	17	4	0	21	54
07:30 AM	6	1	4	0	11	10	20	2	0	32	6	2	0	1	9	0	18	1	0	19	71
07:45 AM	6	2	4	0	12	7	19	4	0	30	7	6	1	0	14	2	18	5	0	25	81
08:00 AM	3	2	4	0	9	13	29	4	0	46	2	2	0	0	4	2	15	1	0	18	77
Total	17	6	14	0	37	33	85	11	0	129	21	11	1	1	34	4	68	11	0	83	283
08:15 AM	4	1	0	0	5	10	17	4	0	31	1	3	1	0	5	0	22	6	0	28	69
08:30 AM	4	0	1	0	5	14	9	2	0	25	3	2	1	0	6	0	9	5	0	14	50
08:45 AM	1	2	7	0	10	4	16	3	0	23	0	1	3	0	4	1	19	3	0	23	60
09:00 AM	4	0	4	0	8	5	24	2	0	31	2	1	2	0	5	0	22	8	0	30	74
Total	13	3	12	0	28	33	66	11	0	110	6	7	7	0	20	1	72	22	0	95	253
*** BREAK ***																					
11:15 AM	2	4	5	0	11	2	16	2	0	20	3	2	4	0	9	3	18	5	0	26	66
11:30 AM	4	2	4	0	10	4	20	5	0	29	2	4	3	0	9	3	16	2	0	21	69
11:45 AM	2	7	3	0	12	7	16	4	0	27	4	1	4	0	9	4	20	4	0	28	76
12:00 PM	11	3	3	0	17	4	17	1	0	22	2	4	3	0	9	2	22	2	0	26	74
Total	19	16	15	0	50	17	69	12	0	98	11	11	14	0	36	12	76	13	0	101	285
12:15 PM	8	3	7	0	18	7	35	1	0	43	6	2	5	0	13	4	29	6	0	39	113
12:30 PM	6	3	6	0	15	4	27	1	0	32	5	1	6	0	12	4	15	3	0	22	81
12:45 PM	10	2	8	0	20	8	27	5	0	40	2	4	0	0	6	2	17	6	0	25	91
01:00 PM	3	1	7	0	11	14	23	2	0	39	1	3	6	0	10	3	17	3	0	23	83
Total	27	9	28	0	64	33	112	9	0	154	14	10	17	0	41	13	78	18	0	109	368
*** BREAK ***																					
02:15 PM	8	7	11	1	27	6	24	2	0	32	5	4	5	1	15	2	26	5	0	33	107
02:30 PM	4	1	7	0	12	4	17	1	0	22	2	1	0	0	3	7	24	2	0	33	70
02:45 PM	9	4	4	0	17	7	29	5	0	41	9	5	3	0	17	3	15	6	0	24	99
03:00 PM	6	5	3	0	14	6	21	1	0	28	3	3	1	0	7	4	19	3	0	26	75
Total	27	17	25	1	70	23	91	9	0	123	19	13	9	1	42	16	84	16	0	116	351
03:15 PM	7	6	4	1	18	11	20	2	0	33	6	1	2	0	9	5	20	5	0	30	90
03:30 PM	8	4	5	0	17	4	29	7	0	40	6	4	4	2	16	3	18	5	0	26	99
03:45 PM	8	3	7	0	18	12	39	5	3	59	6	4	5	3	18	5	28	5	3	41	136
04:00 PM	1	3	7	0	11	11	34	2	0	47	9	1	2	1	13	7	21	4	0	32	103
Total	24	16	23	1	64	38	122	16	3	179	27	10	13	6	56	20	87	19	3	129	428
04:15 PM	16	12	18	0	46	9	26	3	0	38	3	7	6	0	16	5	35	7	0	47	147
04:30 PM	4	5	8	0	17	7	25	8	0	40	8	1	3	0	12	7	11	4	2	24	93
04:45 PM	7	0	9	0	16	3	21	4	0	28	8	9	8	0	25	4	29	3	0	36	105
05:00 PM	6	10	4	0	20	7	44	6	0	57	7	10	4	0	21	4	31	5	0	40	138
Total	33	27	39	0	99	26	116	21	0	163	26	27	21	0	74	20	106	19	2	147	483
05:15 PM	14	9	15	0	38	6	29	9	0	44	10	8	2	0	20	0	48	9	0	57	159
05:30 PM	8	15	10	0	33	9	34	6	0	49	8	5	3	0	16	7	32	2	2	43	141
05:45 PM	9	7	14	0	30	15	28	7	0	50	6	4	1	0	11	2	27	3	2	34	125
06:00 PM	4	1	9	0	14	4	27	1	0	32	6	3	2	0	11	2	28	3	0	33	90
Total	35	32	48	0	115	34	118	23	0	175	30	20	8	0	58	11	135	17	4	167	515
Grand Total	195	126	204	2	527	237	779	112	3	1131	154	109	90	8	361	97	706	135	9	947	2966
Apprch %	37	23.9	38.7	0.4		21	68.9	9.9	0.3		42.7	30.2	24.9	2.2		10.2	74.6	14.3	1		
Total %	6.6	4.2	6.9	0.1	17.8	8	26.3	3.8	0.1	38.1	5.2	3.7	3	0.3	12.2	3.3	23.8	4.6	0.3	31.9	

MICHIGAN DEPARTMENT OF TRANSPORTATION
TRAFFIC STUDY

M-99 / MICHIGAN
@ CLARK ST
ALBION TWP.
CALHOUN COUNTY

USE RESTRICTED
23 USC 409 and/or 402(k) (1)

File Name : 16-0049
Site Code : 160049
Start Date : 1/6/2016
Page No : 1

Groups Printed- SINGLE UNITS / CHILDREN

End Time	CLARK ST. Southbound					M-99 / OLYMPIA ST. Westbound					CLARK ST. Northbound					M-99 / MICHIGAN AVE. Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
07:15 AM	1	0	0	0	1	0	2	0	0	2	0	1	0	0	1	0	3	1	0	4	8
07:30 AM	2	0	0	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3
07:45 AM	0	1	0	0	1	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	3
08:00 AM	2	1	0	0	3	1	0	0	0	1	0	0	0	0	0	0	1	2	0	3	7
Total	5	2	0	0	7	1	3	0	0	4	1	2	0	0	3	0	4	3	0	7	21
08:15 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	3
08:30 AM	0	1	1	0	2	0	1	0	0	1	0	2	0	0	2	0	2	2	0	4	9
08:45 AM	2	5	1	0	8	0	1	0	0	1	2	0	0	0	2	1	0	1	0	2	13
09:00 AM	1	3	0	0	4	0	0	0	0	0	0	0	0	0	0	0	3	1	0	4	8
Total	4	9	2	0	15	0	2	0	0	2	2	2	0	0	4	1	6	5	0	12	33
*** BREAK ***																					
11:15 AM	1	0	1	0	2	1	2	1	0	4	0	0	0	0	0	0	0	0	0	0	6
11:30 AM	0	0	1	0	1	1	2	0	0	3	0	0	0	0	0	0	1	0	0	1	5
11:45 AM	0	0	2	0	2	0	2	0	0	2	0	1	0	0	1	0	3	0	0	3	8
12:00 PM	1	0	1	0	2	0	1	1	0	2	0	0	1	0	1	0	0	0	0	0	5
Total	2	0	5	0	7	2	7	2	0	11	0	1	1	0	2	0	4	0	0	4	24
12:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
*** BREAK ***																					
01:00 PM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
Total	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	4
*** BREAK ***																					
02:15 PM	0	0	2	0	2	2	1	0	0	3	0	6	0	0	6	0	1	0	0	1	12
02:30 PM	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	1	0	0	1	3
02:45 PM	1	0	1	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3
03:00 PM	1	0	1	0	2	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	6
Total	2	0	4	0	6	2	5	1	0	8	0	7	0	0	7	0	3	0	0	3	24
03:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
03:30 PM	0	1	1	0	2	1	1	0	0	2	1	0	0	0	1	0	0	0	0	0	5
03:45 PM	1	1	2	0	4	0	3	0	0	3	0	2	0	0	2	0	0	0	0	0	9
04:00 PM	0	0	0	0	0	1	0	0	0	1	1	1	0	0	2	1	0	1	0	2	5
Total	1	3	3	0	7	2	4	0	0	6	2	3	0	0	5	1	1	1	0	3	21
04:15 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	3
04:30 PM	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	3	0	0	3	5
04:45 PM	1	1	3	0	5	0	1	0	0	1	0	0	1	0	1	1	0	1	0	2	9
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
Total	2	1	4	0	7	0	1	0	0	1	0	1	1	0	2	2	5	2	0	9	19
05:15 PM	1	0	2	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
05:30 PM	0	0	0	0	0	0	1	1	0	2	0	1	0	0	1	0	0	0	1	1	4
05:45 PM	0	1	0	0	1	0	1	0	0	1	0	3	0	0	3	0	0	0	1	1	6
06:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	0	2	3
Total	1	1	2	0	4	1	2	1	0	4	0	5	0	0	5	0	1	1	2	4	17
Grand Total	18	16	20	0	54	8	26	4	0	38	5	21	2	0	28	4	25	12	2	43	163
Apprch %	33.3	29.6	37	0		21.1	68.4	10.5	0		17.9	75	7.1	0		9.3	58.1	27.9	4.7		
Total %	11	9.8	12.3	0	33.1	4.9	16	2.5	0	23.3	3.1	12.9	1.2	0	17.2	2.5	15.3	7.4	1.2	26.4	

MICHIGAN DEPARTMENT OF TRANSPORTATION
TRAFFIC STUDY

M-99 / MICHIGAN
@ CLARK ST
ALBION TWP.
CALHOUN COUNTY

USE RESTRICTED
23 USC 409 and/or 402(k) (1)

File Name : 16-0049
Site Code : 160049
Start Date : 1/6/2016
Page No : 1

Groups Printed- SEMIS

End Time	CLARK ST. Southbound					M-99 / OLYMPIA ST. Westbound					CLARK ST. Northbound					M-99 / MICHIGAN AVE. Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
07:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	0	2	3
*** BREAK ***																					
07:45 AM	2	0	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	4
08:00 AM	0	0	2	0	2	1	0	0	0	1	0	0	0	0	0	0	1	1	0	2	5
Total	2	0	2	0	4	2	1	0	0	3	0	0	0	0	0	0	1	4	0	5	12
08:15 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	2
08:30 AM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	4
08:45 AM	1	0	0	0	1	4	1	0	0	5	0	0	0	0	0	0	1	1	0	2	8
09:00 AM	0	0	3	0	3	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	5
Total	1	0	4	0	5	6	2	0	0	8	0	0	0	0	0	0	3	3	0	6	19
*** BREAK ***																					
11:15 AM	2	0	0	0	2	1	0	0	0	1	0	0	0	0	0	0	2	1	0	3	6
11:30 AM	2	0	0	0	2	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	4
11:45 AM	0	0	1	0	1	4	1	0	0	5	0	0	0	0	0	0	1	0	0	1	7
12:00 PM	2	0	0	0	2	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0	5
Total	6	0	1	0	7	8	3	0	0	11	0	0	0	0	0	0	3	1	0	4	22
12:15 PM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	1	3	0	4	6
12:30 PM	0	0	2	0	2	1	1	0	0	2	0	0	0	0	0	0	3	0	0	3	7
12:45 PM	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	0	1	0	1	4
01:00 PM	1	0	1	0	2	2	1	0	0	3	0	1	0	0	1	0	1	1	0	2	8
Total	1	0	4	0	5	5	4	0	0	9	0	1	0	0	1	0	5	5	0	10	25
*** BREAK ***																					
02:15 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
02:30 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	4
02:45 PM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	1	3
03:00 PM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	2	0	0	0	2	3	1	0	0	4	0	0	0	0	0	0	2	3	0	5	11
03:15 PM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	1	0	1	3
03:30 PM	0	1	2	0	3	1	0	0	0	1	0	0	0	0	0	0	2	1	0	3	7
03:45 PM	1	0	3	0	4	1	0	0	0	1	0	0	0	0	0	0	1	1	0	2	7
04:00 PM	2	0	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	4
Total	3	1	5	0	9	4	1	0	0	5	0	0	0	0	0	0	3	4	0	7	21
04:15 PM	1	0	1	0	2	2	0	0	0	2	0	0	0	0	0	0	0	3	0	3	7
04:30 PM	1	0	1	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
04:45 PM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	4
05:00 PM	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	2	1	6	0	9	3	0	0	0	3	0	0	0	0	0	0	2	3	0	5	17
05:15 PM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:45 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
Total	0	0	3	0	3	1	0	0	0	1	0	0	0	0	0	0	0	2	0	2	6
Grand Total	17	2	25	0	44	32	12	0	0	44	0	1	0	0	1	0	19	25	0	44	133
Apprch %	38.6	4.5	56.8	0		72.7	27.3	0	0		0	100	0	0		0	43.2	56.8	0		
Total %	12.8	1.5	18.8	0	33.1	24.1	9	0	0	33.1	0	0.8	0	0	0.8	0	14.3	18.8	0	33.1	

Michigan Department of Transportation

Cntl. Sect	Milepoint	Station Number	Direction	Station Description	Machine	Placecode	2016	Year
13 043	2.450	43	NE	100 FT NE OF CLARK ST - ALBION EAST CITY LIMITS		.NULL.		
County	Route Designation	Route Number	Roadway Name					
Calhoun	2	99	M-99 (OLYMPIA)					
Time	Wed 01-06	Thu 01-07	Fri 01-08	Sat 01-09	Sun 01-10	Mon 01-11	Tue 01-12	
	AM PM	AM PM	AM PM	AM PM	AM PM	AM PM	AM PM	
0 - 15								
15 - 30								
30 - 45								
45 - 100								
100 - 115								
115 - 130								
130 - 145								
145 - 200								
200 - 215								
215 - 230								
230 - 245								
245 - 300								
300 - 315								
315 - 330								
330 - 345								
345 - 400								
400 - 415								
415 - 430								
430 - 445								
445 - 500								
500 - 515								
515 - 530								
530 - 545								
545 - 600								
600 - 615								
615 - 630								
630 - 645								
645 - 700								
700 - 715								
715 - 730								
730 - 745								
745 - 800								
800 - 815								
815 - 830								
830 - 845								
845 - 900								
900 - 915								
915 - 930								
930 - 945								
945 - 1000								
1000 - 1015	31							
1015 - 1030	23							
1030 - 1045	31							
1045 - 1100	30							
1100 - 1115	29							
1115 - 1130	35							
1130 - 1145	40							
1145 - 1200	31							
Daily Total		1702						
24 Hr Total								
AM Hi Hr End		12:00						
Hi for AM		135						
PM Hi Hr End		4:00						
Hi for PM		202						

USE RESTRICTED

23 USC 409 and/or 402(k) (1)

These volumes are raw axle counts and are not adjusted for the impact of vehicles with more than 2 axles

Michigan Department of Transportation

Cntl. Sect	Milepoint	Station Number	Direction	Station Description				
13 043	2.450	43	SW	100 FT NE OF CLARK ST - ALBION EAST CITY LIMITS				
County	Route Designation	Route Number	Roadway Name	Machine	Placecode			
Calhoun	2	99	M-99 (OLYMPIA)	.NULL.		2016	Year	

Time	Wed		Thu		Fri		Sat		Sun		Mon		Tue	
	01-06		01-07		01-08		01-09		01-10		01-11		01-12	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
0 - 15		45		3										
15 - 30		32		5										
30 - 45		21												
45 - 100		27												
100 - 115		36		2										
115 - 130		32		2										
130 - 145		26		1										
145 - 200		40												
200 - 215		47		10										
215 - 230		39		9										
230 - 245		31												
245 - 300		29		2										
300 - 315		26		2										
315 - 330		47		4										
330 - 345		58												
345 - 400		42		1										
400 - 415		53		2										
415 - 430		39		5										
430 - 445		63		8										
445 - 500		49		9										
500 - 515		74		12										
515 - 530		47		17										
530 - 545		53		9										
545 - 600		39		15										
600 - 615		37		11										
615 - 630		43		20										
630 - 645		29		20										
645 - 700		17		22										
700 - 715		32		31										
715 - 730		18		29										
730 - 745		5		27										
745 - 800		14		30										
800 - 815		9		24										
815 - 830		21		28										
830 - 845		21		28										
845 - 900		10		37										
900 - 915		7		20										
915 - 930		11		27										
930 - 945		21		24										
945 - 1000		18		24										
1000 - 1015	37	19												
1015 - 1030	25	12												
1030 - 1045	40	5												
1045 - 1100	38	4												
1100 - 1115	29	5												
1115 - 1130	22	1												
1130 - 1145	38	4												
1145 - 1200	25	3												

USE RESTRICTED
23 USC 409 and/or 402(k) (1)

Daily Total	1615	520
24 Hr Total	2135	
AM Hi Hr End	11:00	8:00
Hi for AM	140	117
PM Hi Hr End	6:00	
Hi for PM	213	

These volumes are raw axle counts and are not adjusted for the impact of vehicles with more than 2 axles

Michigan Department of Transportation

Cntl. Sect	Milepoint	Station Number	Direction	Station Description	Machine	Placecode	2016	Year						
13 043	2.420	1600	E	100 FT W OF CLARK ST & JACKSON ST		ALBION								
County	Route Designation	Route Number	Roadway Name											
Calhoun	2	99	M-99 (MICHIGAN AVE)											
Time	Wed 01-06		Thu 01-07		Fri 01-08		Sat 01-09		Sun 01-10		Mon 01-11		Tue 01-12	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
0 - 15		54	3											
15 - 30		26	2											
30 - 45		28	1											
45 - 100		28												
100 - 115		47	4											
115 - 130		39	4											
130 - 145		28	3											
145 - 200		27	2											
200 - 215		38	4											
215 - 230		42	2											
230 - 245		26												
245 - 300		26	1											
300 - 315		34	2											
315 - 330		41	3											
330 - 345		41	2											
345 - 400		39	1											
400 - 415		55	2											
415 - 430		30	6											
430 - 445		46	6											
445 - 500		43	11											
500 - 515		48	11											
515 - 530		44	13											
530 - 545		38	10											
545 - 600		32	27											
600 - 615		32	17											
615 - 630		35	14											
630 - 645		33	17											
645 - 700		15	27											
700 - 715		28	33											
715 - 730		18	21											
730 - 745		6	29											
745 - 800		10	33											
800 - 815		11	31											
815 - 830		18	26											
830 - 845		14	33											
845 - 900		10	35											
900 - 915		10	25											
915 - 930		11	30											
930 - 945		18	21											
945 - 1000		15	26											
1000 - 1015	41	21												
1015 - 1030	23	9												
1030 - 1045	39	5												
1045 - 1100	29	2												
1100 - 1115	33	5												
1115 - 1130	21	1												
1130 - 1145	36	5												
1145 - 1200	28	4												

USE RESTRICTED
23 USC 409 and/or 402(k) (1)

Daily Total	1486	538
24 Hr Total	2024	
AM Hi Hr End	11:00	9:00
Hi for AM	132	125
PM Hi Hr End	5:00	
Hi for PM	174	

Michigan Department of Transportation

Cntl. Sect	Milepoint	Station Number	Direction	Station Description	Machine	Placecode	2016	Year						
13 043	2.420	1600	W	100 FT W OF CLARK ST & JACKSON ST		ALBION								
County	Route Designation	Route Number	Roadway Name											
Cathoun	2	99	M-99 (MICHIGAN AVE)											
Time	Wed 01-06		Thu 01-07		Fri 01-08		Sat 01-09		Sun 01-10		Mon 01-11		Tue 01-12	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
0 - 15		40	3											
15 - 30		42	3											
30 - 45		47	1											
45 - 100		37	2											
100 - 115		47	1											
115 - 130		45	3											
130 - 145		37	5											
145 - 200		39	3											
200 - 215		44	2											
215 - 230		27												
230 - 245		42	2											
245 - 300		41	2											
300 - 315		40	2											
315 - 330		42	1											
330 - 345		53	4											
345 - 400		45	1											
400 - 415		48	5											
415 - 430		38	1											
430 - 445		47	5											
445 - 500		54	2											
500 - 515		49	4											
515 - 530		37	8											
530 - 545		39	12											
545 - 600		28	22											
600 - 615		35	11											
615 - 630		40	15											
630 - 645		31	16											
645 - 700		29	28											
700 - 715		24	28											
715 - 730		26	37											
730 - 745		24	36											
745 - 800		23	39											
800 - 815		21	23											
815 - 830		14	25											
830 - 845		17	26											
845 - 900		12	39											
900 - 915		15	39											
915 - 930		14	23											
930 - 945		13	23											
945 - 1000		18	35											
1000 - 1015	39	12												
1015 - 1030	20	13												
1030 - 1045	32	9												
1045 - 1100	31	4												
1100 - 1115	31	6												
1115 - 1130	41	7												
1130 - 1145	39	4												
1145 - 1200	40	6												

USE RESTRICTED
23 USC 409 and/or 402(k) (1)

Daily Total	1698	537
24 Hr Total	2235	
AM Hi Hr End	12:00	8:00
Hi for AM	151	140
PM Hi Hr End	5:00	
Hi for PM	187	

These volumes are raw axle counts and are not adjusted for the impact of vehicles with more than 2 axles

Michigan Department of Transportation

Cntl. Sect	Milepoint	Station Number	Direction	Station Description	Machine	Placecode	2016	Year
13 000	0.000	1608	N	100 FEET SOUTH OF I-94BL M-99 MICHIGAN				
County	Route Designation	Route Number	Roadway Name	Machine	Placecode	2016	Year	
Calhoun		0	CLARK ST		ALBION			
Time	Wed 01-06	Thu 01-07	Fri 01-08	Sat 01-09	Sun 01-10	Mon 01-11	Tue 01-12	
	AM PM	AM PM	AM PM	AM PM	AM PM	AM PM	AM PM	
0 - 15								
15 - 30								
30 - 45								
45 - 100								
100 - 115		1						
115 - 130								
130 - 145		2						
145 - 200								
200 - 215								
215 - 230								
230 - 245								
245 - 300								
300 - 315								
315 - 330								
330 - 345								
345 - 400		2						
400 - 415								
415 - 430								
430 - 445		1						
445 - 500		6						
500 - 515		1						
515 - 530		3						
530 - 545								
545 - 600		3						
600 - 615		6						
615 - 630		3						
630 - 645		3						
645 - 700		15						
700 - 715		8						
715 - 730		6						
730 - 745		14						
745 - 800		4						
800 - 815		5						
815 - 830		8						
830 - 845		8						
845 - 900		4						
900 - 915		7						
915 - 930		3						
930 - 945		8						
945 - 1000		9						
1000 - 1015	10	1						
1015 - 1030	9	1						
1030 - 1045	11							
1045 - 1100	13	1						
1100 - 1115	10	1						
1115 - 1130	8	1						
1130 - 1145	16	1						
1145 - 1200	14	1						

USE RESTRICTED
23 USC 409 and/or 402(k) (1)

Daily Total	663	130
24 Hr Total		793
AM Hi Hr End	12:00	8:00
Hi for AM	48	32
PM Hi Hr End	5:00	
Hi for PM	100	

These volumes are raw axle counts and are not adjusted for the impact of vehicles with more than 2 axles

Michigan Department of Transportation

Cntf. Sect	Milepoint	Station Number	Direction	Station Description	Machine	Placecode	2016	Year
13 000	0.000	1608	S	100 FEET SOUTH OF I-94BL M-99 MICHIGAN		ALBION		
County	Route Designation	Route Number	Roadway Name					
Calhoun		0	CLARK ST					
Time	Wed 01-06	Thu 01-07	Fri 01-08	Sat 01-09	Sun 01-10	Mon 01-11	Tue 01-12	
	AM PM	AM PM	AM PM	AM PM	AM PM	AM PM	AM PM	
0 - 15		11						
15 - 30		11	2					
30 - 45		11	4					
45 - 100		8						
100 - 115		26						
115 - 130		28						
130 - 145		16						
145 - 200		22	2					
200 - 215		18	3					
215 - 230		15						
230 - 245		10						
245 - 300		17						
300 - 315		20						
315 - 330		29						
330 - 345		22	3					
345 - 400		14						
400 - 415		33						
415 - 430		28	1					
430 - 445		14						
445 - 500		32	2					
500 - 515		36	3					
515 - 530		44						
530 - 545		26	5					
545 - 600		5	1					
600 - 615		16	3					
615 - 630		8	1					
630 - 645		12	3					
645 - 700		17	5					
700 - 715		6	4					
715 - 730		7	3					
730 - 745		4	18					
745 - 800		8	9					
800 - 815		14	6					
815 - 830		2	6					
830 - 845		7	15					
845 - 900		2	13					
900 - 915		13	12					
915 - 930		3	5					
930 - 945		3	11					
945 - 1000			17					
1000 - 1015	15							
1015 - 1030	13	1						
1030 - 1045	13	3						
1045 - 1100	10	2						
1100 - 1115	14	4						
1115 - 1130	12	2						
1130 - 1145	24	2						
1145 - 1200	12							

USE RESTRICTED
23 USC 409 and/or 402(k) (1)

Daily Total	745	157
24 Hr Total	902	
AM Hi Hr End	12:00	10:00
Hi for AM	62	45
PM Hi Hr End	6:00	
Hi for PM	111	

These volumes are raw axle counts and are not adjusted for the impact of vehicles with more than 2 axles

Michigan Department of Transportation

Cntl. Sect	Milepoint	Station Number	Direction	Station Description	Machine	Placecode	2016	Year
13 000	0.000	1609	N	100 FEET NORTH OF I-94BL M-99 MICHIGAN		ALBION		
County	Route Designation	Route Number	Roadway Name					
Calhoun		0	CLARK ST					
Time	Wed 01-06	Thu 01-07	Fri 01-08	Sat 01-09	Sun 01-10	Mon 01-11	Tue 01-12	
	AM PM	AM PM	AM PM	AM PM	AM PM	AM PM	AM PM	
0 - 15		36	2					
15 - 30		21						
30 - 45		33						
45 - 100		52	3					
100 - 115		45	5					
115 - 130		42	8					
130 - 145		28	13					
145 - 200		27	2					
200 - 215		32						
215 - 230		23	2					
230 - 245		27						
245 - 300		16	1					
300 - 315		32						
315 - 330		27						
330 - 345		37						
345 - 400		39						
400 - 415		39						
415 - 430		18	4					
430 - 445		23	1					
445 - 500		26	10					
500 - 515		29	9					
515 - 530		29	7					
530 - 545		31	14					
545 - 600		15	34					
600 - 615		22	24					
615 - 630		10	15					
630 - 645		13	9					
645 - 700		5	34					
700 - 715		11	23					
715 - 730		19	16					
730 - 745		11	37					
745 - 800		15	38					
800 - 815		3	30					
815 - 830		7	37					
830 - 845		8	36					
845 - 900		8	35					
900 - 915		6	24					
915 - 930		13	18					
930 - 945		5	18					
945 - 1000		3	20					
1000 - 1015	12	8						
1015 - 1030	9	2						
1030 - 1045	27	3						
1045 - 1100	16	4						
1100 - 1115	29	4						
1115 - 1130	19	6						
1130 - 1145	28	3						
1145 - 1200	27	2						

USE RESTRICTED
23 USC 409 and/or 402(k) (1)

Daily Total	1085	529
24 Hr Total		1614
AM Hi Hr End	12:00	9:00
Hi for AM	103	138
PM Hi Hr End	1:00	
Hi for PM	142	

Michigan Department of Transportation

Cntl. Sect	Milepoint	Station Number	Direction	Station Description				
13 000	0.000	1609	S	100 FEET NORTH OF I-94BL M-99 MICHIGAN				
County	Route Designation	Route Number	Roadway Name	Machine	Placecode	2016	Year	
Calhoun		0	CLARK ST		ALBION			

Time	Wed 01-06		Thu 01-07		Fri 01-08		Sat 01-09		Sun 01-10		Mon 01-11		Tue 01-12	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
0 - 15		30	4											
15 - 30		30	6											
30 - 45		33	2											
45 - 100		19												
100 - 115		55												
115 - 130		31												
130 - 145		30												
145 - 200		41	4											
200 - 215		55	14											
215 - 230		16	10											
230 - 245		35												
245 - 300		29												
300 - 315		27	1											
315 - 330		37	2											
330 - 345		56												
345 - 400		23												
400 - 415		83												
415 - 430		39	4											
430 - 445		39	2											
445 - 500		51	2											
500 - 515		89	12											
515 - 530		50	6											
530 - 545		42	13											
545 - 600		21	8											
600 - 615		23	1											
615 - 630		25	16											
630 - 645		6	13											
645 - 700		18	18											
700 - 715		15	19											
715 - 730		19	18											
730 - 745		7	38											
745 - 800		19	28											
800 - 815		16	15											
815 - 830			23											
830 - 845		12	34											
845 - 900		7	37											
900 - 915		10	33											
915 - 930		9	11											
930 - 945		4	29											
945 - 1000		5	40											
1000 - 1015	17	2												
1015 - 1030	14	5												
1030 - 1045	31	6												
1045 - 1100	41	3												
1100 - 1115	25	3												
1115 - 1130	20	8												
1130 - 1145	24	1												
1145 - 1200	42													

USE RESTRICTED
23 USC 409 and/or 402(k) (1)

Daily Total	1398	463
24 Hr Total	1861	
AM Hi Hr End	12:00	10:00
Hi for AM	111	113
PM Hi Hr End	5:00	
Hi for PM	212	

These volumes are raw axle counts and are not adjusted for the impact of vehicles with more than 2 axles

Michigan Department of Transportation

Direction Specific
 Control Section Milepoint Station Number Direction Route Designation 2 Route Number 099 Roadway Name M-99 (OLYMPIA) Year 2016
 13 043 2.450 0043 NE 100 FT NE OF CLARK ST - ALBION EAST CITY LIMITS
 County Calhoun
 Source F:\2016 DATA\TURNING MOVEMENTS\TM#049 M-99 @ CLARK CALHOUN\STM16-0049 .TXT

Time	Wed	Thu	Fri	Sat	Sun	Mon	Tue
12-0100AM	1-6	1-7	1-8	1-9	1-10	1-11	1-12
01-0200AM							
02-0300AM							
03-0400AM							
04-0500AM							
05-0600AM							
06-0700AM							
07-0800AM							
08-0900AM							
09-1000AM							
10-1100AM							
11-1200AM							
12-0100PM							
01-0200PM							
02-0300PM							
03-0400PM							
04-0500PM							
05-0600PM							
06-0700PM							
07-0800PM							
08-0900PM							
09-1000PM							
10-1100PM							
11-1200PM							
Daily Total	1702						
24 Hr Total					1702		
AM Hi Hr End	12:00						
Hi for AM	135						
PM Hi Hr End	04:00						
Hi for PM	202						
% Hi Hr Factor 24 Hr Totals							11.87
							Machine 4467

USE RESTRICTED
 23 USC 409 and/or 402(k)(1)

These volumes are raw axle counts and are not adjusted for the impact of vehicles with more than 2 axles

Michigan Department of Transportation

Direction Specific
 Control Section Milepoint Station Number Direction Station Description Placecode
 13 043 2.450 0043 SW 100 FT NE OF CLARK ST - ALBION EAST CITY LIMITS
 County Calhoun Route Designation 2 Route Number 099 Roadway Name M-99 (OLYMPIA) Year 2016
 Source F:\2016 DATA\TURNING MOVEMENTS\TM#049 M-99 @ CLARK CALHOUN\STM16-0049 .TXT

Time	Wed	Thu	Fri	Sat	Sun	Mon	Tue
12-0100AM	1-6	1-7	1-8	1-9	1-10	1-11	1-12
		8					
01-0200AM		5					
02-0300AM		21					
03-0400AM		7					
04-0500AM		24					
05-0600AM		53					
06-0700AM		73					
07-0800AM		117					
08-0900AM		117					
09-1000AM		95					
10-1100AM	140						
11-1200AM	114						
12-0100PM	125						
01-0200PM	134						
02-0300PM	146						
03-0400PM	173						
04-0500PM	204						
05-0600PM	213						
06-0700PM	126						
07-0800PM	69						
08-0900PM	61						
09-1000PM	57						
10-1100PM	40						
11-1200PM	13						
Daily Total	1615	520					
24 Hr Total		2135					
AM Hi Hr End	11:00	08:00					
Hi for AM	140	117					
PM Hi Hr End	06:00						
Hi for PM	213						
% Hi Hr Factor							
24 Hr Totals		9.98					Machine
							4140

USE RESTRICTED
 23 USC 409 and/or 402(k) (1)

These volumes are raw axle counts and are not adjusted for the impact of vehicles with more than 2 axles

Michigan Department of Transportation

Direction Specific
 Control Section Milepoint Station Number Direction Station Description Placecode ALBION
 13 043 2.420 1600 E 100 FT W OF CLARK ST & JACKSON ST
 County Calhoun Route Designation 2 Route Number 099 Roadway Name M-99 (MICHIGAN AVE) Year 2016
 Source F:\2016 DATA\TURNING MOVEMENTS\TM#049 M-99 @ CLARK CALHOUN\STM16-0049 .TXT

Time	Wed	Thu	Fri	Sat	Sun	Mon	Tue
12-0100AM		1-7	1-8	1-9	1-10	1-11	1-12
01-0200AM		13					
02-0300AM		7					
03-0400AM		8					
04-0500AM		25					
05-0600AM		61					
06-0700AM		75					
07-0800AM		116					
08-0900AM		125					
09-1000AM		102					
10-1100AM	132						
11-1200AM	118						
12-0100PM	136						
01-0200PM	141						
02-0300PM	132						
03-0400PM	155						
04-0500PM	174						
05-0600PM	162						
06-0700PM	115						
07-0800PM	62						
08-0900PM	53						
09-1000PM	54						
10-1100PM	37						
11-1200PM	15						
Daily Total	1486	538					
24 Hr Total		2024					
AM Hi Hr End	11:00	09:00					
Hi for AM	132	125					
PM Hi Hr End	05:00						
Hi for PM	174						
% Hi Hr Factor							
24 Hr Totals		8.60					

USE RESTRICTED
 23 USC 409 and/or 402(k) (1)

Machine
 3787

Michigan Department of Transportation

Direction Specific
 Control Section Milepoint Station Number Direction Station Description Placecode ALBION
 13 043 2.420 1600 W 100 FT W OF CLARK ST & JACKSON ST
 County Calhoun Route Designation 2 Route Number 099 Roadway Name M-99 (MICHIGAN AVE) Year 2016
 Source F:\2016 DATA\TURNING MOVEMENTS\TM#049 M-99 @ CLARK CALHOUN\STM16-0049 .TXT

Time	Wed	Thu	Fri	Sat	Sun	Mon	Tue
12-0100AM	1-6	1-7	1-8	1-9	1-10	1-11	1-12
		9					
01-0200AM		12					
02-0300AM		6					
03-0400AM		8					
04-0500AM		13					
05-0600AM		46					
06-0700AM		70					
07-0800AM		140					
08-0900AM		113					
09-1000AM		120					
10-1100AM	122						
11-1200AM	151						
12-0100PM	166						
01-0200PM	168						
02-0300PM	154						
03-0400PM	180						
04-0500PM	187						
05-0600PM	153						
06-0700PM	135						
07-0800PM	97						
08-0900PM	64						
09-1000PM	60						
10-1100PM	38						
11-1200PM	23						
Daily Total	1698	537					
24 Hr Total		2235					
AM Hi Hr End	12:00	08:00					
Hi for AM	151	140					
PM Hi Hr End	05:00						
Hi for PM	187						
% Hi Hr Factor 24 Hr Totals		8.37					
							Machine 4350

USE RESTRICTED
 23 USC 409 and/or 402(k) (1)

These volumes are raw axle counts and are not adjusted for the impact of vehicles with more than 2 axles

Michigan Department of Transportation

Direction Specific
 Control Section Milepoint Station Number Direction Station Description Placecode ALBION
 13 000 0.000 1608 N 100 FEET SOUTH OF I-94BL M-99 MICHIGAN
 County Calhoun Route Designation Route Number Roadway Name CLARK ST Year 2016
 Source F:\2016 DATA\TURNING MOVEMENTS\TM#049 M-99 @ CLARK CALHOUN\STM16-0049 .TXT

Time	Wed 1-6	Thu 1-7	Fri 1-8	Sat 1-9	Sun 1-10	Mon 1-11	Tue 1-12
12-0100AM							
01-0200AM		3					
02-0300AM		2					
03-0400AM		7					
04-0500AM		7					
05-0600AM		27					
06-0700AM		32					
07-0800AM		25					
08-0900AM		27					
09-1000AM							
10-1100AM	43						
11-1200AM	48						
12-0100PM	51						
01-0200PM	60						
02-0300PM	66						
03-0400PM	81						
04-0500PM	100						
05-0600PM	78						
06-0700PM	61						
07-0800PM	34						
08-0900PM	22						
09-1000PM	12						
10-1100PM	3						
11-1200PM	4						
Daily Total	663	130					
24 Hr Total		793					
AM Hi Hr End	12:00	08:00					
Hi for AM	48	32					
PM Hi Hr End	05:00						
Hi for PM	100						
% Hi Hr Factor 24 Hr Totals		12.61					
Machine							3773

USE RESTRICTED
 23 USC 409 and/or 402(k) (1)

These volumes are raw axle counts and are not adjusted for the impact of vehicles with more than 2 axles

Michigan Department of Transportation

Direction Specific
 Control Section Milepoint Station Number Direction Station Description Placecode ALBION
 13 000 0.000 1608 S 100 FEET SOUTH OF I-94BL M-99 MICHIGAN
 County Calhoun Route Designation Route Number Roadway Name CLARK ST Year 2016
 Source F:\2016 DATA\TURNING MOVEMENTS\TM#049 M-99 @ CLARK CALHOUN\STM16-0049 .TXT

Time	Wed	Thu	Fri	Sat	Sun	Mon	Tue
12-0100AM	1-6	1-7	1-8	1-9	1-10	1-11	1-12
01-0200AM		6					
02-0300AM		2					
03-0400AM		3					
04-0500AM		3					
05-0600AM		3					
06-0700AM		9					
07-0800AM		12					
08-0900AM		34					
09-1000AM		40					
10-1100AM		45					
11-1200AM							
12-0100PM							
01-0200PM							
02-0300PM							
03-0400PM							
04-0500PM							
05-0600PM							
06-0700PM							
07-0800PM							
08-0900PM							
09-1000PM							
10-1100PM							
11-1200PM							
Daily Total	745	157					
24 Hr Total		902					
AM Hi Hr End	12:00	10:00					
Hi for AM	62	45					
PM Hi Hr End	06:00						
Hi for PM	111						
% Hi Hr Factor 24 Hr Totals		12.31					
							Machine 3993

USE RESTRICTED
23 USC 409 and/or 402(k) (1)

These volumes are raw axle counts and are not adjusted for the impact of vehicles with more than 2 axles

Michigan Department of Transportation

Direction Specific
 Control Section Milepoint Station Number Direction Route Designation Route Number Roadway Name Placecode ALBION
 13 000 0.000 1609 N CLARK CALHOUN\STM16-0049 .TXT CLARK ST Year 2016
 County Calhoun
 Source F:\2016 DATA\TURNING MOVEMENTS\TM#049 M-99 @ CLARK CALHOUN\STM16-0049 .TXT

Time	Wed 1-6	Thu 1-7	Fri 1-8	Sat 1-9	Sun 1-10	Mon 1-11	Tue 1-12
12-0100AM		5					
01-0200AM		28					
02-0300AM		3					
03-0400AM							
04-0500AM		15					
05-0600AM		64					
06-0700AM		82					
07-0800AM		114					
08-0900AM		138					
09-1000AM		80					
10-1100AM	64						
11-1200AM	103						
12-0100PM	142						
01-0200PM	142						
02-0300PM	98						
03-0400PM	135						
04-0500PM	106						
05-0600PM	104						
06-0700PM	50						
07-0800PM	56						
08-0900PM	26						
09-1000PM	27						
10-1100PM	17						
11-1200PM	15						
Daily Total	1085	529					
24 Hr Total	1614						
AM Hi Hr End	12:00	09:00					
Hi for AM	103	138					
PM Hi Hr End	01:00						
Hi for PM	142						
% Hi Hr Factor 24 Hr Totals	8.80						
							Machine 4380

USE RESTRICTED
23 USC 409 and/or 402(k) (1)

These volumes are raw axle counts and are not adjusted for the impact of vehicles with more than 2 axles

Michigan Department of Transportation

Direction Specific
 Control Section Milepoint Station Number Direction Station Description Placecode ALBION
 13 000 0.000 1609 S 100 FEET NORTH OF I-94BL M-99 MICHIGAN
 County Calhoun Route Designation Route Number Roadway Name CLARK ST Year 2016
 Source F:\2016 DATA\TURNING MOVEMENTS\TM#049 M-99 @ CLARK CALHOUN\STM16-0049 .TXT

Time	Wed	Thu	Fri	Sat	Sun	Mon	Tue
12-0100AM		12					
01-0200AM		4					
02-0300AM		24					
03-0400AM		3					
04-0500AM		8					
05-0600AM		39					
06-0700AM		48					
07-0800AM		103					
08-0900AM		109					
09-1000AM		113					
10-1100AM							
11-1200AM							
12-0100PM							
01-0200PM							
02-0300PM							
03-0400PM							
04-0500PM							
05-0600PM							
06-0700PM							
07-0800PM							
08-0900PM							
09-1000PM							
10-1100PM							
11-1200PM							
Daily Total	1398	463					
24 Hr Total	1861						
AM Hi Hr End	12:00	10:00					
Hi for AM	111	113					
PM Hi Hr End	05:00						
Hi for PM	212						
% Hi Hr Factor							
24 Hr Totals	11.39						
							Machine
							3776

USE RESTRICTED
 23 USC 409 and/or 402(k) (1)

These volumes are raw axle counts and are not adjusted for the impact of vehicles with more than 2 axles



OFFICE MEMORANDUM

DATE: March 24, 2016

TO: Mark Dionise
Marshall TSC Manager

FROM: Paula J. Corlett, Supervising Engineer
Signal Operations Unit
Operations Field Services Division

SUBJECT: Traffic Signal Removal Memo #1
BL-94 (Eaton) at Watson Street
City of Albion, Calhoun County

FILE: 13043-010

USE RESTRICTED
23 USC 409 and/or 402(k) (1)

We evaluated the subject location's need for traffic signal removal. An analysis based on November 2014 traffic counts revealed this traffic signal no longer met minimum vehicular volume requirement. For a traffic signal to be retained, one of the following nine traffic signal warrants of the *Michigan Manual on Uniform Traffic Control Devices* (MMUTCD) must be met:

- Warrant 1A, Eight-Hour Vehicular Volume—not met.
- Warrant 1B, Interruption of Continuous Traffic—not met.
- Warrant 2, Four-Hour Vehicular Volume—not met.
- Warrant 3, Peak Hour—not met.
- Warrant 4, Minimum Pedestrian Volume—not met.
- Warrant 5, School Crossing, not met.
- Warrant 6, Coordinated Signal System—not applicable.
- Warrant 7, Crash Experience—not applicable.
- Warrant 8, Roadway Network—not applicable.
- Warrant 9, Intersection Near a Grade Crossing—not applicable.

A field review of the intersection was conducted on March 3, 2016, with the Michigan State Police and MDOT personnel from the TSC and Southwest Region Office. The MDOT Geometrics Unit reviewed the intersection on a separate occasion and submitted input to the Signals Unit as well. The intersection consists of three legs. If MDOT did decide to flash the signal, it was agreed upon to provide right-of-way for northbound and southbound BL-94 (Eaton) with a flashing yellow operation, and provide a stop sign with flashing red operation for westbound Watson Street.

A Synchro analysis for the daily peak hour (3:00 p.m. – 4:00 p.m.) was conducted for the existing signalized operation and the intersection as non-signalized with two-way stop control.

SimTraffic Results - Level of Service (Delay - seconds/vehicle)		
PM PEAK	Signalized	Non-Signalized
NB BL-94 (Eaton)	A (6.1)	A (0.3)
SB BL-94 (Eaton)	A (7.0)	A (0.8)
WB Watson Street	A (9.4)	A (5.6)
Overall	A (6.8)	A (1.1)

Analysis shows overall intersection delay decreases with the change from signal control to two-way stop control.

Evaluation of crash patterns completed for the intersection showed six reported crashes for the three-year period from January 1, 2013, through December 31, 2015. The CRIS report indicated none of these crashes were right-angle type crashes (the type of crash susceptible to correction with signalization).

Since the initial review indicates the intersection might operate better under two-way stop control, a more in-depth review is necessary. According to the *Michigan Manual on Uniform Traffic Control Devices*, when a traffic signal is being considered for removal, the signal must be placed in 24-hour flash mode for a minimum of 90 days. During this 90-day period, volume data, delay data and crash information will be collected to evaluate the intersection under two-way stop control.

The Signals Unit and Marshall TSC informed the City of Albion of the study via a meeting held at City Hall on March 16, 2016. Based on discussions with city staff, it was determined to flash as soon as possible and to continue to flash the signal as a two-way stop controlled intersection during the time students return for classes at Albion College. The final determination regarding the removal of the traffic signal will occur after college classes resume in fall of 2016. Furthermore, the Signals Unit will collect the data before Albion College adjourns for the summer.

Please inform local agencies and those concerned of our recommendations. We recommend this intersection be placed in flash operation during the time period specified above. Once under flash control, we will request a full traffic survey before Albion College adjourns for the summer.

Digitally signed by Paula J. Corlett
DN: cn=Paula J. Corlett, o=Michigan Department
of Transportation, ou=Traffic Signals Unit,
email=corlett@mi.gov, c=US
Date: 2016.03.24 12:34:44 -0400

Supervising Engineer

Attachments

PJC:NJB:js

cc: D. Adelman
B. Maurer Marshall TSC
A. Hubbell, Marshall TSC
S. Brink, Southwest Region
K. Avery, Southwest Region

USE RESTRICTED
23 USC 409 and/or 402(k) (1)

Summary of Warrants

Spot Number:	13043-010		
Major Street:	BL-94	Minor Street:	WATSON
Intersection:	BL-94 at WATSON		
City/Twp:	Albion		
Date Performed:	1/7/2015	Performed By:	Bouvy
Date Volumes Collected:	10/29/2014		

Warrant	Condition	Is Warrant Met
Data Has Been Validated		
WARRANT 1: Eight-Hour Vehicular Volume	Condition A	
	Condition B	
	Condition A&B	
WARRANT 2: Four-Hour Vehicular Volume	(70%)	
WARRANT 3: Peak-Hour Vehicular Volume	(70%)	#N/A
	Condition A	#N/A
	Condition B	
WARRANT 4: Pedestrian Volume	(70%)	
	Four Hour	N/A
	Peak Hour	N/A
	(Threshold) HAWK	
	(Threshold) RRFB	
WARRANT 5: School Crossing		
WARRANT 6: Coordinated Signal System		
WARRANT 7: Crash Experience	Condition A	
	Condition B	
WARRANT 8: Roadway Network		
WARRANT 9: Intersection Near a Grade Crossing		#N/A

Issue to Be Addressed by Signalization:

Existing signal. Check warrants

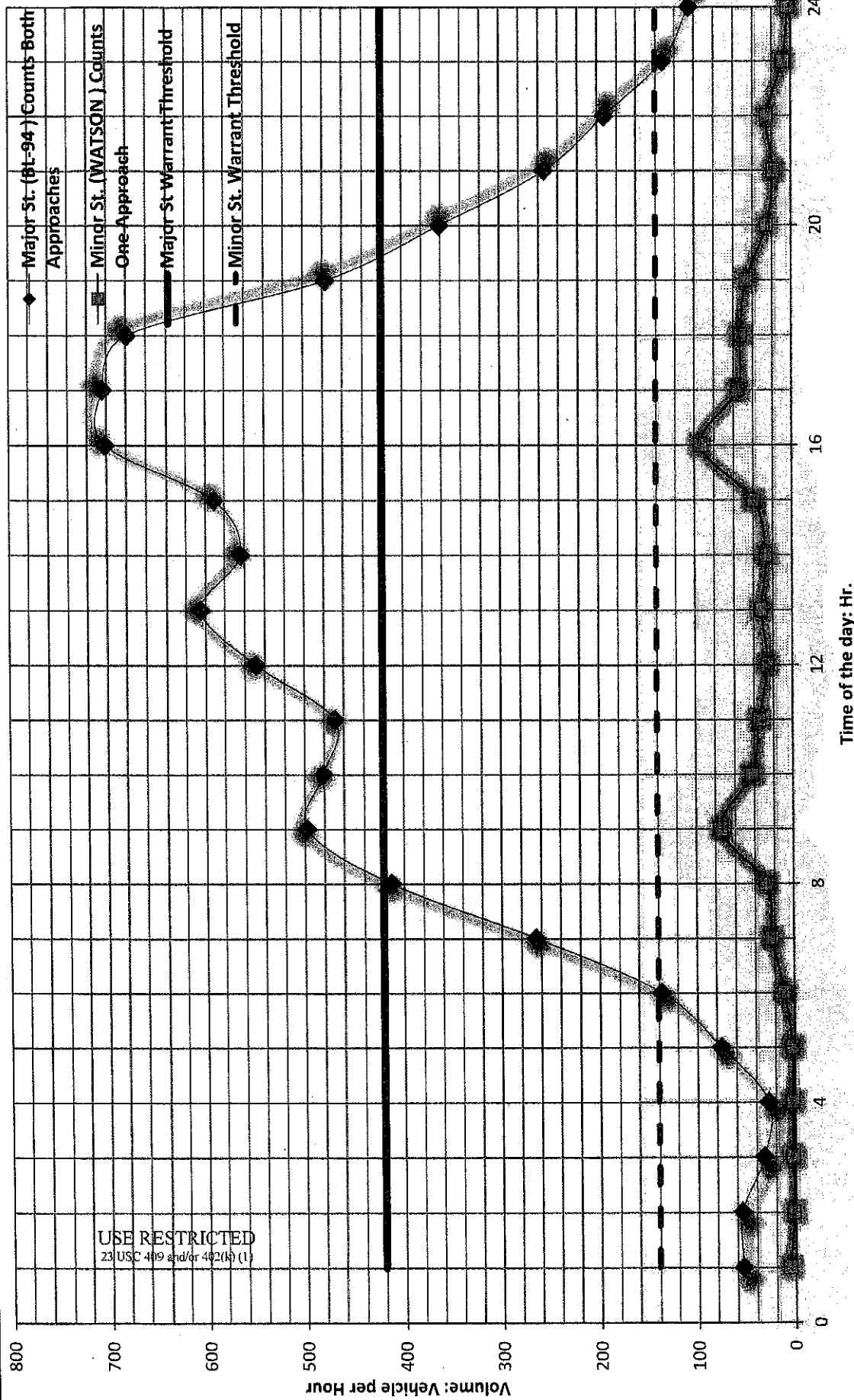


FIGURE 1: WARRANT 1A

IS THERE A REDUCTION IN THE WARRANT THRESHOLDS TO 70% ...

1- DUE TO SPEED? YES

2- DUE TO ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000? NO

Spot Number:

BL-94 @ WATSON

NO. OF LANES ON MAJOR ST.? 3

NO. OF LANES ON MINOR ST.? 2

Number of Hours that met the Warrant: 0

Does this intersection meet Warrant 1A for signal installation? NO

Data Collection Date: