# TRAFFIC IMPACT STUDY

For

Owl Place Commercial El Paso County, Colorado PCD File No. CR221

> June 2022 Revised: September 2022

> > Prepared for:

First Cup 106 S Kyrene Road, Suite 2 Chandler, AZ 85226

Prepared by:



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Engineer in Responsible Charge: Fred Lantz, PE

23410 09/27/2022

22-051673

# **Traffic Engineer's Statement**

The attached traffic report and supporting information were prepared under my respondent they comport with the standard of care. So far as is consistent with the standard report was prepared in general conformance with the criteria established by the Coureports.						
Fred Lantz, P.E. #23410	Date					
Developer's Statement						
I, the Developer, have read and will comply with all commitr	ments made on my behalf within this report.					
Brian Zurek	Date					

First Cup 106 S Kyrene Road, Suite 2 Chandler, AZ 85226

Complete / sign statements.

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#### I. Introduction

#### **Project Overview**

This traffic impact study is provided as a planning document and addresses the capacity, geometric, and control requirements associated with the development entitled Owl Place Commercial.

This traffic impact study has been revised to address County review comments made to the June 2022 version of the traffic impact study regarding inclusion of additional analyses and recommendations with corresponding revisions to figures and tables pursuant to the latest conceptual site plan.

This proposed commercial development consists of various potential uses including a gas station convenience store, coffee/donut shop with drive-through window, automated car wash, and quick-serve restaurants. The development is located at the southwest corner of the intersection of Meridian Road with Owl Place in El Paso County, Colorado.

#### **Study Area**

The study area to be examined in this analysis encompasses Meridian Road between the intersections of Bent Grass Meadows Drive and E Woodmen Road.

Figure 1 illustrates location of the site and study intersections.

#### **Site Description**

Land for the development is currently occupied by a single-family dwelling unit and is surrounded by a mix of residential, commercial, and open space land uses.

The proposed development is conceptual and no specific land uses have been determined. However, for purposes of this analysis, there is assumed to be construction for an approximate 5,300 square foot gas station convenience store supporting up to 12 vehicle fueling positions, an approximate 2,000 square foot coffee/donut shop with drive-through window, a 4,170 square foot automated car wash with one wash tunnel, and an approximate 3,420 square foot high-turnover quick-serve restaurant.

Proposed access to the development is provided at the following locations: one full-movement access onto Owl Place (referred to as Access A), and one full-movement access onto Eastonville Road as an extension of Falcon Market Place (referred to as Access B). For analysis purposes and given the conceptual nature of proposed land uses, proposed accesses are considered to be internal to the overall development area and are not specifically analyzed. Access operations are generally considered to be comparable to or better than that of the closest major intersection.

For purposes of this study, it is anticipated that development construction would be completed by end of Year 2024. General site and access locations are shown on Figure 1.

A conceptual site plan, as prepared by Baseline Engineering Corporation, is shown on Figure 2. This plan is provided for illustrative purposes only.







SM ROCHA, LLC Traffic and Transportation Consultants



# Recommend adding "(interim)" since it will be closed at some point.

# **Existing and Committed Surface Transportation Network**

Within the study area, Meridian Road is the primary roadway that will accommodate traffic to and from the proposed development. The secondary roadways include E Woodmen Road, Eastonville Road, Owl Place, and Bent Grass Meadows Drive. A brief description of each roadway, based on the County's 2040 Major Transportation Corridors Plan (MTCP)<sup>1</sup> and Engineering Criteria Manual (ECM)<sup>2</sup>, is provided below:

Meridian Road is a north-south principal arterial roadway having four through lanes (two lanes in each direction) with exclusive turn lanes at the intersections within the study area. Meridian Road provides a posted speed limit of 55 MPH.

<u>E Woodmen Road</u> is an east-west principal arterial roadway having four through lanes (two lanes in each direction) with exclusive turn lanes at the intersection within the study area. E Woodmen Road provides a posted speed limit of 55 MPH.

Eastonville Road is an east-west arterial roadway having two through lanes (one lane in each direction) with a combination of shared and exclusive turn lanes at the intersection within the study area. Eastonville Road provides a posted speed limit of 35 MPH.

Owl Place is an east-west unpaved roadway having two through lanes (one lane in each direction) with shared turn lanes at the intersection within the study area. Owl Place is unclassified in County's MTCP. However, per Standard Drawing 2-10 of County ECM and the roadway's estimated ROW width, Owl Place is assumed to be classified as a local roadway.

and provides a posted speed limit of 30 MPH.

<u>Bent Grass Meadows Drive</u> is an east-west collector roadway having two through lanes (one lanes in each direction) with exclusive turn lanes at the intersections within the study area. Bent Grass Meadows Drive provides a posted speed limit of 35 MPH.

The study intersections of Meridian Road with E Woodmen Road, Eastonville Road, and Bent Grass Meadows Drive are signalized. All other study intersections operate under a stop-controlled condition. A stop-controlled intersection is defined as a roadway intersection where vehicle rights-of-way are controlled by one or more "STOP" signs.

<sup>&</sup>lt;sup>1</sup> El Paso County 2016 Major Transportation Corridors Plan Update, Felsburg Holt & Ullevig, December 2016.

<sup>&</sup>lt;sup>2</sup> El Paso County Engineering Criteria Manual, El Paso County, December 2016.

It is however noted that signal installation at Eastonville Road and Meridian Road is a recent occurrence with associated extension of Eastonville Road west of Meridian Road. Due to the ongoing development within the area, the newly constructed west leg of the study intersection was observed to experience low volumes associated with construction traffic only. Therefore, for analysis purposes, the study intersection was assumed to not currently operate at its anticipated capacity and was considered as a three-leg stop-controlled intersection for existing conditions only.

In reference to the County's MTCP, E Woodmen Road is planned to become a six-lane, expressway by Year 2040. The remaining study area roadways appear to be built to their ultimate cross-sections excluding potential improvements required due to the proposed development.

Although Woodmen Rd from Marksheffel Rd to Banning Lewis Pkwy is anticipated to be widened to 6 lanes per MTCP Table 4, this widening does not extend east to Meridian Rd and should not be relied upon in the TIS.

Meridian Road is anticipated to be widened to a 6-Lane Principal Arterial from Woodmen to Stapleton Road also in the 2060 Corridor Preservation Plan.

#### **II. Existing Traffic Conditions**

Morning (AM) and afternoon (PM) peak hour traffic counts were collected at the intersections of Meridian Road with E Woodmen Road, Eastonville Road, and Owl Place. Counts were collected on June 1, 2022, with AM peak hour counts being collected during the period of 7:00 a.m. to 9:00 a.m. and PM peak hour counts being collected during the period of 4:00 p.m. to 6:00 p.m.

Peak hour traffic counts and 24-hour traffic volumes shown for Meridian Road and the intersection of Meridian Road with Bent Grass Meadows Drive were obtained from a previous traffic study<sup>3</sup>. Referenced counts were collected on March 29, 2022.

Newly collected and referenced counts representing existing traffic volumes, as well as existing intersection geometries, are shown on Figure 3.

Existing signal timing parameters for the intersections of Meridian Road with E Woodmen Road and Bent Grass Meadows Drive were obtained from County Staff and used throughout this study to the best extent possible in order to remain consistent with existing signal coordination plans. City signal timing information received is included for reference in Appendix A.

We assume that the timing data were provided by the County, not the City.

For reference, the timing reports are at:

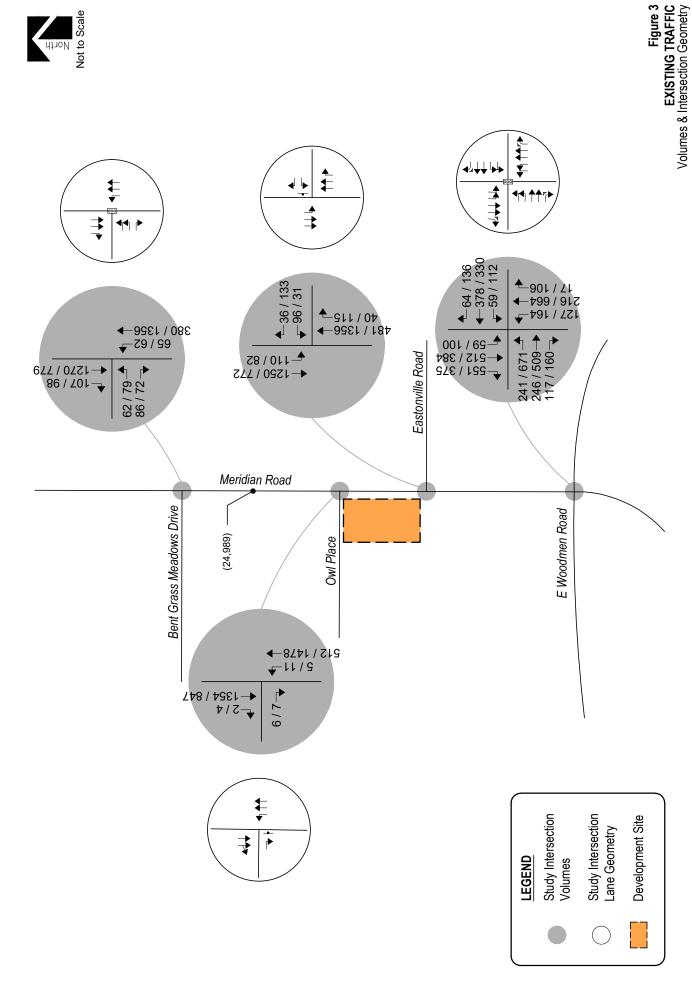
https://epcdevplanstorage.blob.core.windows.net/project/2cf7 accf-06f2-481b-afe8-e33ec291437c/5dccdfed-ae85-423c-ac d9-1b79a1acb22c.pdf

and

https://epcdevplanstorage.blob.core.windows.net/project/2cf7 accf-06f2-481b-afe8-e33ec291437c/c3d76724-8861-4122-9f 05-2b2a889d6039.pdf

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<sup>&</sup>lt;sup>3</sup> Bent Grass Dunkin' Donuts, SM ROCHA, LLC, April 2022.



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AM / PM Peak Hour

(ADT): Average Daily Traffic

Traffic Impact Study

OWL PLACE COMMERCIAL





#### Peak Hour Intersection Levels of Service – Existing Traffic

The Signalized and Unsignalized Intersection Analysis techniques, as published in the Highway Capacity Manual (HCM), 6<sup>th</sup> Edition, by the Transportation Research Board and as incorporated into the SYNCHRO computer program, were used to analyze the study intersections for existing and future traffic conditions. These nationally accepted techniques allow for the determination of intersection level of service (LOS) based on the congestion and delay of each traffic movement.

Level of service is a method of measurement used by transportation professionals to quantify a driver's perception of travel conditions that include travel time, number of stops, and total amount of stopped delay experienced on a roadway network. The HCM categorizes level of service into a range from "A" which indicates little, if any, vehicle delay, to "F" which indicates a level of operation considered unacceptable to most drivers. These levels of service grades with brief descriptions of the operating condition, for unsignalized and signalized intersections, are included for reference in Appendix B and have been used throughout this study.

The level of service analyses results for existing conditions are summarized in Table 1.

Intersection capacity worksheets developed for this study are provided in Appendix C.

Table 1 – Intersection Capacity Analysis Summary – Existing Traffic

INTERSECTION	LEVEL OF SERVICE				
LANE GROUPS	AM PEAK HOUR	PM PEAK HOUR			
Meridian Road / E Woodmen Road (Signalized)	C (30.5)	D (37.8)			
Meridian Road / Bent Grass Meadows Drive (Signalized)	A (9.9)	A (7.6)			
Meridian Road / Eastonville Road (Stop-Controlled)		_			
Westbound Left Westbound Right	B A	F B			
Southbound Left	A	В			
Meridian Road / Owl Place (Stop-Controlled)					
Eastbound Right	В	Α			
Northbound Left	A	A			

Key: Signalized Intersection: Level of Service (Control Delay in sec/veh)

Stop-Controlled Intersection: Level of Service

#### **Existing Traffic Analysis Results**

Under existing conditions, operational analysis shows that the signalized intersection of Meridian Road with E Woodmen Road has overall operations at LOS C during the morning peak traffic hour and LOS D during the afternoon peak traffic hour.

The signalized intersection of Meridian Road with Bent Grass Meadows Drive has overall operations at LOS A during both the morning and afternoon peak traffic hours.

The unsignalized intersection of Meridian Road with Eastonville Road has turning movement operations at or better than LOS B during either peak traffic hour. Exceptions would include the westbound left turning movement which operates at LOS F during the PM peak traffic hour. The LOS F operation is attributed to the high through traffic volumes along Meridian Road and the stop-controlled nature of the intersection. However, as previously discussed, given the recent signalization of the study intersection, actual operations are expected to be better than shown.

The unsignalized intersection of Meridian Road with Owl Place has turning movement operations at or better than LOS B during the morning peak traffic hour and LOS A during the afternoon peak traffic hour.

It is to be noted that it is not uncommon for unsignalized movements to or from an arterial roadway, in urban areas, to operate with noticeable delays during peak traffic hours.

# **III. Future Traffic Conditions Without Proposed Development**

Background traffic is the traffic projected to be on area roadways without consideration of the proposed development. Background traffic includes traffic generated by development of vacant parcels in the area.

To account for projected increases in background traffic for Years 2024 and 2040, a compounded annual growth rate was determined using population growth estimates provided by the Pikes Peak Area Council of Governments' (PPACG) 2045 Long Range Transportation Plan<sup>4</sup> which anticipates a 20-year growth rate of less than two percent. Therefore, in order to provide for a conservative analysis, a growth rate of two percent was applied to existing traffic volumes.

To account for projected traffic from adjacent developments not yet built, trip generations from the previously prepared Falcon Marketplace Traffic Impact Analysis<sup>5</sup>, provided by the County's Electronic Development Application Review Program (EDARP), were added to background traffic volumes.

Pursuant to the proposed and committed area roadway improvements discussed in Section I, Year 2024 and Year 2040 background traffic conditions assume the completion of the Eastonville Road extension west of Meridian Road and the improvement of the intersection including signalization. Year 2040 also assumes signal timing parameters for the Meridian Road intersections with optimized intersection splits in effort to better long-term intersection performance.

Projected background traffic volumes and intersection geometry for Years 2024 and 2040 are shown on Figure 4 and Figure 5, respectively.

Address the traffic assumptions for the rezone of the 3 surrounding parcels. Coordinate with that traffic study and ensure that the background traffic and total traffic reflects this.

Please see PCD project file CS224 for the TIS that was recently submitted.

https://epcdevplanreview.com/Public/ProjectDetails/183464

<sup>&</sup>lt;sup>4</sup> Moving Forward 2045: Pikes Peak Area Regional Transportation Plan, PPACG, January 2020.

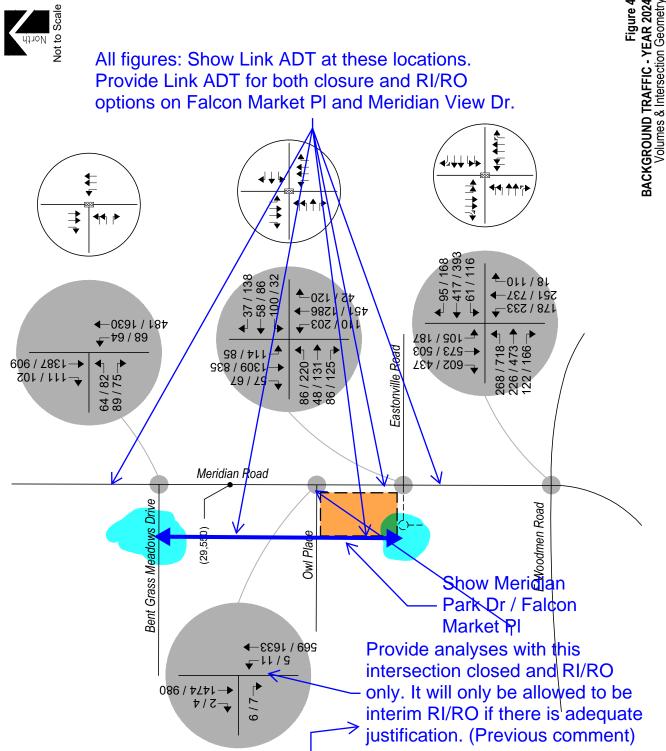
<sup>&</sup>lt;sup>5</sup> Falcon Marketplace Traffic Impact Analysis, LSC Transportation Consultants Inc., September 2018.

AM / PM Peak Hour

(ADT) : Average Daily Traffic



All figures: Show Link ADT at these locations. Provide Link ADT for both closure and RI/RO options on Falcon Market PI and Meridian View Dr.



- \* Reasoning for this requirement was requested in your response to redlines; There are several reasons including the following:
- Meridian Road is a Principal Arterial, with corresponding access criteria
- Meridian Road will be widened to 6 lanes and EPC does not want another signalized intersection or left turns across it
- This has been planned for approximately 15 years when the area was studied in the Latigo Business area TIS that planned for the Meridian Park Drive/Falcon Market Place road connection in coordination with County staff.

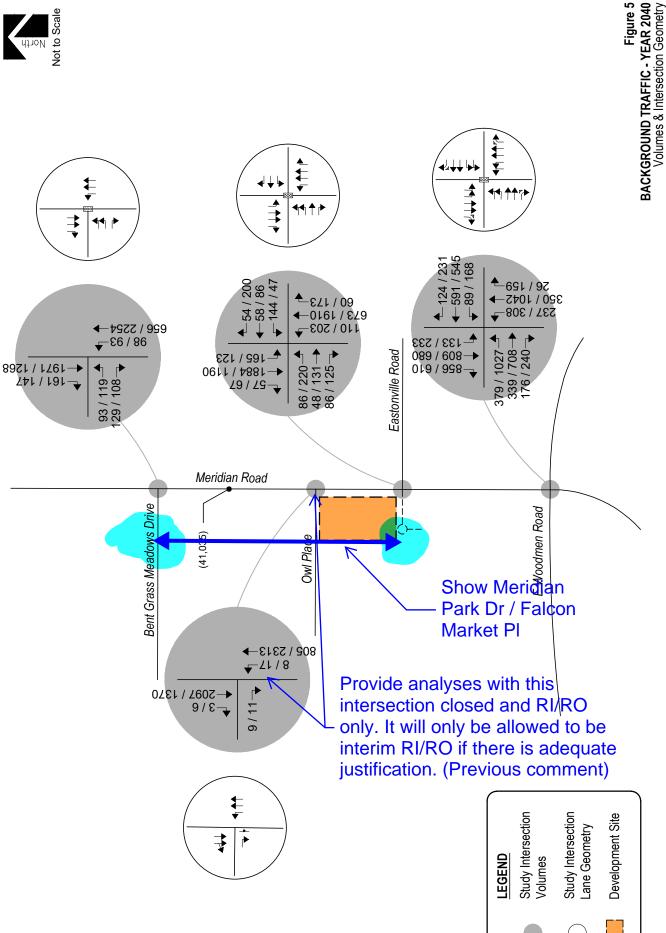
https://epcdevplanstorage.blob.core.windows.net/project/6c24fa94-807a-44ab-8 c84-219d53371153/892aad51-92e1-458b-9d1d-c8223df8d55c.TIF

- See EA-21-191 notes



AM / PM Peak Hour

(ADT): Average Daily Traffic









#### Peak Hour Intersection Levels of Service – Background Traffic

As with existing traffic conditions, the operations of study intersections were analyzed under background conditions, without the proposed development, using the SYNCHRO computer program.

Background traffic level of service analysis results for Year 2024 are listed in Table 2. Year 2040 operational results are summarized in Table 3.

Definitions of levels of service are given in Appendix B. Intersection capacity worksheets are provided in Appendix C.

Analyze the intersections on Meridian Park

— Drive /Falcon Market Place: Eastonville,
Bent Grass Meadows, Owl Pl

Table 2 – Intersection Capacity Analysis Summary – Background Traffic – Year 2024

INTERSECTION	LEVEL OF	SERVICE
LANE GROUPS	AM PEAK HOUR	PM PEAK HOUR
Meridian Road / E Woodmen Road (Signalized)	C (31.6)	D (45.1)
Meridian Road / Bent Grass Meadows Drive (Signalized)	B (10.2)	A (5.9)
Meridian Road / Eastonville Road (Signalized)	D (35.3)	C (23.2)
Meridian Road / Owl Place (Stop-Controlled) Eastbound Right (Northbound Left)	В В	B A

Key: Signalized Intersection: Level of Service (Control Delay in sective)
Stop-Controlled Intersection: Level of Service

Unresolved previous comment - analyze only as right-in/right-out and closed for all horizons except existing.

#### Background Traffic Analysis Results - Year 2024

Year 2024 background traffic analysis indicates that the signalized intersection of Meridian Road with E Woodmen Road has overall operations at LOS C during the AM peak traffic hour and LOS D during the PM peak traffic hour.

The signalized intersection of Meridian Road with Bent Grass Meadows Drive has overall operations at LOS B during the AM peak traffic hour and LOS A during the PM peak traffic hour.

The signalized intersection of Meridian Road with Eastonville Road has overall operations at LOS D during the AM peak traffic hour and LOS C during the PM peak traffic hour.

The unsignalized intersection of Meridian Road with Owl Place operates at or better than LOS B during both AM and PM peak traffic periods.

Table 3 – Intersection Capacity Analysis Summary – Background Traffic – Year 2040

INTERSECTION		LEVEL OF	SERVICE
LANE GROUPS		AM PEAK HOUR	PM PEAK HOUR
Meridian Road / E Woodmen Ro	oad (Signalized)	D (39.0)	F (86.8)
Meridian Road / Bent Grass Mea	adows Drive (Signalized)	B (19.6)	B (11.9)
Meridian Road / Eastonville Roa	nd (Signalized)	D (38.6)	C (30.6)
Meridian Road / Owl Place (Stop Eastbound Right Northbound Left	o-Controlled)	CC	B A

Key: Signalized Intersection: Level of Service (Control Delay in sec/vert) Stop-Controlled Intersection: Level of Service

Unresolved previous comment - analyze only as right-in/right-out and closed for all horizons except existing.

#### Background Traffic Analysis Results – Year 2040

By Year 2040 and without the proposed development, the study intersection of Meridian Road with E Woodmen Road experiences LOS D operations during the AM peak traffic hour and LOS F during the PM peak traffic hour. The LOS F operation is primarily attributed to the high eastbound, northbound and southbound left turning volumes. In order to provide mitigation to the poor overall operation and increase available intersection capacity, potential improvements may include the widening of E Woodmen Road to six-lanes, pursuant to its future classification as an expressway, as well as further optimization of traffic signal timings to accommodate future regional demand. It is noted that long-term operations may be better than shown given the potential for future planned roadway connections to the west along E Woodmen Road to influence vehicle routes. As example, planned construction of future Banning Lewis Parkway within the City of Colorado Springs along E Woodmen Road will provide an additional major north-south arterial roadway which may reduce some of the volumes projected to utilize Meridian Road for north-south travel. It is recommended that County Staff continues to monitor the study intersection in order to determine what mitigation may be most applicable and when implementation of said improvements becomes necessary. See previous comment regarding the future Woodmen Road cross-section.

The study intersection of Meridian Road with Bent Grass Meadows Drive experiences LOS B operations during both the AM and PM peak traffic hours.

The study intersection of Meridian Road with Eastonville Road experiences LOS D operations during the AM peak traffic hour and LOS C operations during the PM peak traffic hour.

The study intersection of Meridian Road with Owl Place experiences LOS C operations during the AM peak traffic hour and LOS B or better operations during the PM peak traffic hour.

It is not recommended that access onto Meridian Road from Owl Place be more limited than that already existing. Limited access will interfere with the existing and proposed developments' ability to equally distribute traffic within the site and out to available roadways, thus impacting existing and future traffic in the surrounding area and potentially cause the adjacent roadway network to be used in a manner not intended or cause additional delay that could impact emergency response times.

# IV. Proposed Project Traffic

#### **Trip Generation**

Standard traffic generation characteristics compiled by the Institute of Transportation Engineers (ITE) in their report entitled Trip Generation Manual, 11<sup>th</sup> Edition, were applied to the proposed land use in order to estimate average daily traffic (ADT), AM Peak Hour, and PM Peak Hour vehicle trips. A vehicle trip is defined as a one-way vehicle movement from a point of origin to a point of destination.

The ITE land use codes 934 (Fast-Food Restaurant with Drive-Through Window), 937 (Coffee/Donut Shop with Drive-Through Window), 945 (Convenience Store/Gas Station), and 948 (Automated Car Wash) were used for estimating trip generation because of their conservative rates and best fit to the anticipated land use descriptions.

As actual land uses, densities or site plans within the Owl Place Commercial development area become defined over time, it is expected that traffic generation characteristics considered within this study will need to be updated by more specific traffic analyses or studies to help assess if transportation improvements are needed to mitigate potential traffic impacts.

Trip generation rates used in this study are presented in Table 4.

**Table 4 – Trip Generation Rates** 

			TRIP GENERATION RATES						
ITE			24	AM	PEAK HO	DUR	PM	PEAK HO	DUR
CODE	LAND USE	UNIT	HOUR	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
934	Fast-Food Restaurant w/DTW	KSF	467.48	22.75	21.86	44.61	17.18	15.85	33.03
937	Coffee/Donut Shop w/DTW	KSF	533.57	43.80	42.08	85.88	19.50	19.50	38.99
945	Convenience Store/Gas Station	KSF	700.43	28.26	28.26	56.52	27.26	27.26	54.52
948	Automated Car Wash	CWT	775.00	*	*	*	38.75	38.75	77.50

Key: KSF = Thousand Square Reet Gross Floor Area. CWT = Car Wash Tunnels.

\* = ITE does not report significant AM peak hour generation due to the nature of the business (ie, operating hours typically open after AM peak).

Note: All data and calculations above are subject to being rounded to nearest value.

Table 5 illustrates projected ADT, AM Peak Hour, and PM Peak Hour traffic volumes likely generated by the proposed development upon build-out.

The planned development following the rezone will include a service station, three quick-service restaurants, and one car wash. These will be accessible by a road branching north from the

Verify consistency between the TIS and Letter of Intent. Revise one or the other as appropriate. (If the TIS is conservative that's fine.)

**Table 5 – Trip Generation Summary** 

			TOTAL TRIPS GENERATED						
ITE			24	AM	PEAK H	DUR	PM	PEAK HO	DUR
CODE	LAND USE	SIZE	HOUR	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
934	Fast-Food Restaurant w/DTW	3.4 KSF	1,599	78	75	153	59	54	113
937	Coffee/Donut Shop w/DTW	2.0 KSF	1,067	88	84	172	39	39	78
945	Convenience Store/Gas Station	5.3 KSF	3,712	150	150	300	144	144	289
948	Automated Car Wash	1 CWT	775	*	*	*	39	39	78
	Prop	osed Total:	7,153	315	309	624	281	276	557

Key: KSF = Thousand Square Feet Gross Floor Area. CWT = Car Wash Tunnels.

Note: All data and calculations above are subject to being rounded to nearest value.

Upon build-out, Table 5 illustrates that the proposed development has the potential to generate approximately 7,153 daily vehicle trips with 624 of those occurring during the morning peak hour and 557 during the afternoon peak hour.

#### **Adjustments to Trip Generation Rates**

A development of this type is likely to attract pass-by trips from the adjacent roadway system. ITE defines a pass-by trip as an intermediate stop on the way from an origin to a primary trip destination without a route diversion. Due to this behavior, pass-by trips are not considered as "new" traffic generated by the development since the trips are already present on the roadway network enroute to their primary destination.

Pass-by trips are especially common to fast-food restaurant, coffee/donut shop, and gas station land uses given the convenience provided by these businesses on the way to another primary destination such as a place of work or home. As example, published ITE pass-by and diverted link trip data indicates an average trip generation reduction rate of 49 percent during the AM peak traffic hour and 50 percent during the PM peak traffic hour as typical to fast-food restaurants with drive-through window.

It is also considered likely that a mixed-use development of this type will attract trips from within area land uses as well as from the adjacent Falcon Marketplace development. However, due to the conceptual nature of proposed land uses, specific internal capture rates can only be assumed. Therefore, no trip reduction was taken in this analysis This assumption provides for a conservative analysis.

Upon consideration of the proposed land use, reductions were applied pursuant to ITE average data to the proposed land use in order to account for the high probability of pass-by trip generation. ITE average pass-by trip percentages used are presented in Table 6.

<sup>\* =</sup> ITE does not report significant AM peak hour generation due to the nature of the business (ie, operating hours typically open after AM peak).

Table 6 illustrates projected ADT, AM Peak Hour, and PM Peak Hour traffic volumes likely generated by the proposed development upon build-out with reductions applied due to pass-by trips. Average daily (24-Hour) pass-by trip percentages were estimated as the average between the AM and PM peak hour rates indicated by ITE.

Table 6 – Trip Generation Summary with Pass-By Trip Reductions

			TOTAL NEW TRIPS GENERATED						
ITE			24	AM	PEAK H	OUR	PM PEAK HOUR		OUR
CODE	LAND USE	SIZE	HOUR	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
	Pass-By Trip	Reduction:	50%	49%	49%	49%	50%	50%	50%
934	Fast-Food Restaurant w/DTW	3.4 KSF	807	40	38	78	29	27	56
	Pass-By Trip	Reduction:	60%	60%	60%	60%	60%	60%	60%
937	Coffee/Donut Shop w/DTW	2.0 KSF	427	35	34	69	16	16	31
	Pass-By Trip	Reduction:	59%	62%	62%	62%	56%	56%	56%
945	Convenience Store/Gas Station	5.3 KSF	1,522	57	57	114	64	64	127
	Pass-By Trip Reduction:		0%	0%	0%	0%	0%	0%	0%
948	Automated Car Wash	1.0 CWT	775	*	*	*	39	39	78
	Pro	oosed Total:	3,531	132	129	260	147	145	292

Key: KSF = Thousand Square Feet Gross Floor Area. CWT = Car Wash Tunnels.

Note: All data and calculations above are subject to being rounded to nearest value.

Upon build-out and with consideration for pass-by trip reductions, Table 6 illustrates that the proposed development has the potential to generate approximately 3,531 new daily trips with 260 of those occurring during the morning peak hour and 292 during the afternoon peak hour.

#### **Trip Distribution**

The overall directional distribution of site-generated traffic was determined based on the location of development site within the County, proposed and existing area land uses, allowed turning movements, available roadway network, assumptions made for previous studies within the area, and in reference to distribution patterns of existing traffic count data.

Additional pass-by trip distribution is assumed to include vehicle routes heading north-south along Meridian Road. Distribution percentages utilized for pass-by trips are anticipated to be 50 percent from the north and south.

Overall trip distribution patterns for the development are shown on Figure 6.

<sup>\* =</sup> ITE does not report significant AM peak hour generation due to the nature of the business (ie, operating hours typically open after AM peak).

#### **Trip Assignment**

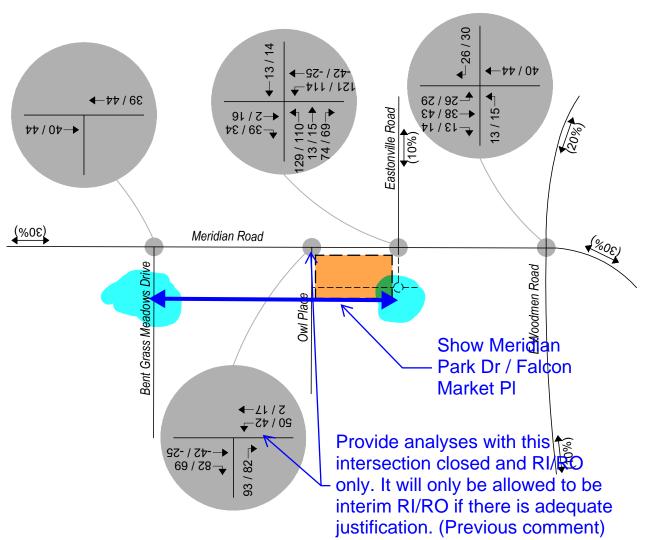
Traffic assignment is how generated and distributed vehicle trips are expected to be loaded onto the available roadway network.

Applying trip distribution patterns to site-generated traffic provides the overall site-generated trip assignments shown on Figure 6.

It is to be noted that the overall site-generated trip assignments shown on Figure 6 represent the combination of both primary trip generation and pass-by trips. Due to the application of pass-by trips, some negative site-generated trips are shown at the study intersections. These negative trips are the result of redistributing existing through volumes along Meridian Road to site-generated ingress volumes.

AM / PM Peak Hour

SITE DEVELOPMENT DISTRIBUTION SITE-GENERATED (%) : Overall



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Study Intersection

LEGEND

Volumes

Development Site



# V. Future Traffic Conditions With Proposed Developments

Total traffic is the traffic projected to be on area roadways with consideration of the proposed development. Total traffic includes background traffic projections for Years 2024 and 2040 with consideration of site-generated traffic. For analysis purposes, it was assumed that development construction would be completed by end of Year 2024.

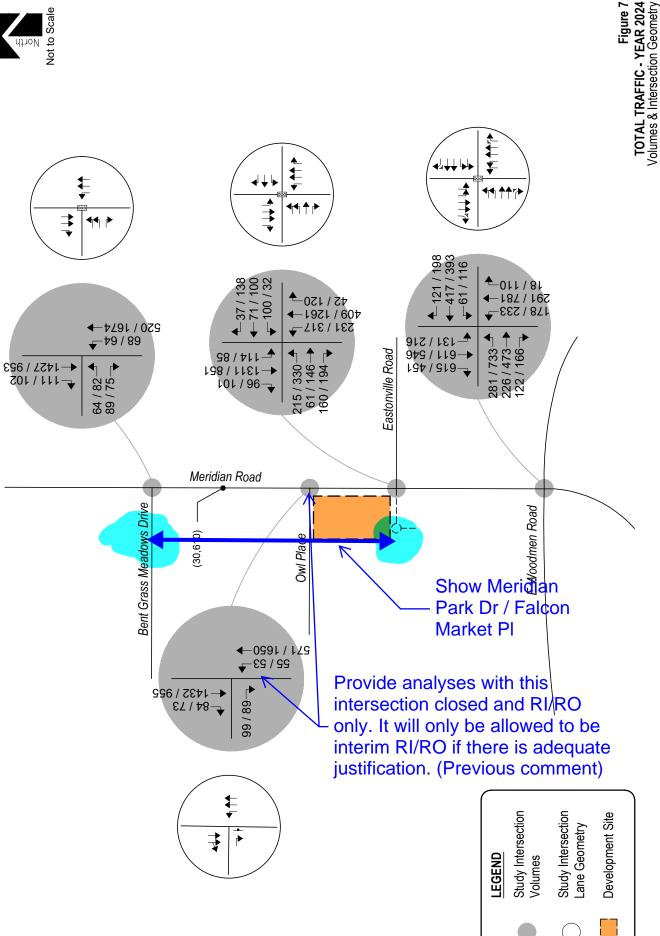
Pursuant to area roadway improvement discussions provided in Section III, Year 2024 and Year 2040 total traffic conditions assume no additional roadway improvements to accommodate regional transportation demands. Roadway improvements associated with site development are expected to be limited to site access and frontage as required by the governing agency. This is anticipated to include the paving of Owl Place along the property frontage and installation of exclusive turn lanes at site accesses as needed.

Projected Year 2024 total traffic volumes and intersection geometry are shown in Figure 7.

Figure 8 shows projected total traffic volumes and intersection geometry for Year 2040.

AM / PM Peak Hour

(ADT): Average Daily Traffic











SM ROCHA, LLC
Traffic and Transportation Consultants

September 2022

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#### **VI. Project Impacts**

The analyses and procedures described in this study were performed in accordance with the latest HCM and are based upon the worst-case conditions that occur during a typical weekday upon build-out of site development and analyzed land uses. Therefore, study intersections are likely to operate with traffic conditions better than those described within this study, which represent the peak hours of weekday operations only.

#### Peak Hour Intersection Levels of Service - Total Traffic

As with background traffic, the operations of the study intersections were analyzed under projected total traffic conditions using the SYNCHRO computer program. Total traffic level of service analysis results for Years 2024 and 2040 are summarized in Table 7 and Table 8, respectively.

Definitions of levels of service are given in Appendix B. Intersection capacity worksheets are provided in Appendix C.

Analyze the intersections on Meridian Park

Drive /Falcon Market Place: Eastonville, Bent Grass Meadows, Owl Pl

Table 7 – Intersection Capacity Analysis Summary – Total Traffic – Year 2024

INTERSECTION	LEVEL OF	SERVICE
LANE GROUPS	AM PEAK HOUR	PM PEAK HOUR
Meridian Road / E Woodmen Road (Signalized)	C (32.5)	D (46.0)
Meridian Road / Bent Grass Meadows Drive (Signalized)	B (10.5)	A (5.9)
Meridian Road / Eastonville Road (Signalized)	D (41.9)	C (27.8)
Meridian Road / Owl Place (Stop-Controlled) Eastbound Right Northbound Left	B B	B A

Key: Signalized Intersection: Level of Service (Control Delay in sec/veh) Stop-Controlled Intersection: Level of Service

Table 8 – Intersection Capacity Analysis Summary – Total Traffic – Year 2040

INTERSECTION		LEVEL OF	SERVICE
LANE GROUPS		AM PEAK HOUR	PM PEAK HOUR
Meridian Road / E Woodmen Ro	ad (Signalized)	D (39.9)	F (94.0)
Meridian Road / Bent Grass Mea	dows Drive (Signalized)	C (20.5)	B (11.2)
Meridian Road / Eastonville Road	l (Signalized)	E (59.3)	D (44.3)
Meridian Road / Owl Place (Stop-	-Controlled)		
Eastbound Right		D	В
Northbound Left V		С	В

Key: Signalized Intersection: Level of Service (Control Delay in sec/veh) Stop-Controlled Intersection: Level of Service

#### **Total Traffic Analysis Results Upon Development Build-Out**

Table 8 illustrates how, by Year 2040 and upon development build-out, the signalized intersection of Meridian Road with E Woodmen Road shows an overall LOS D operation during both the morning peak traffic hour and LOS F during the afternoon peak traffic hour. Compared to the background traffic analysis, the traffic generated by the proposed development is not expected to significantly change the operations of the study intersection and is noted to increase overall intersection delay by approximately seven seconds which is considered minor. The LOS F operation anticipated during the afternoon peak traffic period continues to be primarily attributed to the eastbound, northbound and southbound turning movements. As with background traffic conditions, in order to provide mitigation to the poor overall operation and increase available intersection capacity, potential improvements may include the widening of E Woodmen Road to six-lanes, pursuant to its future classification as an expressway, as well as further optimization of traffic signal timings to accommodate future regional demand. It is also noted that long-term operations may be better than shown given the potential for future planned roadway connections to the west along E Woodmen Road to influence vehicle routes. As example, planned construction of future Banning Lewis Parkway within the City of Colorado Springs along E Woodmen Road will provide an additional major north-south arterial roadway which may reduce some of the volumes projected to utilize Meridian Road for north-south travel. It is recommended that County Staff continues to monitor the study intersection in order to determine what mitigation may be most applicable and when implementation of said improvements becomes See previous comment regarding the necessary. future Woodmen Road cross-section.

The signalized intersection of Meridian Road with Bent Grass Meadows Drive is projected to have morning and afternoon peak traffic hour operations at LOS C and B, respectively.

The signalized intersection of Meridian Road with Eastonville Road is projected to have morning peak traffic hour operations at LOS E and LOS D during the afternoon peak traffic hour. The LOS E operation anticipated during the morning peak traffic period continues to be attributed to the high southbound through volumes. To mitigate the anticipated LOS E operation, it is recommended increasing northbound and southbound signal split timing by taking away from eastbound and westbound signal split timing. However, this may result in increased vehicle queues along Eastonville Road. Alternatively, restriping of the existing northbound left-turn lane to accommodate dual northbound lefts allowing additional signal split timing to be provided to other movements would provide improved operations. As site plan development continues to occur, it is anticipated that additional analysis may be needed in order to determine when such improvements are necessary.

The stop-controlled intersection of Meridian Road with Owl Place is projected to have turning movement operations at LOS D or better for the morning peak traffic hour and LOS B for the afternoon peak traffic hour.

Address both analyses for closure and RI/RO

#### **Auxiliary Lane Analysis**

Auxiliary lanes for site development intersections are to be based on County's ECM.

Considering development build-out, an evaluation of auxiliary lane requirements, pursuant to Section 2.3.7(D), of the County's ECM, reveals that exclusive left-turn and right-turn deceleration lanes are required at all study intersections along Meridian Road due to its roadway classification and corresponding CDOT State Highway Access Code (SHAC) designation. It is anticipated that auxiliary lanes at internal site accesses will include a left-turn westbound deceleration lane along Owl Place at Access A due to the high left-turn ingress volumes. Define WB LT lane length at Access A to ensure that it does not extend to Meridian Rd.

An evaluation of auxiliary requirements also indicates that a southbound acceleration lane at Owl Place along Meridian Road would be required since projected egress turning volumes are expected to exceed CDOT SHAC volume thresholds.

Define SB accel lane length at Owl Place and

ensure that it does not extend to Eastonville Rd.

Queue Length Analysis

State that site design will need to account for the accel lane width when Meridian Road is expanded to 6 lanes unless the access is closed at that time.

to 6 lanes unless the access is closed at that time. Queue lengths for study intersections were analyzed using Year 2040 total traffic conditions. The analysis yields estimate of 95<sup>th</sup> percentile queue lengths, which have only a five percent probability of being exceeded during the analysis time period. Queue lengths were modeled and are included with the Synchro worksheets in Appendix C.

Some queueing at the site access intersections of Meridian Road with Eastonville Road and Owl Place were indicated. The greatest on-site queue length anticipated occurs during the afternoon peak hour at the Eastonville Road intersection. The queue length is approximately 253 feet or between ten and eleven vehicles for the eastbound approach, assuming a typical vehicle length of 25 feet.

If queue blockages are forecasted to

occur, they should be mitigated It is nowever noted that comparable queueing is shown to occur under Year 2040 background conditions without the proposed development. With the addition of site generated traffic, queue lengths are shown to increase by approximately one to two vehicles. This quade length can generally be accommodated within the available readway length, however some blocking of the northbound movement at the adjacent roundabout intersection may occur during peak periods. However, this is not expected to interfere with vehicles entering the development area from Meridian Road. Additionally, the upstream signal control on Meridian Road will tend to greate additional gaps in the traffic stream for turning movements at the Falcon Market Place roundabout and will most likely provide mitigation to vehicle queues projected during the afternoon peak traffic hour.

It is noted that provision for dual northbound left turn lanes on Meridian Road as previously discussed would also allow additional signal timing for the eastbound movement reducing vehicle queues and improving everally intersection operations. To prevent vehicle stacking within the intersection, additional mitigation measures may include conversion of the existing roundabout to a two-way stop-controlled intersection.

If progression is being relied upon for mitigation, provide progression results in TIS

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Make mitigation recommendation

Address queue lengths for the intersections on Meridian Park
Drive /Falcon Market Place: Eastonville, Bent Grass Meadows,
Owl PI, with the two required options for Owl/Meridian

#### **Pedestrian Circulation & Safety Analysis**

Pedestrian and bicycle connectivity should be planned for, including connection to the MTCP's proposed bicycle route along Meridian Blvd.

In accordance with Section B.2.4.B of the County's ECM, an assessment to pedestrian connectivity and safety was considered. However, it is emphasized that the sketch plan analyzed throughout this study is conceptual and details of pedestrian circulation and connectivity have not been determined. As actual site plans within the overall development become defined over time, it is assumed that an evaluation of pedestrian circulation and connectivity may be necessary.

With the assumption that future site plans are designed per the County's ECM, and pursuant to the Federal Highway Administration's (FHWA) Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations<sup>6</sup>, pedestrian safety is not expected to be of concern. Moreover, traffic calming, and pedestrian crossing treatments, are not applicable, and traffic calming is not recommended for the proposed conditions.

#### **Transportation Demand Management Plan**

Pursuant to Section B.2.4.B of the County's ECM, a Transportation Demand Management (TDM) Plan for the proposed development was prepared in order to identify features, measures, and strategies designed to reduce single-occupant vehicle (SOV) trips and maximize the use of alternate modes of transportation. As it relates to this development site and the overall area, these alternate modes of transportation include, but may not be limited to, public bus routes, shuttles, car-pooling, bicycling, scooters, and walking. This is consistent with transportation facilities and services described within the County's MTCP and the Pikes Peak Area Council of Governments (PPACG) 2045 Regional Transportation Plan – Transit<sup>7</sup>.

One method includes the availability of public bus routes. The City of Colorado Springs provides the Mountain Metropolitan Transit (MMT). While MMT currently does not provide service in unincorporated areas of El Paso County. Additional transit services for unincorporated areas of El Paso County, as described within the MTCP, include Community Intersections, ComCor, Amblicab, El Paso Fountain Valley Senior Citizens Program, Goodwill Industries, Metro Mobility, Mountain Community Senior Services, Rocky Mountain Health Care Services, and Silver Key Senior Services. These public modes of transportation are expected to be affordable and easy to access.

Residents, tenants, visitors, or employees of the overall development area may also be encouraged to travel by bicycle or by walking. Within the immediate area, public sidewalks and pedestrian trails will be available to allow for connectivity within the greater area. Urban and regional trails exist within the overall area, as shown in the MTCP, and are planned to be improved in the future. Other forms of transportation may also be available that encourage the use of these pedestrian routes, including electric scooters and electric bicycles.

<sup>7</sup> 2045 Regional Transportation Plan – Transit, Mountain Metropolitan Transit, January 8, 2020.

<sup>&</sup>lt;sup>6</sup> <u>Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations</u>, Federal Highway Administration, July 2018.

As site plans within the Owl Place Commercial area develop, they may consider promoting alternate modes of pedestrian travel and accommodations as needed. In reference to the City and County of Denver's TDM Guide, general strategies and tools for implementing a successful TDM Plan may include subsidized transit passes, investments in future transit stops, transit connection services, and passenger pick-up / drop-off areas used in conjunction with transit connection services. Bicycle and pedestrian strategies may include shared bicycle amenities, bike, e-bike, or scooter share/loan programs, subsidized shared mobility programs, or pedestrian wayfindings. Parking and car-share strategies may include parking fees, parking cash-out programs, or incentivized carpooling programs. Supportive strategies may include membership in a Transportation Management Association (TMA), transportation incentive fundings, transit screens and information kiosks, new resident kits, or teleworking policies. Event-related TDM strategies may include one-time transit passes, valet bicycle parking, or special event transit services.

#### **Recommended Improvements**

Table 9 illustrates the recommended roadway and intersection control improvements associated with the proposed Owl Place Commercial development and adjacent area.

**TYPE TIMING IMPROVEMENT** RESPONSIBILITY Whoever warrants the need; i.e. Restriping of northbound left turn lane to Auxiliary Lane When Warranted support dual left turn at Eastonville Road County, City, or Developer Construct southbound right turn lane on With Final Plat Application(s) / Auxiliary Lane Applicant Site Development Meridian Road at Owl Place Construct westbound left turn lane on Owl With Final Plat Application(s) / Auxiliary Lane Applicant Place at Access A Site Development Widen E Woodmen Road to six-lane cross-Based on Expressway Master planned Roadway Segment Classification per 2040 MTCP section

Table 9 – Recommended Improvements Summary

Recommended improvements, as shown in Table 9 above, which may be reimbursable under the County's MTCP include roadway widening and realignment improvements.

This already exists.

Add lines for conversion to RI/RO (interim) and/or closure of Owl PI

Update table for any other improvements identified to Meridian Park Dr./Falcon Market Pl.

# and Meridian Park Drive/Falcon Market Place between Eastonville VII. Conclusion and Bent Grass Meadows Dr.

This traffic impact study is provided as a planning document and addresses the capacity, geometric, and control requirements associated with the development entitled Owl Place Commercial. This proposed commercial development consists of various potential uses including a gas station convenience store, coffee/donut shop with drive-through window, automated car wash, and quick-serve restaurants. The development is located at the southwest corner of the intersection of Meridian Road with Owl Place in El Paso County, Colorado.

The study area to be examined in this analysis encompasses Meridian Road between the intersections of Bent Grass Meadows Drive and E Woodmen Road.

Analysis was conducted for critical AM Peak Hour and PM Peak Hour traffic operations for existing traffic conditions, Year 2024 and Year 2040 background traffic conditions, and Year 2024 and Year 2040 total traffic conditions.

Under existing conditions, operational analysis shows that the signalized intersection of Meridian Road with E Woodmen Road has overall operations at LOS C during the morning peak traffic hour and LOS D during the afternoon peak traffic hour. The signalized intersection of Meridian Road with Bent Grass Meadows Drive has overall operations at LOS A during both the morning and afternoon peak traffic hours. The unsignalized intersection of Meridian Road with Eastonville Road has turning movement operations at or better than LOS B during either peak traffic hour. Exceptions would include the westbound left turning movement which operates at LOS F during the PM peak traffic hour. The LOS F operation is attributed to the high through traffic volumes along Meridian Road and the stop-controlled nature of the intersection. However, as previously discussed, given the recent signalization of the study intersection, actual operations are expected to be better than shown. The unsignalized intersection of Meridian Road with Owl Place has turning movement operations at or better than LOS B during the morning peak traffic hour and LOS A during the afternoon peak traffic hour. It is to be noted that it is not uncommon for unsignalized movements to or from an arterial roadway, in urban areas, to operate with noticeable delays during peak traffic hours.

Year 2024 background traffic analysis indicates that the signalized intersection of Meridian Road with E Woodmen Road has overall operations at LOS C during the AM peak traffic hour and LOS D during the PM peak traffic hour. The signalized intersection of Meridian Road with Bent Grass Meadows Drive has overall operations at LOS B during the AM peak traffic hour and LOS A during the PM peak traffic hour. The signalized intersection of Meridian Road with Eastonville Road has overall operations at LOS D during the AM peak traffic hour and LOS C during the PM peak traffic hour. The unsignalized intersection of Meridian Road with Owl Place operates at or better than LOS B during both AM and PM peak traffic periods.

By Year 2040 and without the proposed development, the study intersection of Meridian Road with E Woodmen Road experiences LOS D operations during the AM peak traffic hour and LOS F during the PM peak traffic hour. The LOS F operation is primarily attributed to the high eastbound, northbound and southbound left turning volumes. The study intersection of Meridian Road with Bent Grass Meadows Drive experiences LOS B operations during both the AM and PM peak traffic hours. The study intersection of Meridian Road with Eastonville Road experiences LOS D operations during the AM peak traffic hour and LOS C operations during the PM peak traffic hour. The study intersection of Meridian Road with Owl Place experiences LOS C operations during the AM peak traffic hour and LOS B or better operations during the PM peak traffic hour.

In order to provide mitigation to the poor long-term operations and increase available intersection capacity, potential improvements may include the widening of E Woodmen Road to six-lanes, pursuant to its future classification as an expressway, as well as further optimization of traffic signal timings to accommodate future regional demand. It is also noted that long-term operations may be better than shown given the potential for future planned roadway connections to the west along E Woodmen Road to influence vehicle routes. As example, planned construction of future Banning Lewis Parkway within the City of Colorado Springs along E Woodmen Road will provide an additional major north-south arterial roadway which may reduce some of the volumes projected to utilize Meridian Road for north-south travel. It is recommended that County Staff continues to monitor the study intersection in order to determine what mitigation may be most applicable and when implementation of said improvements becomes necessary.

Analysis of future traffic conditions indicates that the addition of site-generated traffic is expected to create no negative impact to traffic operations for the existing and surrounding roadway system upon consideration of the various roadway and intersection control improvements assumed within this analysis. With all conservative assumptions defined in this analysis, the study intersections are projected to operate at future levels of service comparable to Year 2040 background traffic conditions. Proposed site access intersections have long-term operations at LOS D or better during peak traffic periods and upon build-out.

This site is subject to the El Paso County Road Impact Fee Program (Resolution 19-471), as amended. An option for payment will be selected at the final land use approval stage.

Update as appropriate with the required revisions

# **APPENDIX A**

Traffic Count Data Signal Timing Information

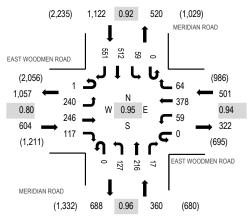


Location: 1 MERIDIAN ROAD & EAST WOODMEN ROAD AM

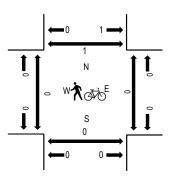
Date: Wednesday, June 1, 2022 Peak Hour: 07:15 AM - 08:15 AM

Peak 15-Minutes: 07:15 AM - 07:30 AM

#### Peak Hour - All Vehicles



#### Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

#### **Traffic Counts**

 Interval Start Time	EAST WOODMEN ROAD Eastbound				EAST WOODMEN ROAD Westbound				MERIDIAN ROAD Northbound				MERIDIAN ROAD Southbound					Rolling	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru F	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South N	North
7:00 AM	0	41	45	41	0	9	112	15	0	26	47	7	0	9	165	127	644	2,584	0	0	0	0
7:15 AM	0	45	61	32	0	16	104	19	0	40	52	1	0	8	144	156	678	2,587	0	0	0	0
7:30 AM	0	55	64	26	0	8	113	17	0	32	52	6	0	13	150	142	678	2,550	0	0	0	0
7:45 AM	0	72	72	30	0	20	78	10	0	28	51	4	0	19	105	95	584	2,509	0	0	0	1
8:00 AM	1	68	49	29	0	15	83	18	0	27	61	6	0	19	113	158	647	2,528	0	0	0	0
8:15 AM	0	60	60	13	0	9	101	17	2	20	56	6	0	25	120	152	641		0	0	0	0
8:30 AM	0	71	67	14	0	15	73	19	0	27	47	7	0	17	123	157	637		0	0	0	0
8:45 AM	0	78	94	23	0	25	69	21	2	27	36	10	1	26	83	108	603		0	0	0	0
Count Total	1	490	512	208	0	117	733	136	4	227	402	47	1	136	1,003	1,095	5,112		0	0	0	1
Peak Hour	1	240	246	117	0	59	378	64	0	127	216	17	0	59	512	551	2,58	7	0	0	0	1

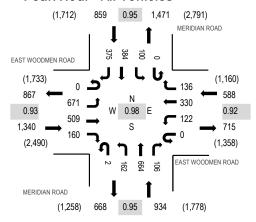


Location: 1 MERIDIAN ROAD & EAST WOODMEN ROAD PM

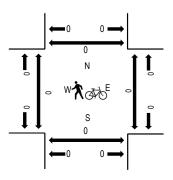
Date: Wednesday, June 1, 2022 Peak Hour: 04:45 PM - 05:45 PM

**Peak 15-Minutes:** 05:30 PM - 05:45 PM

## Peak Hour - All Vehicles



## Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Interval	EAST	WOOD Eastb		ROAD	EAST V	VOOD! Westb	MEN RO	AD		RIDIAN Northb		)	MI	ERIDIA Southb		D		Rolling	Ped	estriar	n Crossir	ngs
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru F	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South I	North
4:00 PM	0	108	100	28	0	21	80	36	0	40	132	23	0	22	100	107	797	3,490	0	0	0	0
4:15 PM	0	142	136	41	1	31	75	33	2	31	141	22	0	24	85	104	868	3,609	0	0	0	0
4:30 PM	0	160	129	25	0	25	82	32	3	32	190	21	0	17	91	100	907	3,678	0	0	0	0
4:45 PM	0	166	113	48	0	26	75	35	1	45	158	32	0	23	100	96	918	3,721	0	0	0	0
5:00 PM	0	147	137	43	0	35	82	29	0	44	171	21	0	31	90	86	916	3,650	0	0	0	0
5:15 PM	0	180	119	27	0	31	89	45	0	30	164	27	0	21	110	94	937		0	0	0	0
5:30 PM	0	178	140	42	0	30	84	27	1	43	171	26	0	25	84	99	950		0	0	0	0
5:45 PM	0	154	101	26	1	24	94	37	0	30	155	22	0	24	88	91	847		0	0	0	0
Count Total	0	1,235	975	280	2	223	661	274	7	295	1,282	194	0	187	748	777	7,140		0	0	0	0
 Peak Hour	0	671	509	160	0	122	330	136	2	162	664	106	0	100	384	375	3,72	1.1	0	0	0	0

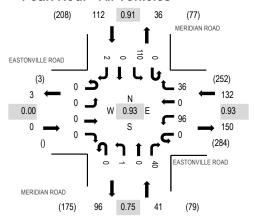


Location: 2 MERIDIAN ROAD & EASTONVILLE ROAD AM

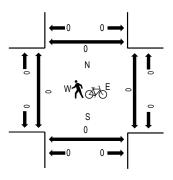
Date: Wednesday, June 1, 2022 Peak Hour: 07:45 AM - 08:45 AM

Peak 15-Minutes: 08:00 AM - 08:15 AM

## Peak Hour - All Vehicles



## Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

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	EAS	ΓΟΝVΙΙ	LLE RO	DAD	EAST	ONVIL	LE ROA	D	ME	ERIDIAI	N ROA	D	ME	ERIDIA	N ROA	.D						
Interval		Eastb	ound			Westb	ound			Northb	ound			South	bound			Rolling	Ped	lestriar	n Crossir	ngs
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru F	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South I	North
7:00 AM	0	0	0	0	0	14	0	12	0	0	0	8	0	21	0	0	55	254	0	0	0	0
7:15 AM	0	0	0	0	0	17	0	11	0	0	0	9	0	24	0	0	61	276	0	0	0	0
7:30 AM	0	0	0	0	0	19	0	9	0	0	0	12	0	29	0	0	69	283	0	0	0	0
7:45 AM	0	0	0	0	0	21	0	7	0	0	0	9	0	31	0	1	69	285	0	0	0	0
8:00 AM	0	0	0	0	0	23	0	10	0	1	0	14	0	29	0	0	77	285	0	0	0	0
8:15 AM	0	0	0	0	0	27	0	8	0	0	0	7	0	26	0	0	68		0	0	0	0
8:30 AM	0	0	0	0	0	25	0	11	0	0	0	10	0	24	0	1	71		0	0	0	0
8:45 AM	0	0	0	0	0	29	0	9	0	0	0	9	0	22	0	0	69		0	0	0	0
Count Total	0	0	0	0	0	175	0	77	0	1	0	78	0	206	0	2	539		0	0	0	0
Peak Hour	0	0	0	0	0	96	0	36	0	1	0	40	0	110	) (	) :	2 28	35	0	0	0	0

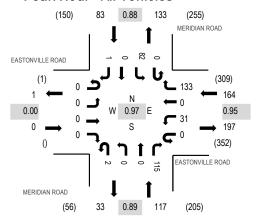


Location: 2 MERIDIAN ROAD & EASTONVILLE ROAD PM

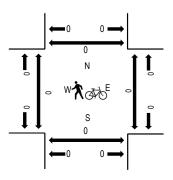
Date: Wednesday, June 1, 2022
Peak Hour: 05:00 PM - 06:00 PM

**Peak 15-Minutes:** 05:15 PM - 05:30 PM

## Peak Hour - All Vehicles



## Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Haillo	Count																						
		EAST	ΓΟΝVΙΙ	LLE RO	DAD	EAST	ONVIL	LE ROA	۸D	M	ERIDIAI	N ROAI	)	MI	ERIDIA	N ROA	.D						
Inte	erval		Eastb	ound			Westb	ound			Northb	ound			South	oound			Rolling	Ped	lestriar	n Crossii	ngs
Star	t Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
4:00	0 PM	0	0	0	0	0	4	0	23	0	0	0	12	0	14	0	0	53	300	0	0	0	0
4:1:	5 PM	0	0	0	0	0	7	0	27	0	0	0	23	0	13	0	0	70	336	0	0	0	0
4:30	0 PM	0	0	0	0	0	9	0	39	0	0	0	25	0	16	0	0	89	360	0	0	0	0
4:4:	5 PM	0	0	0	0	0	3	0	33	0	0	0	28	0	24	0	0	88	359	0	0	0	0
5:00	0 PM	0	0	0	0	0	7	0	36	0	0	0	23	0	23	0	0	89	364	0	0	0	0
5:1	5 PM	0	0	0	0	0	5	0	31	2	0	0	31	0	24	0	1	94		0	0	0	0
5:30	0 PM	0	0	0	0	0	9	0	34	0	0	0	30	0	15	0	0	88		0	0	0	0
5:4	5 PM	0	0	0	0	0	10	0	32	0	0	0	31	0	20	0	0	93		0	0	0	0
Count 7	Total	0	0	0	0	0	54	0	255	2	0	0	203	0	149	0	1	664		0	0	0	0
Peak I	Hour	0	0	0	0	0	31	0	133	2	0	0	115	0	82	? (	)	1 36	64	0	0	0	0

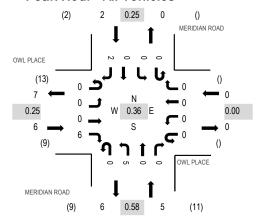


Location: 3 MERIDIAN ROAD & OWL PLACE AM

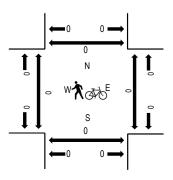
Date: Wednesday, June 1, 2022 Peak Hour: 07:00 AM - 08:00 AM

Peak 15-Minutes: 07:00 AM - 07:15 AM

## Peak Hour - All Vehicles



## Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Interval	(	OWL P Eastb				WL PL Westb			ME	RIDIAN Northb		D	M	ERIDIA Southl		D		Rolling	Ped	estrian	Crossin	ıgs
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South I	North
7:00 AM	0	0	0	6	0	0	0	0	0	1	0	0	0	0	0	2	9	13	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	7	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	8	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	8	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	9	0	0	0	0
8:15 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2		0	0	0	0
8:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1		0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3		0	0	0	0
Count Total	0	0	0	9	0	0	0	0	0	11	0	0	0	0	0	2	22		0	0	0	0
Peak Hour	0	0	0	6	0	0	0	0	0	5	0	0	0	0	) (	)	2 1	13	0	0	0	0

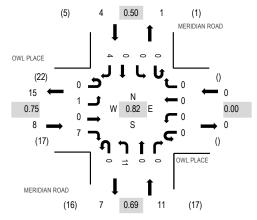


Location: 3 MERIDIAN ROAD & OWL PLACE PM

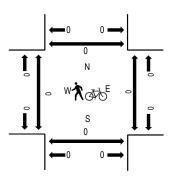
Date: Wednesday, June 1, 2022
Peak Hour: 04:00 PM - 05:00 PM

**Peak 15-Minutes:** 04:00 PM - 04:15 PM

## Peak Hour - All Vehicles



## Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

	,	OWL P	LACE		(	OWL PL	A C E		1.41	ERIDIAI	N DOA	D	1.41	EDIDIV	N ROA	D						
Interval	,	Eastb			(	Westb			IVII	Northb		D	IVII		bound	(D		Rolling	Ped	lestriar	n Crossir	ngs
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru I	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
4:00 PM	0	0	0	2	0	0	0	0	0	3	0	0	0	0	0	2	7	23	0	0	0	0
4:15 PM	0	1	0	2	0	0	0	0	0	2	0	0	0	0	0	1	6	21	0	0	0	0
4:30 PM	0	0	0	2	0	0	0	0	0	4	0	0	0	0	0	0	6	18	0	0	0	0
4:45 PM	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	1	4	15	0	0	0	0
5:00 PM	0	0	0	3	0	0	0	0	0	2	0	0	0	0	0	0	5	16	0	0	0	0
5:15 PM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3		0	0	0	0
5:30 PM	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	3		0	0	0	0
5:45 PM	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	1	5		0	0	0	0
Count Total	0	1	0	16	0	0	0	0	0	17	0	0	0	0	0	5	39	)	0	0	0	0
Peak Hour	0	1	0	7	0	0	0	0	0	11	0	0	0	(	) (	) ,	4	23	0	0	0	0

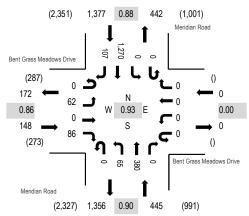


Location: 1 Meridian Road & Bent Grass Meadows Drive AM

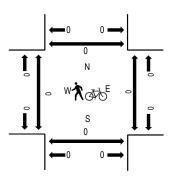
**Date:** Tuesday, March 29, 2022 **Peak Hour:** 07:00 AM - 08:00 AM

Peak 15-Minutes: 07:15 AM - 07:30 AM

## Peak Hour - All Vehicles



## Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Interval	Bent G	rass M Eastb		s Drive	Bent Gr	ass Me Westb	adows Dround	ive	ا	Meridiar Northb			ا	Meridia South	n Road bound			Rolling	Ped	lestrian	n Crossin	gs
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru Ri	ght	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South N	Vorth
7:00 AM	0	17	0	18	0	0	0	0	0	19	63	0	0	0	341	36	494	1,970	0	0	0	0
7:15 AM	0	14	0	29	0	0	0	0	0	17	79	0	0	0	366	26	531	1,912	0	0	0	0
7:30 AM	0	13	0	24	0	0	0	0	0	16	97	0	0	0	307	21	478	1,794	0	0	0	0
7:45 AM	0	18	0	15	0	0	0	0	0	13	141	0	0	0	256	24	467	1,718	0	0	0	0
8:00 AM	0	12	0	15	0	0	0	0	0	12	111	0	0	0	259	27	436	1,645	0	0	0	0
8:15 AM	0	16	0	15	0	0	0	0	0	16	138	0	0	0	210	18	413		0	0	0	0
8:30 AM	0	18	0	21	0	0	0	0	1	9	115	0	0	0	229	9	402		0	0	0	0
8:45 AM	0	13	0	15	0	0	0	0	1	7	136	0	0	0	205	17	394		0	0	0	0
Count Total	0	121	0	152	0	0	0	0	2	109	880	0	0	0	2,173	178	3,615		0	0	0	0
Peak Hour	0	62	0	86	0	0	0	0	0	65	380	0	0	(	1,270	107	7 1,970	)	0	0	0	0

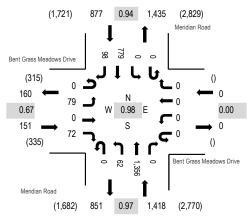


Location: 1 Meridian Road & Bent Grass Meadows Drive PM

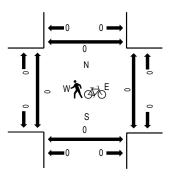
**Date:** Tuesday, March 29, 2022 **Peak Hour:** 04:30 PM - 05:30 PM

**Peak 15-Minutes:** 04:30 PM - 04:45 PM

## Peak Hour - All Vehicles



## Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Interval	Bent G	rass M Eastb		s Drive		ass Me Westb	adows Dr ound	ive		Meridia Northb				Meridia Southl	n Road bound			Rolling	Ped	estriar	n Crossir	ıgs
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru Ri	ght	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South I	North
4:00 PM	0	19	0	21	0	0	0	0	0	17	324	0	0	0	196	22	599	2,398	0	0	0	0
4:15 PM	0	21	0	23	0	0	0	0	0	13	308	0	0	0	171	31	567	2,417	0	0	0	0
4:30 PM	0	20	0	19	0	0	0	0	0	15	336	0	0	0	208	25	623	2,446	0	0	0	0
4:45 PM	0	19	0	17	0	0	0	0	0	17	348	0	0	0	182	26	609	2,446	0	0	0	0
5:00 PM	0	20	0	23	0	0	0	0	0	13	342	0	0	0	198	22	618	2,428	0	0	0	0
5:15 PM	0	20	0	13	0	0	0	0	0	17	330	0	0	0	191	25	596		0	0	0	0
5:30 PM	0	47	0	19	0	0	0	0	0	12	317	0	0	0	203	25	623		0	0	0	0
5:45 PM	0	17	0	17	0	0	0	0	0	20	341	0	0	0	181	15	591		0	0	0	0
Count Total	0	183	0	152	0	0	0	0	0	124	2,646	0	0	0	1,530	191	4,826		0	0	0	0
Peak Hour	0	79	0	72	0	0	0	0	0	62	1,356	0	0	(	779	98	2,446		0	0	0	0

## All Traffic Data Services www.alltrafficdata.net

Date Start: 29-Mar-22 Site Code: 3 Station ID: 3 MERIDIAN RD S.O. BENT GRASS MEADOWS DR

29-Mar-22 Tue	8 R	SB							Total
5									
01:00	19	7							30
02:00	12	18							30
03:00	1	45							56
04:00	24	138							162
05:00	28	358							416
00:90	211	1018							1229
00:20	447	1364							1811
08:00	547	296							1514
00:60	512	805							1317
10:00	562	757							1319
11:00	656	745							1401
12:00 PM	774	756							1530
01:00	798	723							1521
02:00	836	808							1644
03:00	1115	962							1911
04:00	1379	846							2225
02:00	1400	836							2236
00:90	1001	029							1671
00:20	782	438							1220
08:00	521	287							808
00:60	332	164							496
10:00	184	75							259
11:00	77	41							118
Total	12308	12681							24989
Percent	49.3%	20.7%							
AM Peak	11:00	02:00		•	1	1			02:00
Vol.	929	1364	•	•				•	1811
PM Peak -	17:00	16:00	•	•			•		17:00
Vol.	1400	846	•						2236
Grand Total	12308	12681							24989
Percent	49.3%	20.7%							
TUA	ADT 24 989	ΔΔ	DT 24 989						
-	, co, t		200,41						

# Omni eX v1.4 - Unit & Phase Configuration

23

Page 1 of

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501

Agency:		DATE PREPARED: 5/4/2022	By	DLM
Location:	Meridian Road & Bent Grass Meadows	DATE IMPLEMENTED:	, & 	
System ID:			1	

					danse serah		(2.10)															B.3 System Information	пасноп		
Auto PED Clr						1	2	3	4	Н	9 9	7	8	6	10	11	12	13	14	15	16	System Id			
Red Revert				Type	d)	Н	L	_	L	_	_	_	_							Ī	Г	Nате			
Min Yellow				Source	eo.																	Location			
TX Diamond				Alt 1	Alt 1/2 Hz		L	L	L	$\vdash$	_														
Diamond Type				Flsh Red	Red		_	$\vdash$	1	$\vdash$		L	L		L					İ		5.1 Coordination Constants	onstal	ıts	١
namona rype				Flsh Vel	Ye.	╀	+	+	+	+	+	1	1	1	L						Ī	Correction Mode	-S	Shortway	
						$\mathbf{I}$	-	-	-	+	$\mathbf{I}$				1						7	Max Cycles Trans	3		
		1	ſ																			Coord Max Mode	Σ	Max Inhibit	
.3 Startup	-		T	1.40	1.4 Channel Setup	Setup (	(17-32)	(														Coord Force Mode		Fixed	
Start-Up Phases	$\dashv$					17	, 18	3 19	9 20	) 21	1 22	23	24	25	97	27	28	56	30	31	32	Perm Strategy	Σ	Maximum	
Next Phase				Type	,				_	_	_	L		L						Г		Omit Strategy	Σ	Minimum	
Flash				Source	eo.					_												Sync Point	Be	Begin Yellow	≥
All Red				Alt 1	Alt 1/2 Hz								L							Γ		No Early Return	Ιά	Disable	
Start Veh Call				Flsh Red	Red			_		_												Sync Ref Time	0		
Start Ped Call				Flsh Yel	Yel				L	H												Operational Mode			
2.4 Phase Concurrrency	ency									Г	2.4 Ph	2.4 Phase Enable and Rings	ble an	d Rings							Ì				
1	2 3	4	5 6	2 9	8 9	10 1	1 12	13	14 15	16		Ľ	Ė	2 3	4	2	9	7	8	6	10	11 12 13	3 14	15	16
Phase 1							_		_		Enabled	þ	Ĺ	×	_	×	×	×	L	L			H	L	
Phase 2											Ring1		Ĺ	×											
Phase 3											Ring2					×	×	×					H		
Phase 4											Ring3			-	H	L	L		L		L		H		
Phase 5											Ring4		$\vdash$		H	L		L	L				H		
Phase 6																							l		
Phase 7							L											Pha	se Di	Phase Diagram	_				
Phase 8									H						1	Ė		~		-		4			
Phase 9																T		_		_					
Phase 10																_		_		_					
Phase 11																_		_							
Phase 12															-	1		4		+					
Phase 13															4	=				_					
Phase 14																_		_		_					
Phase 15							_									_		_		_					
		l	-					1		Ī										_					



Agency:	Date Prepared: By:
Location:	Date Implemented: By:

	System ID										
1.5.1.1	Nema ABCD Input Map	ping	90-								
Pins	Function	IDX	Pins	Function	IDX	Pins	Function	IDX	Pins	Function	ſDX
A-f	Vehicle Detector	1	B-m	Phase Ped Omit	7	A-k	Man Control Enable	1	D-V	Unused Input	1
A-K	Vehicle Detector	2	B-n	Phase Ped Omit	8	A-q	Mode Select Bit	1	D-W	Unused Input	1
B-N	Vehicle Detector	3	B-U	Phase Omit	1	А-у	Mode Select Bit	2	D-X	Unused Input	1
B-L	Vehicle Detector	4	B-S	Phase Omit	2	А-НН	Mode Select Bit	3	D-Y	Free (no Coord)	1
C-P	Vehicle Detector	5	B-R	Phase Omit	3	A-n	Test	1	D-Z	Unused Input	1
C-S	Vehicle Detector	6	B-g	Phase Omit	4	A-AA	Test	2	D-a	Unused Input	1
C-V	Vehicle Detector	7	C-n	Phase Omit	5	C-b	Test	3	D-b	Alarm	1
C-t	Vehicle Detector	8	C-q	Phase Omit	6	A-BB	Walk Rest Modifier	1	D-c	Alarm	2
A-g	Pedestrian Detector	1	С-г	Phase Omit	7	B-B	Unused Input	1	D-d	Alarm	3
A-L	Pedestrian Detector	2	C-s	Phase Omit	8	B-W	Unused Input	1	D-e	Alarm	4
B-P	Pedestrian Detector	3	A-i	Force Off Ring	1	B-X	Unused Input	1	D-f	Alarm	5
B-M	Pedestrian Detector	4	A-N	Stop Time Ring	1	B-v	Unused Input	1	D-g	Local Flash Sense	1
C-R	Pedestrian Detector	5	A-P	Inhibit Max Ring	1	D-A	Vehicle Detector	9	D-h	Mmu Flash	1
C-T	Pedestrian Detector	6	A-x	Red Rest Ring	1	D-B	Vehicle Detector	10	D-i	Door Ajar	1
C-U	Pedestrian Detector	7	A-FF	Ped Recycle Ring	1	D-C	Vehicle Detector	11	D-j	Special Func Input	1
C-W	Pedestrian Detector	8	A-GG	Max Ii Ring	1_1_	D-D	Vehicle Detector	12	D-k	Special Func Input	2
A-h	Phase Hold	1	A-w	Omit Red Clear Ring	1	D-E	Vehicle Detector	13	D-m	Special Func Input	3
A-M	Phase Hold	2	A-m	Call To Na	1	D-F	Vehicle Detector	14	D-n	Special Func Input	4
B-i	Phase Hold	3	C-Y	Force Off Ring	2	D-G	Vehicle Detector	15	D-p	Special Func Input	. 5
B-h	Phase Hold	4	C-Z	Stop Time Ring	2	D-H	Vehicle Detector	16	D-q	Special Func Input	6
C-m	Phase Hold	5	C-a	Inhibit Max Ring	2	D-J	Vehicle Detector	17	D-r	Special Func Input	7
С-р	Phase Hold	6	C-u	Red Rest Ring	2	D-K	Vehicle Detector	18	D-s	Special Func Input	8
C-EE	Phase Hold	7	B-V	Ped Recycle Ring	2	D-L	Vehicle Detector	19	D-t	Preempt Detector	1
C-X	Phase Hold	8	B-z	Max li Ring	2	D-M	Vehicle Detector	20	D-u	Preempt Detector	2
A-EE	Phase Ped Omit	1	C-v	Omit Red Clear Ring	2	D-N	Vehicle Detector	21	D-v	Preempt Detector	3
A-v	Phase Ped Omit	2	A-z	Call To Na	2	D-P	Vehicle Detector	22	D-w	Preempt Detector	4
B-j	Phase Ped Omit	3	A-R	External Start	_1_	D-R	Vehicle Detector	23	D-x	Preempt Detector	5
В-х	Phase Ped Omit	4	A-S	Interval Advance	1	D-S	Vehicle Detector	24	D-y	Preempt Detector	6
B-T	Phase Ped Omit	5	A-T	Unused Input	1	D-T	Clock Update	1	D-KK	Unused Input	1
B-k	Phase Ped Omit	6	A-j	Min Recall	1	D-U	Unused Input	1	D-MM	Unused Input	1

Pins	Function	IDX	Pins	Function	₹DX	Pins	Function	IDX	Pins	Function	IDX
A-D	Channel Red	1	В-а	Unused Output	1	C-k	Phase Check	. 5	A-A	Fault Monitor	1
A-F	Channel Red	2	B-J	Channel Red	10	C-BB	Phase Check	6	A-C	Voltage Monitor	1
B-F	Channel Red	3	C-L	Unused Output	1	C-MM	Phase Check	7	B-FF	Channel Green	15
B-G	Channel Red	4	C-z	Channel Red	11	C-FF	Phase Check	8	В-НН	Channel Yellow	15
C-H	Channel Red	5	С-у	Unused Output	1	B-A	Phase Next	1	B-DD	Channel Red	15
C-G	Channel Red	6	C-C	Channel Red	12	B-C	Phase Next	2	B-w	Channel Green	16
C-F	Channel Red	7	A-a	Unused Output	1	B-t	Phase Next	3	B-EE	Channel Yellow	16
C-D	Channel Red	8	A-H	Channel Yellow	9	B-f	Phase Next	4	B-u	Channel Red	16
A-Z	Channel Yellow	1	B-Z	Unused Output	1	C-M	Phase Next	5	A-X	Flash Logic Output	1
A-b	Channel Yellow	2	В-Н	Channel Yellow	10	C-DD	Phase Next	6	D-LL	Detector Reset	1
B-E	Channel Yellow	3	C-K	Unused Output	1	C-PP	Phase Next	7	A-CC	Status A	1
В-с	Channel Yellow	4	C-AA	Channel Yellow	11	С-НН	Phase Next	8	A-r	Status B	1
C-J	Channel Yellow	5	C-KK	Unused Output	1	A-DD	Phase On	1	A-Y	Status C	1
C-h	Channel Yellow	6	C-w	Channel Yellow	12	A-e	Phase On	2	C-A	Status A	2
C-E	Channel Yellow	7	A-t	Unused Output	1	B-s	Phase On	3	C-B	Status B	2
С-е	Channel Yellow	8	A-J	Channel Green	9	В-е	Phase On	4	C-c	Status C	2
A-s	Channel Green	1	В-Ү	Unused Output	1	C-N	Phase On	5	D-z	Alarm Output	1
А-с	Channel Green	2	B-d	Channel Green	10	C-CC	Phase On	6	D-AA	Alarm Output	2
B-D	Channel Green	3	C+J	Unused Output	1	C-NN	Phase On	7	D-BB	Special Func Output	1
B-b	Channel Green	4	C-LL	Channel Green	11	C-GG	Phase On	8	D-CC	Special Func Output	2
C-i	Channel Green	5	C-JJ	Unused Output	1	B-AA	Channel Green	13	D-DD	Special Func Output	3
C-g	Channel Green	6	C-d	Channel Green	12	В-р	Channel Yellow	13	D-EE	Special Func Output	4
C-f	Channel Green	7	A-u	Phase Check	1	B-q	Channel Red	13	D-FF	Special Func Output	5
I-x	Channel Green	8	A-d	Phase Check	2	B-GG	Channel Green	14	D-GG	Special Func Output	6
4-E	Unused Output	1	В-г	Phase Check	-3	B-BB	Channel Yellow	14	D-HH	Special Func Output	7
A-G	Channel Red	9	В-К	Phase Check	4	B-CC	Channel Red	14	D-JJ	Special Func Output	8



Agency:	Date Prepared:	By:
Location:	Date Implemeted:	By:
	4	

	IDX				П	П										Γ	Ι			П									Г			Г	
١	=	1	23	2	4	3	4	2	9	L	22	19	11	25	L	L				Ш			Ш				Ш						
5.	Function	Ped Detector	Ped Detector	Ped Detector	Ped Detector	Preempt	Preempt	Preempt	Preempt	Unused Input	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Iterval Adcance	CMU Flash	Stop Time	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	I'mired Innit							
Sunddan can dur are a co-	Pins	C1-67	C1-68	C1-69	C1-70	C1-71	C1-72	C1-73	C1-74	C1-75	C1-76	C1-77	C1-78	C1-79	C1-80	C1-81	C1-82	C11-15	C11-16	C11-17	C11-18	C11-19	C11-20	C11-21	C11-22	C11-23	C11-24	C11-25	C11-26	C11-27	C11-28	C11-29	611.20
	V		П	П	П			П		П				П	П		П				П	П					П			П	П	П	Ē
	IDX	2	16	8	22	3	17	6	23	9	20	12	26	1	2			15	1	21	7	27	13	28	14					4	18	10	24
1	Function	Vehicle Detector	Preempt	Preempt	Manual Ctrl	Unused Input	Vehicle Detector	Unused Input	Unused Input	Unused Input	Unused Input	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector																		
	Pins	C1-39	C1-40	C1-41	C1-42	C1-43	C1-44	C1-45	C1-46	C1-47	C1-48	C1-49	C1-50	C1-51	C1-52	C1-53	C1-54	C1-55	C1-56	C1-57	C1-58	C1-59	C1-60	C1-61	C1-62	C11-10	C11-11	C11-12	C11-13	C1-63	C1-64	C1-65	71-66

	1.5.3.2	2070 FIO	Ō	Output Mapping	ing	
Pins	Function	IDX		Pins	Function	XQI
C1-02	Channel Red	9		C1-35	Unused Output	
C1-03	Channel Green	9	_	C1-36	Unused Output	
C1-04	Channel Red	5	_	C1-37	Unused Output	
C1-05	Channel Yellow	2	_	C1-38	Unused Output	
C1-06	Channel Green	2		C1-100	Unused Output	
C1-07	Channel Red	4		C1-101	Flash Status	
C1-08	Channel Yellow	4	_	C1-102	Detector Reset	
C1-09	Channel Green	4	_	C1-103	Watchdog	
C1-10	Channel Red	3	_	C1-83	Unused Output	
C1-11	Channel Green	3		C1-84	Unused Output	
C1-12	Channel Red	2		C1-85	Channel Red	16
C1-13	Channel Yellow	2		C1-86	Channel Yellow	16
C1-15	Channel Green	2		C1-87	Channel Green	16
C1-16	Channel Red	1		C1-88	Channel Red	15
C1-17	Channel Yellow	1		C1-89	Channel Yellow	15
C1-18	Channel Green	1		C1-90	Channel Green	15
C1-19	Channel Red	12		C1-91	Unused Output	
C1-20	Channel Green	12		C1-93	Unused Output	
C1-21	Channel Red	11		C1-94	Channel Red	14
C1-22	Channel Yellow	11		C1-95	Channel Yellow	14
C1-23	Channel Green	11		C1-96	Channel Green	14
C1-24	Channel Red	10	۲	C1-97	Channel Red	13
C1-25	Channel Yellow	10		C1-98	Channel Yellow	13
C1-26	Channel Green	10		C1-99	Channel Green	13
C1-27	Channel Red	6		C11-1	Unused Output	
C1-28	Channel Green	6	_	C11-2	Unused Output	
C1-29	Channel Red	8	-	C11-3	Unused Output	
C1-30	Channel Yellow	8	Ч	C11-4	Unused Output	
C1-31	Channel Green	8	Н	C11-5	Unused Output	
C1-32	Channel Red	7	ш	C11-6	Unused Output	
C1-33	Channel Yellow	7	щ	C11-7	Unused Output	
C1-34	Channel Green	7	_	C11-8	Unused Output	

23 of Page 3

By: By:

Date Prepared: Date Implemented:

Agency: Location:

IDX Functions Unused Unused Unused Normal Unused Unused Unused ..6 Logic Gate Out Mode Type IN2 IN3 IN4 EXT DLY IDX Functions Unused Unused Unused Unused Normal Unused Unused 1.6 Logic Gate Out Mode Type IN4 IN2 N3 EXT DLY IDX System ID: Functions Unused Normal Unused Unused Unused Unused Unused 1.6 Logic Gate Out Mode

EXT

DLY

		_	_	_	_	_		_
	ATQ							
9	XQI							
	Functions	Unused	Normal	Unused	Unused	Unused	Unused	Unused
1.6 Logic Gate		Type	Out Mode	IN1	INZ	IN3	IN4	our
	EXT							
	DLY							
	2.							
Z.	XQ1							

EXT

Functions

1.6 Logic Gate

Unused

Type

EXT

DLY

IDX

Functions

1.6 Logic Gate

IN4

Unused Normal Unused Unused Unused Unused Unused

Out Mode

IN1

IN3

Unused Unused Unused Unused Unused

N4

Normal

Out Mode

I.6 Logic Gate (Ype N1 N2	Functions Unused Normal Unused Unused	7 IDX	2-4	DLY	EXT	1.6 Logic Gate Type Out Mode IN1	Functions Unused Normal Unused Unused	8 IDX	-	DLY	EXT	1.6 Logic Gate Type Out Mode IN1	Functions Unused Normal Unused Unused	6 XQI		DLY EXT
	Unused					[N4	Unused					INS IN4	Unused			l
	Unused					OUT	Unused					OITT	[Innsed		T	l



## Omni eX v1.4 - Phase Timing & Options Page 4 of 23

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	agency:										<del>-</del> 20		ate Pre	_		By:	_
	cation:	_	Mer	idian	Rd &	Bent	Gras	s Mea	dows	6	-	Date I	mplem	ented:		By:	_
	tem ID:			-													
2.1 Phase Parameters	Set 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Min. Green		<u> </u>	15			5	15	8									
Pass/10			25			25	25	25									
Max. 1			60			15	60	30									
Max. 2																	
Yel/10			55			50	55	40									
Red/10			20			35	20	35									
Walk			ľ														
Pedestrian Clear																	
Add In/10																	
Max. Initial																	
TBR																	
CBR																	
TTR																	
Reduce/10		i —															
Min Gp/10						$\overline{}$					1						
DM Limit						<u> </u>											
DM Stp/10																	
Red Rv/10		1															
Cond Svc Min		┢											1				
Alt Min Green		<b>†</b>	1										<del>                                     </del>				
Alt Ps/10			1		_												
Alternate Walk	-	<del>                                     </del>	+			-					1	-				-	-
Alt Ped Clear		<del>                                     </del>	<del>                                     </del>			-							-	-	_		
Advanced Walk			1							_							
Delay Walk		-	_														
St Dly/10		_	-												_		
Green Clear / 10		_										-	_	-			
Green Clear / 10		L	L	L	L			L		_							
2.2 Phase Options	Set 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phase Omit																	
Ped Omit		_															
Min Recall		_															
Max Recall																	
Soft Recall																	
Ped Recall																	
Pedestrian Recycle																	
Cond Srv																	
Detector Lock																	
Dual Entry																	
Simul Gap																	
Guar Pass																	
Add Init Calc																	
Walk Rest																	
Red Rest																	
Flash Entry																	
Automatic Flash Exit Phas	se																
CNA-1																$\neg \neg$	
CNA-2																	-
No Backup																-	-
Max Walk			T													-	-
Max Extension																	

## Omni eX v1.4 - Phase Sequences

Page 5 of 23

Name of Street			-		44	
100	M	de	-	-	MB	12
100	# W S	160	S.	900	BB	

Agency: ocation:	Date Prepared:  Date Implemented:	
tem ID:	Date implemented:	By:
	2.2 Pk	1
2.3 Phase Sequence 1	2.3 Phase Sequence 9	Note: Phases
Ring 1 2	Ring 1	10 through 16 are entered as
Ring 2 5,6,7	Ring 2	0,A,B,C,D,E,F
Ring 3	Ring 3	0,A,B,C,D,E,F
Ring 4	Ring 4	J
2.3 Phase Sequence 2	2.3 Phase Sequence 10	1
Ring 1 2	Ring 1	1
Ring 2 5,6,7	Ring 2	1
Ring 3	Ring 3	1
Ring 4	Ring 4	i
6	King 1	Ī
2.3 Phase Sequence 3	2.3 Phase Sequence 11	1
Ring 1 Z	Ring 1	1 .
Ring 2 5,6,7	Ring 2	1
Ring 3	Ring 3	1
Ring 4	Ring 4	1
	***************************************	,
2.3 Phase Sequence 4	2.3 Phase Sequence 12	1
Ring 1	Ring 1	1
Ring 2	Ring 2	1
Ring 3	Ring 3	1
Ring 4	Ring 4	1
		<b></b>
2.3 Phase Sequence 5	2.3 Phase Sequence 13	]
Ring 1	Ring 1	1
Ring 2	Ring 2	1
Ring 3	Ring 3	
Ring 4	Ring 4	1
2.3 Phase Sequence 6	2.3 Phase Sequence 14	Ť
Ring 1	Ring 1	1
Ring 2	Ring 2	ł
	Ring 2	ł
Ring 3		1
Ring 4	Ring 4	ı
2.3 Phase Sequence 7	2.3 Phase Sequence 15	1
Ring 1	Ring 1	1
Ring 2	Ring 2	ł
Ring 3	Ring 3	ł
Ring 4	Ring 4	İ
<del> </del>	-2104	
2.3 Phase Sequence 8	2.3 Phase Sequence 16	l
Ring 1	Ring 1	ĺ
Ring 2	Ring 2	ĺ
Ring 3	Ring 3	ĺ
Ring 4	Ring 4	i

Detector Lock	Detector Lock	
No Min Yellow	No Min Yellow	

## Omni eX v1.4 - Vehicle Overlaps

Page 6 of 23



Agency: _ Location: _			Date Prepared: Date Implemented:	
System ID:		2477.1		
3.1 Veh Overlap 1	Set 1	·		Set 1
Type Included Phases		Type Included Phases		
Modifier Phases		Modifier Phases		
Excluded Phases		Excluded Phases		
Excluded Peds		Excluded Phases  Excluded Peds		
Trail Grn		4		
Trailing Yel		Trail Grn		
Trailing Red		Trailing Yel Trailing Red		
Start Delay		Start Delay		
No Trail Grn Phs		No Trail Grn Phs		
Call Phases		Call Phases		
Actuated Only		Actuated Only		
Detector Lock		Detector Lock		
No Min Yellow		No Min Yellow		
NO MILL LEHOW		No Mili Tellow		
3.1 Veh Overlap 3	Set 1	3.1 Veh Overlap 4		Con 1
Туре	Set 1	Type		Set 1
Included Phases		Included Phases		_
Modifier Phases		Modifier Phases		$\rightarrow$
Excluded Phases		Excluded Phases		-
Excluded Peds		Excluded Peds		
Trail Grn		Trail Grn		
Trailing Yel		Trailing Yel		-
Trailing Red		Trailing Red		
Start Delay		Start Delay		
No Trail Grn Phs		No Trail Grn Phs		
Call Phases		Call Phases		-
Actuated Only		Actuated Only		-
Detector Lock		Detector Lock		$\overline{}$
No Min Yellow		No Min Yellow		
		No Fill Tellow		
3.1 Veh Overlap 5	Set 1	3.1 Veh Overlap 6		Set 1
Туре		Туре		5001
Included Phases		Included Phases		
Modifier Phases		Modifier Phases		-
Excluded Phases		Excluded Phases		=
Excluded Peds		Excluded Peds		
Trail Grn		Trail Grn		
Trailing Yel		Trailing Yel		$\overline{}$
Trailing Red		Trailing Red		
Start Delay		Start Delay		
No Trail Grn Phs		No Trail Grn Phs		
Call Phases		Call Phases		
Actuated Only		Actuated Only		$\neg \neg$

Sequential Timing								
No Min Yellow								$\Box$



Agency: Location:	*			Date Prepared: Date Implemented:	_
System ID:				· ·	
1.2 Ped Overlap	1	Set 1	3.2 Ped Overlap 2		Set 1
ncluded Phases		_	Included Phases		10011
Excluded Phases		-	Excluded Phases		-
ntervals		$\neg$	Intervals		
Call Phases		$\neg$	Call Phases		
actuated Only		$\neg$	Actuated Only		$\neg \neg$
.2 Ped Overlap 3		Set 1	3.2 Ped Overlap 4		Set 1
ncluded Phases	ſ	$\dashv$	Included Phases		J Set I
xcluded Phases	i e	$\dashv$	Excluded Phases		-
ntervals		$\dashv$	Intervals		
all Phases		$\neg$	Call Phases		$\overline{}$
ctuated Only			Actuated Only		
.2 Ped Overlap 5		Set 1	3.2 Ped Overlap 6		T Cat 1
ncluded Phases	r	Jet 1	Included Phases		Set 1
excluded Phases		$\dashv$	Excluded Phases		-
ntervals		$\dashv$	Intervals		$\overline{}$
all Phases		$\dashv$	Call Phases		-
ctuated Only		$\dashv$	Actuated Only		
.2 Ped Overlap 7					=
.2 Ped Overlap 7 ncluded Phases	r	Set 1	3.2 Ped Overlap 8		Set 1
xcluded Phases		$\dashv$	Included Phases		
ntervals		$\dashv$	Excluded Phases		
all Phases		$\dashv$	Intervals		
ctuated Only		$\dashv$	Call Phases		
		=	Actuated Only		
.2 Ped Overlap 9		Set 1	3.2 Ped Overlap 10		Set 1
ncluded Phases		$\dashv$	Included Phases		
xcluded Phases		_	Excluded Phases		
ntervals		_	Intervals		
all Phases		_	Call Phases		
ctuated Only			Actuated Only		
2 Ped Overlap 1	1	Set 1	3.2 Ped Overlap 12		Set 1
ncluded Phases			Included Phases		
xcluded Phases			Excluded Phases		
itervals			Intervals		
all Phases			Call Phases		
ctuated Only		_]	Actuated Only		
2 Ped Overlap 1	3	Set 1	3.2 Ped Overlap 14		Set 1
icluded Phases	1		Included Phases		
xcluded Phases		_	Excluded Phases		$\overline{}$
tervals			Intervals		$\neg$
all Phases		7	Call Phases		$\neg$
ctuated Only			Actuated Only		
2 Ped Overlap 1	5	Set 1	3.2 Ped Overlap 16		Set 1
ncluded Phases			Included Phases		50.1
xcluded Phases			Excluded Phases		
ntervals			Intervals		
all Phases			Call Phases		
ctuated Only		_	Actuated Only		

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Cuctom ID.					l	l		l			1	1							l	l	l	1			1
System ID:																									ä
4,1 Vehicle Detector																									_
Set 1 1 2 3 4	5 6	7 8	6	10	11 1	12 13	3 14	15	16	17	18	19	20	21 2	22 23	3 24	4 25	5 26	5 27	28	29	30	31	32	_
Call Phase		_		Т	_	H	_				Н	-	-	H	-	-	_	_	_	_	L				_
Switch Phase						-	_				Г			H	L	H	_	_							
Call					-	-	_			Г			-	Н	_	-	_	_	_	_					
Passage						_	L							H	H	H	H	L		L					_
Add Init						H					Г	H		H	H	H	H	L		L					_
Queue											Г	Н		H	H	H	L	L	L	L					_
Yellow Lock					H	H	L							H	_		_								_
Red Lock		_			-	H	L							_	_	_	L	_	L	L	L				_
Volume					H	H	L	L		T	T	$\vdash$		H	L	┝	H	L	L	L	L				_
Occupancy				П											_	H	_	_		_					_
Delay						H	L				П				-	-	L								_
Extend							_							_	_	_	_	_	_						_
Queue Limit					H	H	L	L			Г	H	H	H	H	H	H	L	L	L					_
VOS Length					-	$\vdash$	L	L			Т	$\vdash$			H	H	H		L	L					_
Alt Passage						H						Н		H	L	H	L	_	L	L					_
Alt Min Green					H	H							$\vdash$	_	L	$\vdash$	L	_	L				L		_
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4.1 Vehicle Detector	l	l	l	l	l	l	l	l	ı	ı	ı	ı	ı	ı	ı	ı	L			ŀ		l	ı	I	
Set 2 1 2 3 4	5 6	7 8	6	101	=	12 13	14	15	14	17	18	<u>ā</u>	20 5	21 2	22 23	2 74	75	26	27	78	20	30	24	33	
	╌	╀	I	-	-	-	4	+		+	+	-	4	+	+-	+	+	4	4	+	-				_
Switch Phase		-		l	H	┝	┡	L		T	T	t	╁	H	╁	╁	┝	╀	L	L	L		L		_
Call				T	H	┝	L	L			T	┢	┢	H	-	-	┝	-	-	_	L				
Passage											П	H		Н	_	H	_	L	_		L				
Add Init					-	-										-	L	_							_
Queue					-	H	_				Т			-	-	H	_	L	_	L					_
Yellow Lock				F	H	H		L		Г	T	H	H	Н	H	H	H	L	-						_
Red Lock				Г		H		L			T	H	$\vdash$	H	$\vdash$	H	╀	L	L	L	L	L			
Volume				Г	H	H	_	L		Г	H	H	┝	H	┞	H	H	H	L	L	L	L	L		
Occupancy								L		Г	T	H	┝	H	H	H	┝	L	L	L	L				
Delay						H	L	L		Т	T	H	$\vdash$	H	H	H	┝	L	L	L	L	L			
Extend						-	_				Т			H	L	H	H	_	L	L	L	L			
Queue Limit				Г	H	H	L	L		T	r	H	┝	┝	H	H	⊦	┞	L	L	L	L			_

Alt Passage Alt Min Green

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4.2 Ped Detector													l				Г
•	Set 1	1	2	3	4	2	9	7	ω	6	10	11	10 11 12 13 14 15 16	13	14	15	16
Phase													Ī	Г	Г	Г	Π
Alt PED Time	Г												Г	Г	Г	Г	Г

4.2 Ped Detector																	
	Set 2	1	2	3	4	22	9	7	00	6	10	11	12	13	14	15	16
Phase								Г	П		Г	Г	Г	Г	Г	П	
Alt PED Time											_	T	Γ	T	T	Ī	

Set 3         4         5         6         7         8         9         10         11         12         13         14         15         16           Phase         1																		
Phase Alt PED Time		Set 3	1	2	3	4	2	9	4	8	6	10	11	12	13	14	15	16
Alt PED Time	Phase									L								
	Alt PED Time	Γ																
		1	1	1	1	1												ı
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	4.2 Ped Detector		ı	l	l		l	l	l	l	l	l	l	l	l	l	l	
4.2 Ped Detector																		

4.2 Ped Detector																Г
Set 4	Set 4 1	2	3	4	2	9	2	8	6	10	11	9 10 11 12 13 14 15 16	13	14	15	16
Phase															Γ	
Alt PED Time																

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4.3 Vehicle Detector Diag																																	_
Set 1	1 1	2	3	4	2	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	56	30	31	32	
No Act															Г	H	$\vdash$						П										
Max Pr																Г	-																_
Err Cnts															Г	T	H	H	H														_
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4.3 Vehicle Detector Diag																																	
Set 2	2 1	2	3	4	2	9	4	8	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	_
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Max Pr															П	Т		-	-			Г		П									_
Err Cnts																	H		T				П	Г									
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4.3 Vehicle Detector Diag						П																											_
Set 3	3 1	2	3	4	2	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	56	27	28	29	30	31	32	_
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4.3 Vehicle Detector Diag		П																															
Set 4	4 1	2	3	4	5	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	_
No Act													П		Г	_	Н	Н		Г		Г	Г	Γ		Г						L	
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Agency:		DATE PREPARED:		Bv:
Location:		DATE IMPLEMENTED:		By:
System ID:				
4.4 Ped Detector Diag	4.5 Extra VEH Detector Calls		4.6 Extra PED Detector Calls	r Calls
Set 1 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	DET Call Phases Call VEH Overlap	Werlap	Call Phases C	Call PED Overlap
No Activity	1			
Max. Presence	2	2		
Erratic Counts	m	m		
	4	4		
4.4 Ped Detector Diag	S	S		
Set 2 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	9	φ		
No Activity	7	7		
Max, Presence	80	00		
Erratic Counts	o.	σ		
	10	10		
4.4 Ped Detector Diag	11	11		
Set 3 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	12	12		
No Activity	13	13		
Max. Presence	14	14		
Erratic Counts	15	15		
	16	16		
4.4 Ped Detector Diag	17			
Set 4 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	18			
No Activity	19			
Max. Presence	20			
Erratic Counts	21			
	22			
	23			
	24			
	25			
	26			
	27			
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	30			
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## Omni eX v1.4 - Patterns



Bv:	By:	ĺ
DATE PREPARED:	DATE IMPLEMENTED:	
	Meridian Road & Bent Grass Meadows	
Agency:	 Location:	System ID:

## Omni eX v1.4 - Splits

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Agency:		DATE PREPARED:	By:
Location:	Meridian Road & Bent Grass Meadows	DATE IMPLEMENTED:	   By: 
System ID:			Ĭ

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sec)         3         4         5           sec)         92         3         4         5           Phase         x         8         20         20           I Permit         x         x         x         x         x           I Comit         1         2         3         4         5         x           Phase         x <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>										
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Mode										
Coord. Phase x	×									
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## Omni eX v1.4 - Schedule

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By:	By:	
DATE PREPARED:	DATE IMPLEMENTED:	
Agency:	Location:	System ID:

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6.4	Sched	1	2	3	4	2	9	7	8	6.4	Sched	6	10	11	12	13	14	15	16

Omni eX v1.4 - Day Plans Page 15 of 23

Ву:

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Location:	· I	Meridian F	Road & Be	nt Grass M	eadows		DATE PREPA E IMPLEMEN	
System	ID:							
6.5 DayPlan 1								
Event#	1	2	3	4	5	6	7	8
Hour	6	9	13	19				
Minute	0	0	30	0				
Action	1	2	3	20				
6.5 DayPlan 1								
Event#	9	10	11	12	13	14	15	16
Hour								
Minute								
Action								
6.5 DayPlan 1								
Event#	17	18	19	20	21	22	23	24
Hour								
Minute								
Action								
6.5 DayPlan 1								
Event#	25	26	27	28	29	30	31	32
Hour								
Minute								
Action								
6.5 DayPlan 2								
Event#	1	2	3	4	5	6	7	8
Hour	10	19						
Minute	0	0						
Action	2	20						
6.5 DayPlan 2								
Event#	9	10	11	12	13	14	15	16
Hour							_	
Minute	7							
Action								
6.5 DayPlan 2								
Event#	17	18	19	20	21	22	23	24
Hour								
Minute								
Action								
6.5 DayPlan 2								
Event#	25	26	27	28	29	30	31	32
Hour		_	-	-5	=-		- P.	32
Minute					1			
Action								



Agency:		Date Prepared:	By:
Location:		Date Implemented:	By:
System ID:			
6.6 Action Parameters 1	6.6 Action Parameters 2	6.6 Action Parameters 3	
Pattern	Pattern	Pattern	
Auxiliary Function	Auxiliary Function	Auxiliary Function	
Special Function	Special Function	Special Function	
Special Function	Special Function	Special Function	
Detector VOS Log	Detector VOS Log	Detector VOS Log	
Speed Trap Log	Speed Trap Log	Speed Trap Log	
Cycle MOE Log	Cycle MOE Log	Cycle MOE Log	
Detector Reset	Detector Reset	Detector Reset	
6.6 Action Parameters 4	6.6 Action Parameters 5	6.6 Action Parameters 6	
Pattern	Pattern	Pattern	
Auxiliary Function	Auxiliary Function	Auxiliary Function	
Special Function	Special Function	Special Function	
Special Function	Special Function	Special Function	
Detector VOS Log	Detector VOS Log	Detector VOS Log	
Speed Trap Log	Speed Trap Log	Speed Trap Log	
Cycle MOE Log	Cycle MOE Log	Cycle MOE Log	
Detector Reset	Detector Reset	Detector Reset	
6.6 Action Parameters 7	6.6 Action Parameters 8	6.6 Action Parameters 9	
Pattern	Pattern	Pattern	
Auxiliary Function	Auxiliary Function	Auxiliary Function	
Special Function	Special Function	Special Function	
Special Function	Special Function	Special Function	
Detector VOS Log	Detector VOS Log	Detector VOS Log	
Speed Trap Log	Speed Trap Log	Speed Trap Log	
Cycle MOE Log	Cycle MOE Log	Cycle MOE Log	
Detector Reset	Detector Reset	Detector Reset	
6.6 Action Parameters 10	6.6 Action Parameters 11	6.6 Action Parameters 12	
Pattern	Pattern	Pattern	
Auxiliary Function	Auxiliary Function	Auxiliary Function	
Special Function	Special Function	Special Function	
Special Function	Special Function	Special Function	
Detector VOS Log	Detector VOS Log	Detector VOS Log	
Speed Trap Log	Speed Trap Log	Speed Trap Log	
Cycle MOE Log	Cycle MOE Log	Cycle MOE Log	
Detector Reset	Detector Reset	Detector Reset	
6.6 Action Parameters 13	6.6 Action Parameters 14	6.6 Action Parameters 15	
Pattern	Pattern	Pattern	
Auxiliary Function	Auxiliary Function	Auxiliary Function	
Special Function	Special Function	Special Function	
Special Function	Special Function	Special Function	
Detector VOS Log	Detector VOS Log	Detector VOS Log	
Speed Trap Log	Speed Trap Log	Speed Trap Log	
Cycle MOE Log	Cycle MOE Log	Cycle MOE Log	
Detector Reset	Detector Reset	Detector Reset	

## Omni eX v1.4 - Preemption



Agency:					Date Prepared:		By:
Location:					Date Implemented:		By:
System ID:					2		
7 Preempts	2	3	4	5	9	7	8
Track Phases							
Track Overlaps							
Track Ped							
Track Ped Overlap							
Dwell Phases							
Dwell Overlaps							
Dwell Peds							
Dwell Ped Overlap							
Cycling Phases							
Cycling Overlaps							
Cycling Ped							
Cycling Ped Overlap							
Exit Phase							
Locking							
Override Flash							
Override Preempt+1							
Flash Dwell							
Enter All Red							
Track Green							
Delay							
Maximum Presence							
Minimum Duration							
Minimum Dwell							
Linked Preempt							
Enter Min Green							
Enter Min Walk							
Enter Min Ped Clear							
Enter Min Yellow							
Enter Min Red Clear							
Track Min Yellow							
Track Min Red Clear							

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Agency	cy:				Date Prepared:	By:
Location:	inc				Date Implemetned:	By:
System ID:	   					
8.1 TSP Global Options	8.2 TSP Strategy Options	Strategy II Set 1	8.2 TSP Strategy Options	Strategy 2 Set 1	8.2 TSP Strategy Options	Strategy 3 Set 1
Enable	1=		Override + 1		Override + 1	
	Service Phases		Service Phases		Service Phases	
	Call Phases		Call Phases		Call Phases	
7	Omit Phases		Omit Phases		Omit Phases	
3	Oueue lumn Ph		Onene lumn Ph		Omerie Trimp Ph	
4	ETA		ETA		ETA	
	Input Function		Input Function		Input Function	
0	Input Index		Input Index		Input Index	
9	Input Type		Input Type		Input Type	
7	Request Mode		Request Mode		Request Mode	
	Checkout Mode		Checkout Mode		Checkout Mode	
8	Checkout time		Checkout Time		Checkout Time	
6	Max rresence		Max Presence		Max Presence	
	Max Presence Cir		Max Presence Cir		Max Presence Cir	
10	MIN ON TIME		Min ON Time		Min ON Time	
11	Dolar Time		Defender time		Min Orr Time	
	Extend Time		Delay Lime		Delay Time	
1.2	Headway Time		Heartway Time		Lexicila Hille	
13	Preempt Lockout		Preempt Lockout		Preemot Lockout	
14						
+ 1	8.2 TSP Strategy Options	Strategy 41 Set 11	8.2 TSP Strategy Options	Strategy 51 Set 1	18.2 TSP Strategy Options	Strategy 6 Set 11
15	Enable		Enable		Enable	
16	Override + 1		Override + 1		Override + 1	
	Service Phases		Service Phases		Service Phases	
Headway	Call Phases		Call Phases		Call Phases	
l.orkont	Omit Phases		Omit Phases		Omit Phases	
occupat.	Omit Peds		Omit Peds		Omit Peds	
Node	Queue Jump Ph		Queue lump Ph		Queue Jump Ph	
Name	ETA		ETA		ETA	
	Input Function		Input Function		Input Function	
	Input Index		Input Index		Input Index	
	Input Type		Input Type		Input Type	
	Request Mode		Request Mode		Request Mode	
	Checkout Mode		Checkout Mode		Checkout Mode	
	Checkout Time		Checkout Time		Checkout Time	
	Max Presence		Max Presence		Max Presence	
	Max Presence Cir		Max Presence Clr		Max Presence Clr	
	Min ON Time		Min ON Time		Min ON Time	
	Min OFF Time		Min GFF Time		Min OFF Time	
	Delay Time		Delay Time		Delay Time	
	Extend Time		Extend Time		Extend Time	
	Headway Time		Headway Time		Headway Time	
	Preempt Lockout		Preempt Lockout		Preempt Lockout	

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## Omni eX v1.4 - Transit Priority

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## **McCain**

## Omni eX v1.4 - Speed Traps

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Agency:	DATE PREPARED:	Ву:
Location:	DATE IMPLEMENTED:	By:
System ID:	<del></del>	

9.3.3.2 Speed	Trap															
Speed Trap	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Detector 1																
Detector 2																
Distance																

9.3.3.3 Speed	l Trap l	3in Rar	iges													
Bin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Range																

## Omni eX v1.4 - Log Configuration

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Date Prepared: By:	Date Implemented: By:	
Agency:	Location:	System ID:

9.3-4 Log Configuration	6.2 Time Zone
Volume Occupancy Period	Global DST
VOS Log Combined Periods	Standard Time Zone (+/- hr)
Speed Trap Log Period	
Display Metric	A.3 Unit Comms
Speed Trap Log Mode	Unit Backup Time
VOS Log Mode	
Cycle MOE Log Mode	1.7 Port 1
Power On/Off	Device 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Low Battery	Device Present
Cycle Fault	Frame40 Enable
Coord Fault	
Coord Fail	1.5.5 Aux Switch
Cycle Fail	Function
MMU Flash	Index
Local Flash	
Local Free	
Preempt Status Change	
Response Fault	A.5-6 Time Sync
Alarm Status Change	NTP Server Address
Door Status Change	NTP Start Hour
Pattern Change	NTP Start Minute
Detector Status Change	NTP Interval Hour
Сотт Status Change	NTP Interval Minute
Command Change	GPS Start Hour
Data Change Keyboard	GPS Start Minute
Controller Download	GPS Interval Hour
Access Code	GPS Interval Minute
Priority	Enable NTP Svr

## **McCain**

## Omni eX v1.4 - Communications Page 22 of 23

Avency:	Date Prepared:	By:
Location:	Date Implemented:	By:
System ID:		

A.1 Serial Comms							
Port	1	2	3	4	5	8	
Protocol							
Speed							
Parity							
Flow Control							
Address							
Group Address							
Data Bits							
Stop Bits							
CTS Delay							
RTS Extend							

A.2 Ethernet Comms			
Port	1	2	
IP Address			
Net Mask			
Gateway			
NTCIP Port			
NTCIP Mode			
AB3418 Port			
AB3418 Mode			
AB3418 Address			
AB3418 Group Address			

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## Omni eX v1.4 - Menu Security

of 23	By:	By:		
<b>Page</b> 23 of 23	Date Prepared:	Date Implemented:		
Omni eX v1.4 - Menu Security				
/cCain	Agency:	Location:	System ID:	

B.1.1 Menu Security Options	rity Optio	su														
Enable:		Allow	Allow Read-Only:		Ţ	Timeout (min):	ı):									
B.1.2 Menu Security Users	rity Users															l
	1	2	3	4	2	9	7	8	6	10	11	12	13	14	15	16
User Id			_													
Pin																
Operation																
Unit																
I/0 Map																
Phase																
Overlap																
Detector																
Coord																
Time Base																
Preempt																
Transit																
Logs																
Comm																
Security																
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# Omni eX v1.4 - Unit & Phase Configuration

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Page 1

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Agency:														DATE	DATE PREPARED:	RED: 5/4/2022	022	D	M
Location:		Ă	eridia	n Road	& Ea	eridian Road & Eastonville Road	e Ros	٩				l	- D	DATE IMPLEMENTED	LEMEN	Ų,		i A	LEIM
System ID:	1											l	77					Š	
1.2 Unit Setup	1.4 Channel Setup (1		16)												<u> </u>	B.3 System Information	rmation	Γ	
Auto PED Clr		1	2	3 4	2	9	7	6 8	10	11	12	13	14	15 1	16	System Id			
Red Revert	Type				_		H	H	_			T	t	╁	H	Name		Γ	
Min Yellow	Source							_				T		H	_	Location			
TX Diamond	Alt 1/2 Hz						H	Н						┢	1				١
Diamond Type	Flsh Red												Г	H		5.1 Coordination Constants	Constan	s	
	Flsh Yel				Н							T	Г	H	<u> </u>	Correction Mode		Shortway	
											ĺ				<u>Σ</u> [	Max Cycles Trans	T	15.15.15	
1.3 Startup	1.4 Channel Setup (1	1	-32)	l	l	l	1					ı	l	ı	3   3	Coord Force Mode	7	Max Innibit	
Start-Up Phases			⊢	19 20	21	22	23	24 25	5 26	27	28	29	30	31 3	32 Pe	Perm Strategy	T	Maximum	
Next Phase	Туре			H	L		H	┝	L			T	t	╁	T	Omit Strategy	Mir	Minimum	
Flash	Source			H				-			T	T	T	H	S	Sync Point	Beg	Begin Yellow	
All Red	Alt 1/2 Hz													H	Ž	No Early Return		Disable	
Start Veh Call	Flsh Red														্য	Sync Ref Time	0		
Start Ped Call	Flsh Yel			-	Ц		Н	_							0	Operational Mode	Je		
2.4 Phase Concurrrency					F	2.4 Phase Enable and Rings	Enable	and Rin	gs						1				┢
1 2 3 4 5	6 8 2 9	10 11	12 13	14 15	16		1	2	3 4	5	9	7	8	6	10	11 12	13 14	15	16
Phase 1						Enabled	×	×	×	×	×	×	×	İ	T		-		Τ
Phase 2						Ring1	×	×	×										Γ
Phase 3						Ring2				×	×	×	×						
Phase 4						Ring3													Γ
Phase 5						Ring4									T				Τ
Phase 6					Ī					l	l			1	1				1
Phase 7												Phas	Phase Diagram	gram					
Phase 8									3			-							
Phase 9										T									
Phase 10												_							
Phase 11																			
Phase 12									1	1		┼.		ļ,		1			
Phase 13												_		_					
Phase 14										-		_							
Phase 15												_							
Phase 16										┧		$\dashv$							



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1 7 1 1	System II I Nema ABCD Input Ma					_		_	_		_
Pins	Function	IDX	Pins	Function	IDX	Pins	Function	IDX	Pins	Function	IDX
A-f	Vehicle Detector	1	B-m	Phase Ped Omit	7	A-k	Man Control Enable	1	D-V	Unused Input	1
A-K	Vehicle Detector	2	B-n	Phase Ped Omit	8	A-q	Mode Select Bit	1	D-W	Unused Input	1
B-N	Vehicle Detector	3	B-U	Phase Omit	1	A-v	Mode Select Bit	2	D-X	Unused Input	1
B-L	Vehicle Detector	4	B-S	Phase Omit	2	А-НН	Mode Select Bit	3	D-Y	Free (no Coord)	1
C-P	Vehicle Detector	5	B-R	Phase Omit	3	A-n	Test	1	D-Z	Unused Input	1
C-S	Vehicle Detector	6	B-g	Phase Omit	4	A-AA	Test	2	D-a	Unused Input	1
C-V	Vehicle Detector	7	C-n	Phase Omit	5	C-b	Test	3	D-b	Alarm	1
C-t	Vehicle Detector	8	C-q	Phase Omit	6	A-BB	Walk Rest Modifier	1	D-c	Alarm	2
A-g	Pedestrian Detector	1	C-r	Phase Omit	7	В-В	Unused Input	1	D-d	Alarm	3
A-L	Pedestrian Detector	2	C-s	Phase Omit	8	B-W	Unused Input	1	D-e	Alarm	4
B-P	Pedestrian Detector	3	A-i	Force Off Ring	1	B-X	Unused Input	1	D-f	Alarm	5
В-М	Pedestrian Detector	4	A-N	Stop Time Ring	1	B-v	Unused Input	1	D-g	Local Flash Sense	1
C-R	Pedestrian Detector	5	A-P	Inhibit Max Ring	1	D-A	Vehicle Detector	9	D-h	Mmu Flash	1
C-T	Pedestrian Detector	6	А-х	Red Rest Ring	1	D-B	Vehicle Detector	10	D-i	Door Ajar	1
C-U	Pedestrian Detector	7	A-FF	Ped Recycle Ring	1	D-C	Vehicle Detector	11	D-j	Special Func Input	1
C-W	Pedestrian Detector	8	A-GG	Max Ii Ring	1	D-D	Vehicle Detector	12	D-k	Special Func Input	2
A-h	Phase Hold	1	A-w	Omit Red Clear Ring	1	D-E	Vehicle Detector	13	D-m	Special Func Input	3
A-M	Phase Hold	2	A-m	Call To Na	_1_	D-F	Vehicle Detector	14	D-n	Special Func Input	4
B•i	Phase Hold	3	C-Y	Force Off Ring	2	D-G	Vehicle Detector	15	D-p	Special Func Input	5
B-h	Phase Hold	4	C-Z	Stop Time Ring	2	D-H	Vehicle Detector	16	D-q	Special Func Input	6
C-m	Phase Hold	5	C-a	Inhibit Max Ring	2	D-J	Vehicle Detector	17	D-r	Special Func Input	7
С-р	Phase Hold	6	C-u	Red Rest Ring	2	D-K	Vehicle Detector	18	D-s	Special Func Input	8
C-EE	Phase Hold	7	B-V	Ped Recycle Ring	2	D-L	Vehicle Detector	19	D-t	Preempt Detector	1
C-X	Phase Hold	8	B-z	Max Ii Ring	2	D-M	Vehicle Detector	20	D-u	Preempt Detector	2
A-EE	Phase Ped Omit	1	C-v	Omit Red Clear Ring	2	D-N	Vehicle Detector	21	D-v	Preempt Detector	3
A-v	Phase Ped Omit	2	A-z	Call To Na	2	D-P	Vehicle Detector	22	D-w	Preempt Detector	4
B-j	Phase Ped Omit	3	A-R	External Start	1	D-R	Vehicle Detector	23	D-x	Preempt Detector	.5
В-х	Phase Ped Omit	4	A-S	Interval Advance	1	D-S	Vehicle Detector	24	D-y	Preempt Detector	6
В-Т	Phase Ped Omit	5	A-T	Unused Input	1	D-T	Clock Update	1	D-KK	Unused Input	1
B-k	Phase Ped Omit	6	A-j	Min Recall	1	D-U	Unused Input	1	D-MM	Unused Input	1

Pins	Function	lDX	Pins	Function	IDX	Pins	Function	IDX	Pins	Function	IDX
A-D	Channel Red	1	B-a	Unused Output	1	C-k	Phase Check	5	A-A	Fault Monitor	1
A-F	Channel Red	2	B-J	Channel Red	10	C-BB	Phase Check	6	A-C	Voltage Monitor	1
В-Г	Channel Red	3	C-L	Unused Output	1	C-MM	Phase Check	7	B-FF	Channel Green	15
B-G	Channel Red	4	C-z	Channel Red	11	C-FF	Phase Check	8	В-НН	Channel Yellow	15
C-H	Channel Red	5	С-у	Unused Output	1	B-A	Phase Next	1	B-DD	Channel Red	15
C-G	Channel Red	6	C-C	Channel Red	12	B-C	Phase Next	2	B-w	Channel Green	16
C-F	Channel Red	7	A-a	Unused Output	1	B-t	Phase Next	3	B-EE	Channel Yellow	16
C-D	Channel Red	8	А-Н	Channel Yellow	9	B-f	Phase Next	4	B-u	Channel Red	16
A-Z	Channel Yellow	1	B-Z	Unused Output	1	C-M	Phase Next	5	A-X	Flash Logic Output	1
۸-b	Channel Yellow	2	В-Н	Channel Yellow	10	C-DD	Phase Next	6	D-LL	Detector Reset	1
B-E	Channel Yellow	3	C-K	Unused Output	1	C-PP	Phase Next	7	A-CC	Status A	1
В-с	Channel Yellow	4	C-AA	Channel Yellow	11	C-HH	Phase Next	8	А-г	Status B	1
2-J	Channel Yellow	5	C-KK	Unused Output	1	A-DD	Phase On	1	A-Y	Status C	1
C-h	Channel Yellow	6	C-w	Channel Yellow	12	A-e	Phase On	2	C-A	Status A	2
C-E	Channel Yellow	7	A-t	Unused Output	1	B-s	Phase On	3	C-B	Status B	2
С-е	Channel Yellow	8	A-J	Channel Green	9	В-е	Phase On	4	C-c	Status C	2
4-s	Channel Green	1	B-Y	Unused Output	1	C-N	Phase On	-5	D-z	Alarm Output	1
1-с	Channel Green	2	B-d	Channel Green	10	C-CC	Phase On	6	D-AA	Alarm Output	2
3-D	Channel Green	3	C-j	Unused Output	1	C-NN	Phase On	7	D-BB	Special Func Output	1
3-b	Channel Green	4	C-LL	Channel Green	11	C-GG	Phase On	8	D-CC	Special Func Output	2
C-i	Channel Green	- 5	C-JJ	Unused Output	1	B-AA	Channel Green	13	D-DD	Special Func Output	3
C-g	Channel Green	6	C-d	Channel Green	12	В-р	Channel Yellow	13	D-EE	Special Func Output	4
C-f	Channel Green	7	A-u	Phase Check	1	B-q	Channel Red	13	D-FF	Special Func Output	5
:-x	Channel Green	8	A-d	Phase Check	2	B-GG	Channel Green	14	D-GG	Special Func Output	6
4-E	Unused Output	1	B-r	Phase Check	3	B-BB	Channel Yellow	14	D-HH	Special Func Output	7
۱-G	Channel Red	9	В-К	Phase Check	4	B-CC	Channel Red	14	D-II	Special Func Output	8

# Omni eX v1.4 - 2070 FIO I/O Mapping



Agency:	Date Prepared:	 E
Location:	Date Implemeted:	By:
System ID:		

	IDX	1	3	2	4	3	4	5	9		5	19	11	25																			
пд	Function	Ped Detector	Ped Detector	Ped Detector	Ped Detector	Preempt	Preempt	Preempt	Preempt	Unused Input	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Iterval Adcance	CMU Flash	Stop Time	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input
2070 FIO Input Mapping	Pins	C1-67	C1-68	C1-69	C1-70	C1-71	C1-72	C1-73	C1-74	C1-75	C1-76	C1-77	C1-78	C1-79	C1-80	C1-81	C1-82	C11-15	C11-16	C11-17	C11-18	C11-19	C11-20	C11-21	C11-22	C11-23	C11-24	C11-25	C11-26	C11-27	C11-28	C11-29	C11-30
. 2070 FIG	IDX	2	16	8	22	3	17	6	23	9	20	12	26	1	2			15	1	21	7	27	13	28	14					4	18	1.0	24
1.5.3.1	Function	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Preempt	Preempt	Manual Ctrl	Unused Input	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Unused Input	Unused Input	Unused Input	Unused Input	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector
	Pins	C1-39	C1-40	C1-41	C1-42	C1-43	C1-44	C1-45	C1-46	C1-47	C1-48	C1-49	C1-50	C1-51	C1-52	C1-53	C1-54	C1-55	C1-56	C1-57	C1-58	C1-59	C1-60	C1-61	C1-62	C11-10	C11-11	C11-12	C11-13	C1-63	C1-64	C1-65	C1-66

	1.5.3.2	2070 FIO	Output Mapping	ing	
Pins	Function	IDX	Pins	Function	IDX
C1-02	Channel Red	9	C1-35	Unused Output	
C1-03	Channel Green	9	C1-36	Unused Output	
C1-04	Channel Red	5	C1-37	Unused Output	
C1-05	Channel Yellow	2	C1-38	Unused Output	
C1-06	Channel Green	2	C1-100	Unused Output	
C1-07	Channel Red	4	C1-101	Flash Status	
C1-08	Channel Yellow	4	C1-102	Detector Reset	
C1-09	Channel Green	4	C1-103	Watchdog	
C1-10	Channel Red	3	C1-83	Unused Output	
C1-11	Channel Green	3	C1-84	Unused Output	
C1-12	Channel Red	2	C1-85	Channel Red	16
C1-13	Channel Yellow	2	C1-86	Channel Yellow	16
C1-15	Channel Green	2	C1-87	Channel Green	16
C1-16	Channel Red	1	C1-88	Channel Red	15
C1-17	Channel Yellow	1	C1-89	Channel Yellow	15
C1-18	Channel Green	1	C1-90	Channel Green	15
C1-19	Channel Red	12	C1-91	Unused Output	
C1-20	Channel Green	12	C1-93	Unused Output	
C1-21	Channel Red	11	C1-94	Channel Red	14
C1-22	Channel Yellow	11	C1-95	Channel Yellow	14
C1-23	Channel Green	11	C1-96	Channel Green	14
C1-24	Channel Red	10	C1-97	Channel Red	13
C1-25	Channel Yellow	10	C1-98	Channel Yellow	13
C1-26	Channel Green	10	C1-99	Channel Green	13
C1-27	Channel Red	6	C11-1	Unused Output	
C1-28	Channel Green	6	C11-2	Unused Output	
C1-29	Channel Red	8	C11-3	Unused Output	
C1-30	Channel Yellow	8	C11-4	Unused Output	
C1-31	Channel Green	8	C11-5	Unused Output	
C1-32	Channel Red	7	C11-6	Unused Output	
C1-33	Channel Yellow	7	C11-7	Unused Output	
C1-34	Channel Green	7	C11-8	Unused Output	

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Date Prepared:

McCain

EXT EXT EXT DLY DLY DLY By: By: IDX IDX IDX 6 Date Implemented: Functions Functions Functions Unused Unused Normal Unused Unused Unused Unused Normal Unused Unused Unused Unused Unused Unused Unused Unused Unused Unused Normal Unused Unused 1.6 Logic Gate 1.6 Logic Gate 1.6 Logic Gate Out Mode Out Mode Out Mode Type Type Type OUT N4 IN2 IN3 N3 N2 N3 N4 NZ N4 N ĭ EXT EXT EXT DLY DLY DLY IDX IDX IDX  $\infty$ Functions Functions Functions Unused Unused Unused Unused Unused Normal Unused Unused Unused Unused Normal Unused Unused Unused Unused Unused Normal Unused Unused Unused Unused 1.6 Logic Gate 1.6 Logic Gate 1.6 Logic Gate Out Mode Out Mode Out Mode Type Type Type OUT [N3 IN3 1N4 IN2 IN3 IN 1 N ľ EXT EXT EXT DLY DLY DLY IDX IDX IDX Location: Agency: System ID: Functions Functions Functions Unused Normal Unused Unused Unused Unused Unused Unused Normal Unused Unused Unused Unused Unused Unused Normal Unused Unused Unused Unused Unused 1.6 Logic Gate ..6 Logic Gate .6 Logic Gate Out Mode Out Mode Out Mode уре OUT IN3 NZ N3 4N IN3 **N**4 IN2



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	cation:			Meri	dian I	Rd & !	Easto	nville	3			Date I	mplem	ented:		By:	1
Syst	tem ID:			-													
2.1 Phase Parameters	Set 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Min. Green		5	15	5	8	5	15	5	8								
Pass/10		25	25.0	25	25	25	25	25	25								
Max. 1		15	60	15	30	15	60	15	30								
Max. 2																	
Yel/10		50.0	55.0	40.0	40.0	40.0	55.0	40.0	40.0								
Red/10		35	20	35	25	35	20	35	25								
Walk		H	7		7		7		7								
Pedestrian Clear		$\vdash$	29		32		29		32								
Add In/10																	
Max. Initial		i															
TBR																	
CBR																	
TTR		$\vdash$										$\vdash$					$\vdash$
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2.2 Phase Options	Set 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phase Omit																	
Ped Omit									ш								
Min Recall																	
Max Recall																	
Soft Recall																	
Ped Recall																	
Pedestrian Recycle																	
Cond Srv																	
Detector Lock																	
Dual Entry																	
Simul Gap																	
Guar Pass																	
Add Init Calc																	
Walk Rest																	
Red Rest																	
Flash Entry																	
Automatic Flash Exit Phas	ie .																
CNA-1																	
CNA-2																	
No Backup																	
Max Walk																	
Max Extension		$\Box$	$\Box$														

### McCain

#### Omni eX v1.4 - Phase Sequences

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Agency:		Date Prepared: _	By:
Location:		Date Implemented:	By:
System ID:		:-	
2.3 Phase Sequence 1	2.3 Phase Sequence	9	Note: Phases
Ring 1 1,2,3,4	Ring 1		10 through 16
Ring 2 5,6,7,8	Ring 2		are entered as
Ring 3	Ring 3		0,A,B,C,D,E,F
Ring 4	Ring 4		
1 <del></del>		-	
2.3 Phase Sequence 2	2.3 Phase Sequence	10	
Ring 1	Ring 1		
Ring 2	Ring 2		
Ring 3	Ring 3		
Ring 4	Ring 4		
	E. R.		
2.3 Phase Sequence 3	2.3 Phase Sequence	11	
Ring 1	Ring 1		
Ring 2	Ring 2		
Ring 3	Ring 3		
Ring 4	Ring 4		
2.3 Phase Sequence 4	2.3 Phase Sequence	12	
Ring 1	Ring 1		
Ring 2	Ring 2		
Ring 3	Ring 3		
Ring 4	Ring 4		
2.3 Phase Sequence 5	2.3 Phase Sequence	13	
Ring 1	Ring 1		
Ring 2	Ring 2		
Ring 3	Ring 3		
Ring 4	Ring 4		
2.3 Phase Sequence 6	2.3 Phase Sequence	14	
Ring 1	Ring 1		
Ring 2	Ring 2		
Ring 3	Ring 3		
Ring 4	Ring 4		
2.3 Phase Sequence 7	2.3 Phase Sequence	15	
Ring 1	Ring 1		
Ring 2	Ring 2		
Ring 3	Ring 3		
Ring 4	Ring 4		
2.3 Phase Sequence 8	2.3 Phase Sequence	16	
Ring 1	Ring 1		
Ring 2	Ring 2		
Ring 3	Ring 3		
Ring 4	Ring 4		

Detector Lock	Detector Lock	
No Min Yellow	No Min Yellow	

### Omni eX v1.4 - Vehicle Overlaps

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Agency:			Date Prepared:	2
Location:			Date Implemented:	By:
System ID:				
3.1 Veh Overlap 1	Set 1	3.1 Veh. Overlap 2		Set 1
Туре		Туре		
Included Phases		Included Phases		
Modifier Phases		Modifier Phases		
Excluded Phases	*	Excluded Phases		
Excluded Peds		Excluded Peds		
Trail Grn		Trail Grn		
Trailing Yel		Trailing Yel		
Trailing Red		Trailing Red		
Start Delay		Start Delay		
No Trail Grn Phs		No Trail Grn Phs		
Call Phases		Call Phases		
Actuated Only		Actuated Only		
Detector Lock		Detector Lock		
No Min Yellow		No Min Yellow		
•				
3.1 Veh Overlap 3	Set 1	3.1 Veh Overlap 4		Set 1
Туре		Туре		
Included Phases		Included Phases		
Modifier Phases		Modifier Phases		
Excluded Phases		Excluded Phases		
Excluded Peds		Excluded Peds		
Trail Grn		Trail Grn		
Trailing Yel		Trailing Yel		
Trailing Red		Trailing Red		
Start Delay		Start Delay		
No Trail Grn Phs		No Trail Grn Phs		
Call Phases		Call Phases		
Actuated Only		Actuated Only		
Detector Lock		Detector Lock		
No Min Yellow		No Min Yellow		
3.1 Veh Overlap 5	Set 1	3.1 Veh Overlap 6		Set 1
Туре		Туре		
Included Phases		Included Phases		
Modifier Phases		Modifier Phases		
Excluded Phases		Excluded Phases		
Excluded Peds		Excluded Peds		
Trail Grn		Trail Grn		
Trailing Yel		Trailing Yel		
Trailing Red		Trailing Red		
Start Delay		Start Delay		
No Trail Grn Phs	$\overline{}$	No Trail Grn Phs		$\overline{}$
Call Phases		Call Phases		
Actuated Only		Actuated Only		

Sequential Timing								
No Min Yellow								



Agency:			Date Prepared:	
Location:			Date Implemented:	By:
System ID:		T-		_
3.2 Ped Overlap 1	Set 1	3.2 Ped Overlap 2		Set 1
Included Phases		Included Phases		
Excluded Phases		Excluded Phases		-
Intervals		Intervals		$\dashv$
Call Phases		Call Phases		
Actuated Only		Actuated Only		
3.2 Ped Overlap 3	Set 1	3.2 Ped Overlap 4		Set 1
Included Phases		Included Phases		
Excluded Phases		Excluded Phases		$\neg$
Intervals		Intervals		$\Box$
Call Phases		Call Phases		$\neg$
Actuated Only		Actuated Only		
3.2 Ped Overlap 5	Set 1	3.2 Ped Overlap 6		Set 1
Included Phases		Included Phases		
Excluded Phases		Excluded Phases		
Intervals		Intervals		$\neg$
Call Phases		Call Phases		$\neg$
Actuated Only		Actuated Only		
3.2 Ped Overlap 7	Set 1	3.2 Ped Overlap 8		Set 1
Included Phases		Included Phases		-
Excluded Phases		Excluded Phases		-
Intervals		Intervals		-
Call Phases		Call Phases		$\neg$
Actuated Only		Actuated Only		
3.2 Ped Overlap 9	Set 1	3.2 Ped Overlap 10		Set 1
Included Phases		Included Phases		$\neg$
Excluded Phases		Excluded Phases		$\neg$
Intervals		Intervals		-
Call Phases		Call Phases		$\neg$
Actuated Only		Actuated Only		$\neg$
3.2 Ped Overlap 11	Set 1	3.2 Ped Overlap 12		Set 1
Included Phases	Jet 1	Included Phases		Set 1
Excluded Phases		Excluded Phases		$\neg$
Intervals		[ntervals		$\dashv$
Call Phases		Call Phases		-
Actuated Only		Actuated Only		$\dashv$
				=
3.2 Ped Overlap 13	Set 1	3.2 Ped Overlap 14		Set 1
Included Phases		Included Phases		
Excluded Phases		Excluded Phases		
Intervals		Intervals		_
Call Phases		Call Phases		_
Actuated Only		Actuated Only		
3.2 Ped Overlap 15	Set 1	3.2 Ped Overlap 16		Set 1
Included Phases		Included Phases		
Excluded Phases		Excluded Phases		
Intervals		Intervals		
Call Phases		Call Phases		
Actuated Only		Actuated Only		

## Omni eX v1.4 - Vehicle Detectors

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1 Vehicle Detector																									1					ı	l	l	Г
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4.2 Ped Detector																
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# Omni eX v1.4 - Vehicle Detector Diagnostics

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4.3 Vehicle Detector Diag																																
Set 1	I	2	3	4	S	9	7	8	6	10	11	12	13	14	15	16	17	18	61	9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27	11 2	22 2	23	24	25	26	27	28	29	30	31	32
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### Omni eX v1.4 - Patterns



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5.2 Pattern Parameters	. 1	5.2 Pattern Parameters	2	5.2 Pattern Parameters	s 3	5.2 Pattern Parameters	4
Cycle Time	120	Cycle Time	100	Cycle Time	120	Cycle Time	
Offset Time	45	Offset Time	68	Offset Time	89	Offset Time	
Split	1	Split	2	Split	3	Split	
Sequence	1	Sequence	1	Sequence	1	Sequence	
Correction Mode		Correction Mode		Correction Mode		Correction Mode	
Maximum Mode		Maximum Mode		Maximum Mode		Maximum Mode	
Force Mode	Fixed	Force Mode	Fixed	Force Mode	Fixed	Force Mode	
Perm Strategy		Perm Strategy		Perm Strategy		Perm Strategy	
Omit Strategy		Omit Strategy		Omit Strategy		Omit Strategy	
Early Return		Early Return		Early Return		Early Return	
Texas Diamond		Texas Diamond		Texas Diamond		Texas Diamond	
Max2 Phases		Max2 Phases		Max2 Phases		Max2 Phases	
Phase Timing Set		Phase Timing Set		Phase Timing Set		Phase Timing Set	
Phase Option Set		Phase Option Set		Phase Option Set		Phase Option Set	
Overlap Set		Overlap Set		Overlap Set		Overlap Set	
Veh. Det. Set		Veh. Det. Set		Veh. Det. Set		Veh. Det. Set	
Veh. Det. Diag Set		Veh. Det. Diag Set		Veh. Det. Diag Set		Veh. Det. Diag Set	
Ped. Det. Diag Set		Ped. Det. Diag Set		Ped. Det. Diag Set		Ped. Det. Diag Set	
Priority Set		Priority Set		Priority Set		Priority Set	
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Det. Reset		Det. Reset		Det. Reset		Det. Reset	

### Omni eX v1.4 - Splits

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.3 Split Table 3																	
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ime (sec)	18	62	18	22	25	55	18	22									

Coord. Phase Manual Permit Manual Omit

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### Omni eX v1.4 - Schedule



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#### Omni eX v1.4 - Day Plans

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	# ## # <b>**</b>	r Shariff (CL)	

Agency:							DATE PREPA	RED:
Location:		Meridiar	n Road & l	Eastonville	Road	DAT	E IMPLEMEN	TED:
System I	D;							
6.5 DayPlan 1								
Event#	1	2	3	4	5	6	7	8
Hour	6	9	13	19				
Minute	0	0	30	0				
Action	1	2	3	20				
6.5 DayPlan 1								
Event#	9	10	11	12	13	14	15	16
Hour								
Minute	7							
Action								
( f DavBlan 1	4							
6.5 DayPlan 1 Event#	17	18	19	20	21	22	23	24
Hour	1.7	10	19	20	21	- 42	43	24
Minute	-		-					_
Action	_		_			-		_
6.5 DayPlan 1								
Event#	25	26	27	28	29	30	31	32
lour								
Minute								
Action								
6.5 DayPlan 2								
Event#	1	2	3	4	5	6	7	8
Hour	10	19						- i
Minute	0	0						
Action	2	20						
6.5 DayPlan 2	_							
Event#	9	10	11	12	13	14	15	16
Hour	- 1	10	111	12	13	14	12	10
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5.5 DayPlan 2	-							
Event#	17	18	19	20	21	22	23	24
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Minute				_			_	
Action			L					
5.5 DayPlan 2								
Event#	25	26	27	28	29	30	31	32
lour								
Minute								
Action								



Location: System ID:		Date Prepared: By: By: By: By: By: By: By: By: By: By
6.6 Action Parameters 1	6.6 Action Parameters 2	6.6 Action Parameters 3
Pattern	Pattern	Pattern
Auxiliary Function	Auxiliary Function	Auxiliary Function
Special Function	Special Function	Special Function
Special Function	Special Function	Special Function
Detector VOS Log	Detector VOS Log	Detector VOS Log
Speed Trap Log	Speed Trap Log	Speed Trap Log
Cycle MOE Log	Cycle MOE Log	Cycle MOE Log
Detector Reset	Detector Reset	Detector Reset
6.6 Action Parameters 4	6.6 Action Parameters 5	6.6 Action Parameters 6
Pattern	Pattern	Pattern
Auxiliary Function	Auxiliary Function	Auxiliary Function
Special Function	Special Function	Special Function
Special Function	Special Function	Special Function
Detector VOS Log	Detector VOS Log	Detector VOS Log
Speed Trap Log	Speed Trap Log	Speed Trap Log
Cycle MOE Log	Cycle MOE Log	Cycle MOE Log
Detector Reset	Detector Reset	Detector Reset
6.6 Action Parameters 7	6.6 Action Parameters 8	6.6 Action Parameters 9
Pattern	Pattern	Pattern
Auxiliary Function	Auxiliary Function	Auxiliary Function
Special Function	Special Function	Special Function
Special Function	Special Function	Special Function
Detector VOS Log	Detector VOS Log	Detector VOS Log
Speed Trap Log	Speed Trap Log	Speed Trap Log
Cycle MOE Log	Cycle MOE Log	Cycle MOE Log
Detector Reset	Detector Reset	Detector Reset
6.6 Action Parameters 10	6.6 Action Parameters 11	6.6 Action Parameters 12
Pattern	Pattern	Pattern
Auxiliary Function	Auxiliary Function	Auxiliary Function
Special Function	Special Function	Special Function
Special Function	Special Function	Special Function
Detector VOS Log	Detector VOS Log	Detector VOS Log
Speed Trap Log	Speed Trap Log	Speed Trap Log
Cycle MOE Log	Cycle MOE Log	Cycle MOE Log
Detector Reset	Detector Reset	Detector Reset
6.6 Action Parameters 13	6.6 Action Parameters 14	6.6 Action Parameters 15
6.6 Action Parameters 13 Pattern	Pattern	Pattern 15
Auxiliary Function	Auxiliary Function	Auxiliary Function
Special Function	Special Function	Special Function
Special Function	Special Function	Special Function
Detector VOS Log	Detector VOS Log	Detector VOS Log
Speed Trap Log	Speed Trap Log	Speed Trap Log
Cycle MOE Log	Cycle MOE Log	Cycle MOE Log
Detector Reset	Detector Reset	Detector Reset
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## Omni eX v1.4 - Preemption

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System ID:							
7 Preempts	1	3	4	2	9	7	8
Track Phases							
Track Overlaps							
Track Ped							
Track Ped Overlap							
Dwell Phases							
Dwell Overlaps							
Dwell Peds							
Dwell Ped Overlap							
Cycling Phases							
Cycling Overlaps							
Cycling Ped							
Cycling Ped Overlap							
Exit Phase							
Locking							
Override Flash							
Override Preempt+1							
Flash Dwell							
Enter All Red							
Track Green							
Delay							
Maximum Presence							
Minimum Duration							
Minimum Dwell							
Linked Preempt							
Enter Min Green							
Enter Min Walk							
Enter Min Ped Clear							
Enter Min Yellow							
Enter Min Red Clear							
Track Min Yellow							
Track Min Red Clear							



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.1 TSP Global Options	8.2 TSP Strategy Options	Strategy 11 Set 1	8.2 TSP Strategy Options	Strategy 2 Set 1	8,2 TSP Strategy Options	Strategy 3 Set 1
Enable	Override + 1		Override + 1		Override + 1	
	Service Phases		Service Phases		Service Phases	
	Call Phases		Call Phases		Call Phases	
	Omit Phases		Omit Phases		Omit Phases	
	Oueste frima Ph		Omit Peds		Omit Peds	
	ETA		ETA		ETA	
	Input Function		Input Function		Input Function	
	Input Index		Input Index		Input Index	
	Input Ivpe		Input Type		Input Type	
	Checkout Mode		Checkout Mode		Request Mode Cherkout Mode	
	Checkout Time		Checkout Time		Checkout Time	
	Max Presence		Max Presence		Max Presence	
	Max Presence Clr		Max Presence Cir		Max Presence Clr	
0	Min ON Time		Min ON Time		Min ON Time	
	Min Orr Time		Min OFF Time		Min OFF Time	
	Extend Time		Fytond Time		Delay Time	
7	Headway Time		Headway Time		Hoadway Time	
3	Preempt Lockout		Preempt Lockout		Preempt Lockout	
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2	8.2.1SP Strategy Options	Strategy 4 Set 1	8.2 TSP Strategy Options	Strategy 51 Set 1	8.2 TSP Strategy Options	I Strategy 61 Set 1
u	Overnide + 1		Override + 1		Override + 1	
	Service Phases		Service Phases		Service Phases	
eadway	Call Phases		Call Phases		Call Phases	
ockout	Omit Phases		Omit Phases		Omit Phases	
odo	Omit Peds		Omit Peds		Omit Peds	
300	ETA		FTA		Cueue jump ra	
ame	Input Function		Input Function		Input Function	
	Input Index		Input Index		Input Index	
	Input Type		Input Type		Input Type	
	Request Mode		Request Mode		Request Mode	
	Checkout Mode		Checkout Mode		Checkout Mode	
	Checkout Time		Checkout Time		Checkout Time	
	Max Presence		Max Presence		Max Presence	
	Max Presence Cir		Max Presence Cir		Max Presence Clr	
	Min ON Time		Min ON Time		Min ON Time	
	Min OFF Time		Min Ori- Time		Min OFF Time	
	Detay time		Delay Time		Delay Time	
	Headway Time		Extend Time		Extend Time	
	Preemnt Lockout		Preempt Lockout		Headway Time	
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Omni eX v1.4 - Transit Priority

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8.3 TSP Phase Adjustment Times	Shase	Adi	,											100	WILLIAM A	_	シントエ	CO 13t 1 1936 Aujustille III 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2	-							ŀ	1	•	311 41	SUBJECT	7	
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Reduce Extend	+	+	1	+	+	+	+	+	+	+	T							Reduce Extend		4		4	+	+	+	+	$\vdash$	+	$\vdash$				
Olump	4		-	4	$\perp$	$\dashv$	+	$\dashv$	$\dashv$	T	7	7						Qlump	$\Box$	Ц	Н		Н	Н	$\vdash$	H		Н					Ц
8.3 TSP Phase Adjustment Times	phase.	Adi	ustn	ent	Ľ.	S.	ır	ır	ır	Ιſ	١ħ	lÌ		Strat		3 8	et 1	Phase A	istm	ent	Lim	82	П	11			П	П		Strat	Strategy 4 Set 1	4 5	Set 1
Phase Reduce	+	2	m	4	N	٥	1	φ	6		10	=	12	13	14	15	16	Phase 1 2 Reduce	m	4	v.	9		œ	6	_	10	=	12	13	14	15	16
Extend	$\vdash$	4	$\sqcup$	H	$\vdash$	H	H	H	+	H	ΙT	П	П			П	LT	Extend	Ц	Н	Н	H	H	H	H	H	H	H	$\dagger \dagger$	П	П		Ц
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8.3 TSP Phase Adjustment Times	hase	Adj	ıstm	ent	Lim	S							Ĺ	strat	Strategy 5	S	Set 1	8.3 TSP Phase Adjustment Times	stm	ent	Time	S	Г	ı		ı	L	П	S	Strat	Strategy 6 Set 1	8 9	Set 1
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8 3 TCD Dhace Adingsmans Times	haca	1948	100	100	1	3			П	П	П	П	إ	1	Constant 2 Car.	1	1	0 2 TCD DL				П	П	П	П	П	П	П	וו	11			П
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Reduce	+	1	-	4	1	-	1	1-	7	Т		1	_	3		2	2	- T	2	1	0	2	4	<u> </u>	7	Т	07		77	2		97 CT	Q.
Extend	Н	Н	Н	Н	Н	Н	Н	H	H	H	H	П	П	П	П	П		Extend	Ш	Ц	Ц	H	H	$\vdash$	Н	+	+	t			Γ		$\perp$
Olump	4	4	_	4	4	4	$\dashv$	┨	-1	1	1	7						Qjump		Ц	Ц	4	$\dashv$	4	+	Н	$\dashv$	H	H	П	П		Ц
8.3 TSP Phase Adiustment Times	hase	Adii	Istm	ent	Lime	99					1		Ľ	Trat	Strategy 9 Set 1	5	100	8 3 TSP Phase Adjustment Times	t t	- Luc	June	y							5	rator	Stratogy 10		Cot 1
Phase	Ξ	2	3	4	S	9	7	89	г	9 1	10	11	12	13	14	15	16	Phase 1 2	3	4	25	9	7	æ	6	_	10 1	11 11	12	13	4		116
Reduce	Н	Ц	Ц	Н	Н	Н	H	Н	Н	H	H	П	П	П	П	П	П	Reduce		Ц	Ц	Н	Н	H	Н	Н							L
Extend	+	4	4	4	4	+	+	+	+	$\dashv$	$\dashv$	$\dashv$	$\sqcap$					Extend	Ц	Ц	Ц	Н	$\dashv$	4	Н	H	H	H	H				
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8 3 TCD Dhace Adjustmant Times	hace	Adi	E	440	i	,				1	1	ı	ė	940	1	9	-	o o men places A dist									1	1	0		ŀ		
Je1 00	liase	9	III.	ğ		, L	г	ı	г	Г		-	ñ	rate		7	Set 1	rhase /	Still.	ent	Ĕ.	8	ı	ŀ	ı	ı	ŀ		7	rate	Strategy 12 Set 1	5 7	et 1
Phase	+	7	2	4	2	9	1	80	6	Т	10	=	75	23	14	15	16	Phase 1 2	m	4	S	9	_	8	6	т	10	11	12 1	13	14	15	16
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8.3 TSP Phase Adjustment Times	hase	Vd	ıstm	ent	Ē	8	г	r	ı	r			S	rate	Strategy 13 Set 1	S	et 1	Phase Adjus	Stm	ent	lime	S	H	ŀ	ı	ır	lŀ		S	rate	Strategy 14		
Phase	4	1	Y)	4	S	9	4	œ	5	7	2	=	71	13	14	15	16	1 2	m	4	N	9	^	8	6	т	10	=	7	13	14	15	16
Cartona	╀	1	1	1	1	+	+	+	+	+	t	T	T	T	T	T	T	Keduce		1	1	1	+	+	+	+	+	+	t	†	T	T	1
Olumn	+	1	1	1	+	+	+	+	+	+	†	T	T	T	T	T	T	Catend		1	4	+	+	+	+	+	+	+	$\dagger$	†	T	T	
dillinio	-	1	1	1	1	-	1	1	1	1	1	1	1			1		dunik	1	1	1	4	4	-	-	┨	1	1	1	1	1	1	1
8.3 TSP Phase Adjustment Times	hase	Adju	ıstm	ent	Time	ş	П	П	П	П	П	П	St	rate	Strategy 15		Set 1	8.3 TSP Phase Adjustment Times	stme	ent	Time	S	П	П	П				Str	rates	Strategy 16 Set 1	19	et 1
Phase	Ξ	2	N	4	S	10	7	8	6		10 1	11	12	13	1.4	15	16	Phase 1 2	3	4	2	9	2	8	6	Г	10 1	11 11	12 11	13	14	15	16
Reduce	4	4	4	4	4	4	+	+	$\dashv$	+	7		٦	T				Reduce						_	Н	Н	Н	H	H		П		
Extend	4	4	4	4	4	4	+	+	+	+	1	7	7	7	7	1	Ī	Extend					$\dashv$	4		$\dashv$							
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### Omni eX v1.4 - Speed Traps

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Agency:	DATE PREPARED:	Ву:
Location:	DATE IMPLEMENTED:	Ву:
System ID:		

9.3.3.2 Speed	l Trap															
Speed Trap	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Detector 1																
Detector 2																
Distance																

9.3.3.3 Spee	d Trap	Bin Raı	nges										_			
Bin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Range																

## Omni eX v1.4 - Log Configuration

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Date Dranarad	Parci i chai cu.	Date Implemented: By:	
Agency:	Location	LUCALIUII	System ID:

9.3-4 Log Configuration	6.2 Ti	6.2 Time Zone	1				Г													
Volume Occupancy Period	Globa	Global DST					Г													
VOS Log Combined Periods	Stand	Standard Time Zone	Zone (+/- hr)	Ĺ.			Т													
Speed Trap Log Period							ĭ													
Display Metric	A.3 U	A.3 Unit Comms																		
Speed Trap Log Mode	Unit I	Unit Backup Time		L																
VOS Log Mode					1															
Cycle MOE Log Mode	1.7 Port 1	ort 1																		Г
Power On/Off	Device	je.	1	2	3	4 5	9	7	8	6	10	11	12	13	14	15	16	17 1	18 1	19
Low Battery	Devic	Device Present	H	H	-		L	L	L				Г			H	$\vdash$	H	_	Г
Cycle Fault	Fram	Frame40 Enable	$\vdash$		_	$\vdash$	L	L		L			T	H	H	H	_	H	┝	Γ
Coord Fault					8															Ī
Coord Fail	1.5.5	1.5.5 Aux Switch																		
Cycle Fail	Function	tion																		
MMU Flash	Index	د			Γ															
Local Flash					l															
Local Free																				
Preempt Status Change							1,8													
Response Fault	A.5-6	A.5-6 Time Sync																		
Alarm Status Change	NTP 5	NTP Server Address	H																	
Door Status Change	NTP 5	NTP Start Hour	L																	
Pattern Change	NTP 8	NTP Start Minute	H				_													
Detector Status Change	NTP	NTP Interval Hour	H																	
Comm Status Change	NTP	NTP Interval Minute	H																	
Command Change	GPS S	GPS Start Hour	L																	
Data Change Keyboard	GPS S	GPS Start Minute	H																	
Controller Download	GPS I	GPS Interval Hour	$\vdash$																	
Access Code	GPS I.	GPS Interval Minute	_																	
Priority	Fnahl	Enable NTP Svr	L				-													

#### Omni eX v1.4 - Communicaitons

Page	22	of	23

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Avency:	Date Prepared:	By:
Location:	Date Implemented:	By:
System ID:	<u></u>	

A.1 Serial Comms	5						
Port	1	2	3	4	5	8	
Protocol							
Speed							
Parity							
Flow Control							
Address							
Group Address							
Data Bits							
Stop Bits							
CTS Delay							
RTS Extend					i		

A.2 Ethernet Comms			
Port	1	2	
IP Address			
Net Mask			
Gateway			
NTCIP Port			
NTCIP Mode			
AB3418 Port			
AB3418 Mode			
AB3418 Address			
AB3418 Group Address			

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Agency:	  -  -											Date I	Date Prepared:		By:	
System ID:												Date Imj	Date Implemented:		By:	
B.1.1 Menu Security Options	Option	S														
Enable:		Allow Read-Only:	d-Only:			Timeout (min):	n):									
B.1.2 Menu Security Users	' Users															
	1	2	3	4	5	9	7	8	6	10	11	12	13	14	15	16
User Id														ĺ		
Pin																
Operation																Γ
Unit																Γ
1/0 Map																
Phase																
Overlap																
Detector																Γ
Coord																
Time Base																
Preempt																
Transit																
Logs																
Comm																
Security																
Database																
CIM Iladato												Ī		T	İ	Ī

# Omni eX v1.4 - Unit & Phase Configuration

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DATE PREPARED: 5/4/2022 By:	Road & Woodmen Road By:	
recircle.	Location: Merid	system ID:

1.2 Unit Setup	1.4 Channel Se	tup (1-16)	(9)													B.3 Sys	B.3 System Information	rmation		
Auto PED CIr		1	2	3 4	4 5	9	7	8	9 1	10 11	1 12	2 13	14	15	16	Syste	System Id			
Red Revert	Type		-		_				H	┝	H	L	L	L		Na	Name			
Min Yellow	Source								_	-				_		Locs	Location			
TX Diamond	Alt 1/2 Hz		П		H											7 1 Co.	1 Coordination Constants	1000	4	
Diamond Type	Flsh Red				_											0.1.0	uninatio	T COIISI	dilks	l
	Flsh Yel									_	-					a lo	Correction Mode	T	SHOTTWAY	
																Coord	Max Cycles Trans	Τ	5 Max Inhibit	
1.3 Startup	1.4 Channel Se	tup (17-32)	32)				l	l	l	l	l	l	l	l		Coord	Coord Force Mode	Т	Fixed	
Start-Up Phases		17	Н	19 2	20 21	22	23	24	25 2	26 27	7 28	3   29	30	31	32	Perm S	Perm Strategy	$\top$	Maximum	
Next Phase	Type		Н		L				H	H	-	L	L	L		Omit S	Omit Strategy	Ī	Minimum	
Flash	Source															Sync Point	oint	Ĺ	Begin Yellow	W
All Red	Alt 1/2 Hz													L		No Ear	No Early Return		Disable	
Start Veh Call	Flsh Red				H							L				Sync R	Sync Ref Time	Ĭ	0	
Start Ped Call	Flsh Yel									-			L			Operat	Operational Mode	de		
2.4 Phase Concurrency					Γ	2.4 Phase Enable and Rings	Enable	and R	sgui											
1 2 3 4 5 6	6 7 8 9 1	.0 11	12 13	14 15	16		1	2	3	4	rv	9	7	8	9 10	) 11	12	13	14 15	16
Phase 1					Ē	Enabled	×	×	×	×	×	×	×	×	H			-	-	
Phase 2						Ring1	×	×	×	×		-	-					-	_	
Phase 3						Ring2				Г	×	×	×	×	_	_		H		
Phase 4						Ring3				Г	П	H	H	Н	-			T	_	
Phase 5						Ring4				Г		-	-	-	_					
Phase 6										ĺ				l						
Phase 7												立	Phase Diagram	Diagr	am					
Phase 8									E.	1	Ŀ		P4	Г	_	•	Г			
Phase 9									1											
Phase 10									_											
Phase 11																				
Phase 12									l	Spann Spann	,			T		╽.	T			
Phase 13											_					_				
Phase 14									_											
Phase 15									_											
Phase 16			Н											٦		4				



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	System ID	):									
1.5.1.1	Nema ABCD Input Maj	oping									
Pins	Function	IDX	Pins	Function	IDX	Pins	Function	IDX	Pins	Function	IDX
A-f	Vehicle Detector	1	B-m	Phase Ped Omit	7	A-k	Man Control Enable	1_	D-V	Unused Input	1
A-K	Vehicle Detector	2	B-n	Phase Ped Omit	8	A-q	Mode Select Bit	1	D-W	Unused Input	1
B-N	Vehicle Detector	3	B-U	Phase Omit	1	А-у	Mode Select Bit	2	D-X	Unused Input	1
B-L	Vehicle Detector	4	B-S	Phase Omit	2	А-НН	Mode Select Bit	3	D-Y	Free (no Coord)	1
C-P	Vehicle Detector	5	B-R	Phase Omit	3	A-n	Test	1	D-Z	Unused Input	1
C-S	Vehicle Detector	6	B-g	Phase Omit	4	A-AA	Test	2	D-a	Unused Input	1
C-V	Vehicle Detector	7	C-n	Phase Omit	5	C-b	Test	3	D-b	Alarm	1
C-t	Vehicle Detector	8	C-q	Phase Omit	6	A-BB	Walk Rest Modifier	1	D-c	Alarm	2
A-g	Pedestrian Detector	1	C-r	Phase Omit	7	B-B	Unused Input	1	D-d	Alarm	3
A-L	Pedestrian Detector	2	C-s	Phase Omit	8	B-W	Unused Input	1	D-e	Alarm	4
B-P	Pedestrian Detector	3	A-i	Force Off Ring	1	B-X	Unused Input	1	D-f	Alarm	5
B-M	Pedestrian Detector	4	A-N	Stop Time Ring	1	B-v	Unused Input	1	D-g	Local Flash Sense	1
C-R	Pedestrian Detector	5	A-P	Inhibit Max Ring	1	D-A	Vehicle Detector	9	D-h	Mmu Flash	1
C-T	Pedestrian Detector	6	А-х	Red Rest Ring	1	D-B	Vehicle Detector	10	D-i	Door Ajar	1
C-U	Pedestrian Detector	7	A-FF	Ped Recycle Ring	1	D-C	Vehicle Detector	11	D-j	Special Func Input	_ 1
C-W	Pedestrian Detector	8	A-GG	Max Ii Ring	1	D-D	Vehicle Detector	12	D-k	Special Func Input	2
A-h	Phase Hold	1	A-w	Omit Red Clear Ring	1	D-E	Vehicle Detector	13	D-m	Special Func Input	3
A-M	Phase Hold	2	A-m	Call To Na	1	D-F	Vehicle Detector	14	D-n	Special Func Input	4
B-1	Phase Hold	3	C-Y	Force Off Ring	2	D-G	Vehicle Detector	15	D-p	Special Func Input	5
B-h	Phase Hold	4	C-Z	Stop Time Ring	2	D-H	Vehicle Detector	16	D-q	Special Func Input	6
C-m	Phase Hold	5	C-a	Inhibit Max Ring	2	D-J	Vehicle Detector	17	D-r	Special Func Input	7
C-p	Phase Hold	6	C-u	Red Rest Ring	2	D-K	Vehicle Detector	18	D-s	Special Func Input	8
C-EE	Phase Hold	7	B-V	Ped Recycle Ring	2	D-L	Vehicle Detector	19	D-t	Preempt Detector	1
C-X	Phase Hold	8	B-z	Max li Ring	2	D-M	Vehicle Detector	20	D-u	Preempt Detector	2
A-EE	Phase Ped Omit	1	C-v	Omit Red Clear Ring	2	D-N	Vehicle Detector	21	D-v	Preempt Detector	3
A-v	Phase Ped Omit	2	A-z	Call To Na	2	D-P	Vehicle Detector	22	D-w	Preempt Detector	4
B-j	Phase Ped Omit	3	A-R	External Start	1	D-R	Vehicle Detector	23	D-x	Preempt Detector	5
В-х	Phase Ped Omit	4	A-S	Interval Advance	1	D-S	Vehicle Detector	24	D-y	Preempt Detector	6
В-Т	Phase Ped Omit	5	A-T	Unused Input	1	D-T	Clock Update	1	D-KK	Unused Input	1
B-k	Phase Ped Omit	6	A-j	Min Recall	1	D-U	Unused Input	1	D-MM	Unused Input	1

Pins	Function	IDX	Pins	Function	IDX	Pins	Function	IDX	Pins	Function	IDX
A-D	Channel Red	1	B-a	Unused Output	1	C-k	Phase Check	5	A-A	Fault Monitor	1
A-F	Channel Red	2	B-J	Channel Red	10	C-BB	Phase Check	6	A-C	Voltage Monitor	1
B-F	Channel Red	3	C-L	Unused Output	1	C-MM	Phase Check	7	B-FF	Channel Green	15
B-G	Channel Red	4	C-z	Channel Red	11	C-FF	Phase Check	8	В-НН	Channel Yellow	. 15
С-Н	Channel Red	5	С-у	Unused Output	1	B-A	Phase Next	1	B-DD	Channel Red	15
C-G	Channel Red	6	C-C	Channel Red	12	В-С	Phase Next	2	B-w	Channel Green	16
C-F	Channel Red	7	A-a	Unused Output	1	B-t	Phase Next	3	B-EE	Channel Yellow	16
C-D	Channel Red	8	A-H	Channel Yellow	9	B-f	Phase Next	4	B-u	Channel Red	16
A-Z	Channel Yellow	1	B-Z	Unused Output	1	C-M	Phase Next	. 5	A-X	Flash Logic Output	1
A-b	Channel Yellow	2	В-Н	Channel Yellow	10	C-DD	Phase Next	6	D-LL	Detector Reset	1
B-E	Channel Yellow	3	C-K	Unused Output	1	C-PP	Phase Next	7	A-CC	Status A	1
В-с	Channel Yellow	4	C-AA	Channel Yellow	11	C-HH	Phase Next	8	A-r	Status B	1
C-J	Channel Yellow	5	C-KK	Unused Output	1	A-DD	Phase On	1	A-Y	Status C	1
C-lı	Channel Yellow	6	C-w	Channel Yellow	12	A-e	Phase On	2	C-A	Status A	2
C-E	Channel Yellow	7	A-t	Unused Output	1	B-s	Phase On	3	C-B	Status B	2
C-e	Channel Yellow	8	A-J	Channel Green	9	В-е	Phase On	4	C-c	Status C	2
A-s	Channel Green	1	B-Y	Unused Output	1	C-N	Phase On	- 5	D-z	Alarm Output	1
A-c	Channel Green	2	B-d	Channel Green	10	C-CC	Phase On	6	D-AA	Alarm Output	2
B-D	Channel Green	3	C-j	Unused Output	1	C-NN	Phase On	7	D-BB	Special Func Output	1
B-b	Channel Green	4	C-LL	Channel Green	111	C-GG	Phase On	8	D-CC	Special Func Output	2
C-I	Channel Green	5	C-JJ	Unused Output	1	B-AA	Channel Green	13	D-DD	Special Func Output	3
C-g	Channel Green	6	C-d	Channel Green	12	В-р	Channel Yellow	13	D-EE	Special Func Output	4
C-f	Channel Green	7	A-u	Phase Check	1	B-q	Channel Red	13	D-FF	Special Func Output	5
C-x	Channel Green	8	A-d	Phase Check	2	B-GG	Channel Green	14	D-GG	Special Func Output	6
A-E	Unused Output	1	B-r	Phase Check	3	B-BB	Channel Yellow	14	D-HH	Special Func Output	7
۸-G	Channel Red	9	B-K	Phase Check	4	B-CC	Channel Red	14	D-II	Special Func Output	8



Agency:	Date Prepared:	By:
Location:	Date Implemeted:	By:
System ID:		

	XQI	1	3	2	4	3	4	5	9		5	19	11	25																			
ng	Function	Ped Detector	Ped Detector	Ped Detector	Ped Detector	Preempt	Preempt	Preempt	Preempt	Unused Input	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Iterval Adcance	CMU Flash	Stop Time	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input	Unused Input
2070 FIO Input Mapping	Pins	C1-67	C1-68	C1-69	C1-70	C1-71	C1-72	C1-73	C1-74	C1-75	C1-76	C1-77	C1-78	C1-79	C1-80	C1-81	C1-82	C11-15	C11-16	C11-17	C11-18	C11-19	C11-20	C11-21	C11-22	C11-23	C11-24	C11-25	C11-26	C11-27	C11-28	C11-29	C11-30
	IDX	2	16	8	22	3	1.7	6	23	9	20	12	26	1	2			15	1	21	7	27	13	28	14					4	18	10	24
1.5.3.1	Function	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Preempt	Preempt	Manual Ctrl	Unused Input	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector	Unused Input	Unused Input	Unused Input	Unused Input	Vehicle Detector	Vehicle Detector	Vehicle Detector	Vehicle Detector
	Pins	C1-39	C1-40	C1-41	C1-42	C1-43	C1-44	C1-45	C1-46	C1-47	C1-48	C1-49	C1-50	C1-51	C1-52	C1-53	C1-54	C1-55	C1-56	C1-57	C1-58	C1-59	C1-60	C1-61	C1-62	C11-10	C11-11	C11-12	C11-13	C1-63	C1-64	C1-65	C1-66

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| XQI      |                            |  |  |  |   |  |   |  |  |   | 16  | 16   | 16  | 15  | 15   | 15   |   
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   | 14  | 14   | 14  | 13   
   
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   |
| Function | Unused Output              | Unused Output  | Unused Output  | Unused Output  | Unused Output   | Flash Status   | Detector Reset  | Watchdog   | Unused Output  | Unused Output   | Channel Red   | Channel Yellow   | Channel Green   | Channel Red   | Channel Yellow   | Channel Green  | Unused Output   
   | Unused Output   
   | Channel Red   | Channel Yellow   | Channel Green   | Channel Red  
   
   | Channel Yellow  
  | Channel Green  | Unused Output   
  | Unused Output  | Unused Output  | Unused Output   | Unused Output   | Unused Output   | Unused Output  
   |
| Pins     | C1-35                      | C1-36  | C1-37  | C1-38  | C1-100  | C1-101   | C1-102  | C1-103   | C1-83  | C1-84   | C1-85   | C1-86  | C1-87   | C1-88   | C1-89  | C1-90  | C1-91   
   | C1-93   
   | C1-94   | C1-95  | C1-96   | C1-97  
   
   | C1-98   
  | C1-99  | C11-1   
  | C11-2  | C11-3  | C11-4   | C11-5   | C11-6   | C11-7  
   |
| XQI      | 9                          | 9  | 5  | 2  | 5   | 4  | 4   | 4  | 3  | 3   | 2   | 2  | 2   | 1   | 1  | 1  | 12  
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   | 11  | 11   | 11  | 10   
   
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   |
| Function | Channel Red                | Channel Green  | Channel Red  | Channel Yellow   | Channel Green   | Channel Red  | Channel Yellow  | Channel Green  | Channel Red  | Channel Green   | Channel Red   | Channel Yellow   | Channel Green   | Channel Red   | Channel Yellow   | Channel Green  | Channel Red   
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   | Channel Red   | Channel Yellow   | Channel Green   | Channel Red  
   
   | Channel Yellow  
  | Channel Green  | Channel Red   
  | Channel Green  | Channel Red  | Channel Yellow  | Channel Green   | Channel Red   | Channel Yellow   
   |
| Pins     | C1-02                      | C1-03  | C1-04  | C1-05  | C1-06   | C1-07  | C1-08   | C1-09  | C1-10  | C1-11   | C1-12   | C1-13  | C1-15   | C1-16   | C1-17  | C1-18  | C1-19   
   | C1-20   
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   | C1-25   
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  | C1-28  | C1-29  | C1-30   | C1-31   | C1-32   | C1-33  
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|          | Function IDX Pins Function | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output | Function IDX Pins Function Channel Red 6 C1-35 Unused Output Channel Green 6 C1-36 Unused Output | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output           Channel Yellow         5         C1-38         Unused Output | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Yellow         5         C1-37         Unused Output           Channel Green         5         C1-38         Unused Output           Channel Green         5         C1-100         Unused Output | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Yellow         5         C1-37         Unused Output           Channel Green         5         C1-38         Unused Output           Channel Red         4         C1-101         Flash Status | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output           Channel Green         5         C1-38         Unused Output           Channel Green         5         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Yellow         4         C1-102         Detector Reset | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output           Channel Green         5         C1-38         Unused Output           Channel Red         4         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Yellow         4         C1-102         Detector Reset           Channel Green         4         C1-103         Watchdog | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output           Channel Green         5         C1-38         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Yellow         4         C1-102         Detector Reset           Channel Green         4         C1-103         Watchdog           Channel Red         3         C1-83         Unused Output | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output           Channel Yellow         5         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Yellow         4         C1-101         Plash Status           Channel Green         4         C1-102         Detector Reset           Channel Green         4         C1-103         Watchdog           Channel Green         3         C1-83         Unused Output           Channel Green         3         C1-84         Unused Output | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-37         Unused Output           Channel Yellow         5         C1-37         Unused Output           Channel Green         5         C1-100         Unused Output           Channel Green         4         C1-101         Flash Status           Channel Red         4         C1-101         Flash Status           Channel Green         4         C1-102         Detector Reset           Channel Green         4         C1-103         Watchdog           Channel Green         3         C1-83         Unused Output           Channel Green         3         C1-84         Unused Output           Channel Green         3         C1-84         Unused Output | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output           Channel Green         5         C1-38         Unused Output           Channel Green         4         C1-101         Flash Status           Channel Red         4         C1-102         Detector Reset           Channel Green         4         C1-102         Detector Reset           Channel Green         4         C1-103         Watchdog           Channel Red         3         C1-83         Unused Output           Channel Red         2         C1-84         Unused Output           Channel Yellow         2         C1-85         Channel Yellow         16 | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output           Channel Green         5         C1-100         Unused Output           Channel Green         4         C1-101         Flash Status           Channel Red         4         C1-102         Detector Reset           Channel Green         4         C1-102         Detector Reset           Channel Green         4         C1-103         Watchdog           Channel Red         3         C1-83         Unused Output           Channel Red         3         C1-84         Unused Output           Channel Yellow         2         C1-85         Channel Yellow         16           Channel Yellow         2         C1-86         Channel Yellow         16           Channel Green         2         C1-86         Channel Yellow         16 | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         5         C1-36         Unused Output           Channel Red         5         C1-38         Unused Output           Channel Green         5         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Yellow         4         C1-102         Detector Reset           Channel Green         4         C1-103         Watchdog           Channel Green         3         C1-83         Unused Output           Channel Red         3         C1-84         Unused Output           Channel Sceen         3         C1-84         Unused Output           Channel Sceen         3         C1-84         Unused Output           Channel Green         3         C1-84         Unused Output           Channel Green         3         C1-84         Unused Output           Channel Green         2         C1-86         Channel Yellow         16           Channel Green         2         C1-86         Channel Red         16           Channel Green         2< | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Yellow         5         C1-38         Unused Output           Channel Green         5         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Yellow         4         C1-102         Detector Reset           Channel Green         4         C1-103         Watchdog           Channel Green         4         C1-103         Watchdog           Channel Red         3         C1-83         Unused Output           Channel Red         3         C1-84         Unused Output           Channel Red         2         C1-85         Channel Red         16           Channel Yellow         2         C1-86         Channel Yellow         16           Channel Red         1         C1-87         Channel Yellow         15           Channel Yellow         1         C1-89         Channel Yellow         15 | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Yellow         5         C1-38         Unused Output           Channel Red         4         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Red         4         C1-102         Detector Reset           Channel Green         4         C1-103         Watchdog           Channel Red         3         C1-83         Unused Output           Channel Red         3         C1-84         Unused Output           Channel Red         2         C1-85         Channel Red         16           Channel Yellow         2         C1-85         Channel Red         16           Channel Yellow         2         C1-86         Channel Yellow         16           Channel Yellow         1         C1-89         Channel Yellow         15   
       Channel Yellow         1         C1-89         Channel Yellow         15           Channel Green         1         C1-99         Channel Yellow | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Red         5         C1-38         Unused Output           Channel Red         4         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Yellow         4         C1-102         Detector Reset           Channel Green         4         C1-103         Watchdog           Channel Green         3         C1-83         Unused Output           Channel Red         3         C1-84         Unused Output           Channel Red         2         C1-85         Channel Red         16           Channel Yellow         2         C1-86         Channel Red         16           Channel Seen         3         C1-86         Channel Red         15           Channel Yellow         1         C1-89         Channel Yellow         16           Channel Green         1         C1-90         Channel Green         16           Channel Green         1         C1-90         Channel Green <td< td=""><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output           Channel Red         4         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Yellow         4         C1-102         Detector Reset           Channel Green         4         C1-103         Watchdog           Channel Green         3         C1-83         Unused Output           Channel Red         2         C1-84         Unused Output           Channel Red         2         C1-85         Channel Red         16           Channel Sellow         2         C1-86         Channel Red         15           Channel Sellow         2         C1-86         Channel Red         15           Channel Green         3         C1-86         Channel Nellow         16           Channel Green         1         C1-90         Channel Ned         15           Channel Green         1         C1-90         Channel Ned         15</td><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output           Channel Green         5         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Yellow         4         C1-102         Detector Reset           Channel Green         4         C1-103         Watchdog           Channel Green         3         C1-83         Unused Output           Channel Red         2         C1-84         Unused Output           Channel Sceen         3         C1-85         Channel Red           Channel Scen         2         C1-86         Channel Red           Channel Scen         2         C1-86         Channel Red           Channel Green         1         C1-89         Channel Red           Channel Red         1         C1-90         Channel Red           Channel Green         1         C1-91         Unused Output           Channel Green         1         C1-91         Channel Green</td><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Red         4         C1-100         Unused Output           Channel Green         5         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Red         4         C1-102         Detector Reset           Channel Green         3         C1-103         Watchdog           Channel Green         3         C1-83         Unused Output           Channel Red         2         C1-86         Channel Red         16           Channel Red         2         C1-87         Channel Red         15           Channel Yellow         2         C1-86         Channel Red         15           Channel Green         3         C1-87         Channel Red         15           Channel Green         1         C1-90         Channel Red         15           Channel Green         1         C1-90         Channel Red         15           Channel Green         1         C1-91         Channel Creen</td></td<> <td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output           Channel Red         4         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Red         4         C1-102         Detector Reset           Channel Red         3         C1-83         Unused Output           Channel Green         3         C1-84         Unused Output           Channel Red         2         C1-85         Channel Red         15           Channel Green         3         C1-84         Unused Output         16           Channel Green         2         C1-85         Channel Red         15           Channel Green         2         C1-86         Channel Red         15           Channel Green         1         C1-90         Channel Red         15           Channel Green         1         C1-91         Channel Green         16           Channel Green         1         C1-91         Channel Green<!--</td--><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output           Channel Red         4         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         4         C1-103         Watchdog           Channel Green         3         C1-84         Unused Output           Channel Green         3         C1-84         Unused Output           Channel Green         2         C1-85         Channel Red         15           Channel Green         2         C1-86         Channel Red         15           Channel Green         1         C1-86         Channel Red         15           Channel Green         1         C1-90         Channel Green         15           Channel Green         1         C1-91         Channel Green         14           Channel Green         1         C1-94         Channel Green         14<!--</td--><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output           Channel Red         4         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         4         C1-102         Detector Reset           Channel Green         3         C1-84         Unused Output           Channel Green         3         C1-84         Unused Output           Channel Green         2         C1-85         Channel Red         15           Channel Green         3         C1-84         Unused Output         16           Channel Green         1         C1-86         Channel Red         15           Channel Selow         1         C1-89         Channel Green         16           Channel Green         1         C1-90         Channel Green         17           Channel Green         1         C1-91         Channel Green</td><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output           Channel Scen         5         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-103         Watchdog           Channel Green         3         C1-84         Unused Output           Channel Red         2         C1-85         Channel Red         15           Channel Green         3         C1-84         Unused Output         16           Channel Green         1         C1-85         Channel Red         15           Channel Green         1         C1-86         Channel Red         15           Channel Selow         1         C1-89         Channel Selow         14           Channel Green         1         C1-91         Channel Selow         14           Channel Green         1         C1-91         Channel Selow<td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-137         Unused Output           Channel Scen         5         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-102         Detector Reset           Channel Green         4         C1-102         Detector
Reset           Channel Green         3         C1-84         Unused Output           Channel Green         2         C1-85         Channel Yellow           Channel Green         2         C1-85         Channel Yellow           Channel Green         1         C1-89         Channel Yellow           Channel Green         1         C1-90         Channel Yellow           Channel Green         1         C1-91         Unused Output           Channel Green         1         C1-91         Channel Yellow           Channel Green         1         C1-94</td><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-100         Unused Output           Channel Yellow         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-103         Watchdog           Channel Red         2         C1-103         Watchdog           Channel Red         2         C1-83         Unused Output           Channel Red         2         C1-84         Unused Output           Channel Green         3         C1-84         Unused Output           Channel Green         1         C1-89         Channel Yellow         I5           Channel Green         1         C1-89         Channel Red         I4           Channel Sellow         1         C1-91         Unused Output         I4           Channel Sellow         1         C1-93         Unused Output         I4           Channel Sellow         1         C1-94         Channel Sellow         I4</td><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-100         Unused Output           Channel Yellow         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-103         Watchdog           Channel Red         2         C1-103         Watchdog           Channel Red         2         C1-83         Unused Output           Channel Red         2         C1-84         Unused Output           Channel Red         1         C1-85         Channel Yellow         15           Channel Green         1         C1-86         Channel Yellow         15           Channel Selow         1         C1-89         Channel Red         14           Channel Yellow         1         C1-91         Unused Output         14           Channel Selow         1         C1-91         Channel Yellow         14           Channel Yellow         1         C1-91         Channel Yellow         1</td><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-100         Unused Output           Channel Yellow         5         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-103         Watchdog           Channel Red         2         C1-103         Watchdog           Channel Red         3         C1-84         Unused Output           Channel Red         1         C1-85         Channel Yellow         15           Channel Scen         2         C1-84         Unused Output         16           Channel Scen         1         C1-85         Channel Yellow         15           Channel Scen         1         C1-89         Channel Yellow         16           Channel Scen         1         C1-91         Unused Output         17           Channel Scen         1         C1-91         Channel Yellow         14           Channel Scen         1         C1-92         Channel Yellow<!--</td--><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-100         Unused Output           Channel Yellow         5         C1-100         Unused Output           Channel Red         4         C1-102         Detector Reset           Channel Red         3         C1-84         Unused Output           Channel Red         2         C1-103         Watchdog           Channel Red         2         C1-84         Unused Output           Channel Red         1         C1-84         Unused Output           Channel Green         2         C1-84         Unused Output           Channel Green         1         C1-84         Unused Output           Channel Green         1         C1-84         Unused Output           Channel Green         1         C1-84         Unused Output           Channel Red         1         C1-93         Channel Red         14           Channel Green         1         C1-94         Channel Red         14           Channel Green         1</td><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Yellow         5         C1-37         Unused Output           Channel Yellow         4         C1-100         Unused Output           Channel Yellow         4         C1-103         Watchdog           Channel Red         3         C1-83         Unused Output           Channel Yellow         4         C1-103         Watchdog           Channel Red         3         C1-84         Unused Output           Channel Yellow         2         C1-87         Channel Red         15           Channel Yellow         1         C1-87         Channel Yellow         15           Channel Yellow         1         C1-89         Channel Yellow         16           Channel Yellow         1         C1-91         Channel Yellow         14           Channel Green         1         C1-95         Channel Yellow         17           Channel Green         1         C1-96         Channel Yellow         13           Channel Green         1         C1-96</td></td></td></td></td> | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output           Channel Red         4         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Yellow         4         C1-102         Detector Reset           Channel Green         4         C1-103         Watchdog           Channel Green         3         C1-83         Unused Output           Channel Red         2         C1-84         Unused Output           Channel Red         2         C1-85         Channel Red         16           Channel Sellow         2         C1-86         Channel Red         15           Channel Sellow         2         C1-86         Channel Red         15           Channel Green         3         C1-86         Channel Nellow         16           Channel Green         1         C1-90         Channel Ned         15           Channel Green         1         C1-90         Channel Ned         15 | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output           Channel Green         5         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Yellow         4         C1-102         Detector Reset           Channel Green         4         C1-103         Watchdog           Channel Green         3         C1-83         Unused Output           Channel Red         2         C1-84         Unused Output           Channel Sceen         3         C1-85         Channel Red           Channel Scen         2         C1-86         Channel Red           Channel Scen         2         C1-86         Channel Red           Channel Green         1         C1-89         Channel Red           Channel Red         1         C1-90         Channel Red           Channel Green         1         C1-91         Unused Output           Channel Green         1         C1-91         Channel Green | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Red         4         C1-100         Unused Output           Channel Green         5         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Red         4         C1-102         Detector Reset           Channel Green         3         C1-103         Watchdog           Channel Green         3         C1-83         Unused Output           Channel Red         2         C1-86         Channel Red         16           Channel Red         2         C1-87         Channel Red         15           Channel Yellow         2         C1-86         Channel Red         15           Channel Green         3         C1-87         Channel Red         15           Channel Green         1         C1-90         Channel Red         15           Channel Green         1         C1-90         Channel Red         15           Channel Green         1         C1-91         Channel Creen | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5
        C1-37         Unused Output           Channel Red         4         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Red         4         C1-102         Detector Reset           Channel Red         3         C1-83         Unused Output           Channel Green         3         C1-84         Unused Output           Channel Red         2         C1-85         Channel Red         15           Channel Green         3         C1-84         Unused Output         16           Channel Green         2         C1-85         Channel Red         15           Channel Green         2         C1-86         Channel Red         15           Channel Green         1         C1-90         Channel Red         15           Channel Green         1         C1-91         Channel Green         16           Channel Green         1         C1-91         Channel Green </td <td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output           Channel Red         4         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         4         C1-103         Watchdog           Channel Green         3         C1-84         Unused Output           Channel Green         3         C1-84         Unused Output           Channel Green         2         C1-85         Channel Red         15           Channel Green         2         C1-86         Channel Red         15           Channel Green         1         C1-86         Channel Red         15           Channel Green         1         C1-90         Channel Green         15           Channel Green         1         C1-91         Channel Green         14           Channel Green         1         C1-94         Channel Green         14<!--</td--><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output           Channel Red         4         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         4         C1-102         Detector Reset           Channel Green         3         C1-84         Unused Output           Channel Green         3         C1-84         Unused Output           Channel Green         2         C1-85         Channel Red         15           Channel Green         3         C1-84         Unused Output         16           Channel Green         1         C1-86         Channel Red         15           Channel Selow         1         C1-89         Channel Green         16           Channel Green         1         C1-90         Channel Green         17           Channel Green         1         C1-91         Channel Green</td><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output           Channel Scen         5         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-103         Watchdog           Channel Green         3         C1-84         Unused Output           Channel Red         2         C1-85         Channel Red         15           Channel Green         3         C1-84         Unused Output         16           Channel Green         1         C1-85         Channel Red         15           Channel Green         1         C1-86         Channel Red         15           Channel Selow         1         C1-89         Channel Selow         14           Channel Green         1         C1-91         Channel Selow         14           Channel Green         1         C1-91         Channel Selow<td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-137         Unused Output           Channel Scen         5         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-102         Detector Reset           Channel Green         4         C1-102         Detector Reset           Channel Green         3         C1-84         Unused Output           Channel Green         2         C1-85         Channel Yellow           Channel Green         2         C1-85         Channel Yellow           Channel Green         1         C1-89         Channel Yellow           Channel Green         1         C1-90         Channel Yellow           Channel Green         1         C1-91         Unused Output           Channel Green         1         C1-91         Channel Yellow           Channel Green         1         C1-94</td><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-100         Unused Output           Channel Yellow         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-103         Watchdog           Channel Red         2         C1-103         Watchdog           Channel Red         2         C1-83         Unused Output           Channel Red         2         C1-84         Unused Output           Channel Green         3         C1-84         Unused Output           Channel Green         1         C1-89         Channel Yellow         I5           Channel Green         1         C1-89         Channel Red         I4           Channel Sellow         1         C1-91         Unused Output         I4           Channel Sellow         1         C1-93         Unused Output         I4           Channel Sellow         1         C1-94         Channel Sellow         I4</td><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-100         Unused Output           Channel Yellow         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-103         Watchdog           Channel Red         2         C1-103         Watchdog           Channel Red         2         C1-83         Unused Output           Channel Red         2         C1-84         Unused Output           Channel Red         1         C1-85         Channel Yellow         15           Channel Green         1         C1-86         Channel Yellow         15           Channel Selow         1         C1-89         Channel Red         14           Channel Yellow         1         C1-91         Unused Output         14           Channel Selow         1         C1-91         Channel Yellow         14           Channel Yellow         1         C1-91         Channel Yellow         1</td><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-100         Unused Output           Channel Yellow         5         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-103         Watchdog           Channel Red         2         C1-103         Watchdog           Channel Red         3         C1-84         Unused Output           Channel Red         1         C1-85         Channel Yellow         15           Channel Scen         2         C1-84         Unused Output         16           Channel Scen         1         C1-85         Channel Yellow         15           Channel Scen         1         C1-89         Channel Yellow         16           Channel Scen         1         C1-91         Unused Output         17           Channel Scen         1         C1-91         Channel Yellow         14           Channel Scen         1         C1-92         Channel Yellow<!--</td--><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-100         Unused Output           Channel Yellow         5         C1-100         Unused Output           Channel Red         4         C1-102         Detector Reset           Channel Red         3         C1-84         Unused Output           Channel Red         2         C1-103         Watchdog           Channel Red         2         C1-84         Unused Output           Channel Red         1         C1-84         Unused Output           Channel Green         2         C1-84         Unused Output           Channel Green         1         C1-84         Unused Output           Channel Green         1         C1-84         Unused Output           Channel Green         1         C1-84         Unused Output           Channel Red         1       
 C1-93         Channel Red         14           Channel Green         1         C1-94         Channel Red         14           Channel Green         1</td><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Yellow         5         C1-37         Unused Output           Channel Yellow         4         C1-100         Unused Output           Channel Yellow         4         C1-103         Watchdog           Channel Red         3         C1-83         Unused Output           Channel Yellow         4         C1-103         Watchdog           Channel Red         3         C1-84         Unused Output           Channel Yellow         2         C1-87         Channel Red         15           Channel Yellow         1         C1-87         Channel Yellow         15           Channel Yellow         1         C1-89         Channel Yellow         16           Channel Yellow         1         C1-91         Channel Yellow         14           Channel Green         1         C1-95         Channel Yellow         17           Channel Green         1         C1-96         Channel Yellow         13           Channel Green         1         C1-96</td></td></td></td> | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output           Channel Red         4         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         4         C1-103         Watchdog           Channel Green         3         C1-84         Unused Output           Channel Green         3         C1-84         Unused Output           Channel Green         2         C1-85         Channel Red         15           Channel Green         2         C1-86         Channel Red         15           Channel Green         1         C1-86         Channel Red         15           Channel Green         1         C1-90         Channel Green         15           Channel Green         1         C1-91         Channel Green         14           Channel Green         1         C1-94         Channel Green         14 </td <td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output           Channel Red         4         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         4         C1-102         Detector Reset           Channel Green         3         C1-84         Unused Output           Channel Green         3         C1-84         Unused Output           Channel Green         2         C1-85         Channel Red         15           Channel Green         3         C1-84         Unused Output         16           Channel Green         1         C1-86         Channel Red         15           Channel Selow         1         C1-89         Channel Green         16           Channel Green         1         C1-90         Channel Green         17           Channel Green         1         C1-91         Channel Green</td> <td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output           Channel Scen         5         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-103         Watchdog           Channel Green         3         C1-84         Unused Output           Channel Red         2         C1-85         Channel Red         15           Channel Green         3         C1-84         Unused Output         16           Channel Green         1         C1-85         Channel Red         15           Channel Green         1         C1-86         Channel Red         15           Channel Selow         1         C1-89         Channel Selow         14           Channel Green         1         C1-91         Channel Selow         14           Channel Green         1         C1-91         Channel Selow<td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-137         Unused Output           Channel Scen         5         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-102         Detector Reset           Channel Green         4         C1-102         Detector Reset           Channel Green         3         C1-84         Unused Output           Channel Green         2         C1-85         Channel Yellow           Channel Green         2         C1-85         Channel Yellow           Channel Green         1         C1-89         Channel Yellow           Channel Green         1         C1-90         Channel Yellow           Channel Green         1         C1-91         Unused Output           Channel Green         1         C1-91         Channel Yellow           Channel Green         1         C1-94</td><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-100         Unused Output           Channel Yellow         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-103         Watchdog           Channel Red         2         C1-103         Watchdog           Channel Red         2         C1-83         Unused Output           Channel Red         2         C1-84         Unused Output           Channel Green         3         C1-84         Unused Output           Channel Green         1         C1-89         Channel Yellow         I5           Channel Green         1         C1-89         Channel Red         I4           Channel Sellow         1         C1-91         Unused Output         I4           Channel Sellow         1         C1-93         Unused Output         I4           Channel Sellow         1         C1-94         Channel Sellow         I4</td><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-100         Unused Output           Channel Yellow         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-103         Watchdog           Channel Red         2         C1-103         Watchdog           Channel Red         2         C1-83         Unused Output           Channel Red         2         C1-84         Unused Output           Channel Red         1         C1-85         Channel Yellow         15           Channel Green         1         C1-86         Channel Yellow         15           Channel Selow         1         C1-89         Channel Red         14           Channel Yellow         1         C1-91         Unused Output         14           Channel Selow         1         C1-91         Channel Yellow         14           Channel Yellow         1         C1-91         Channel Yellow         1</td><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-100         Unused Output           Channel Yellow         5         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-103         Watchdog           Channel Red         2         C1-103         Watchdog           Channel Red         3         C1-84         Unused Output           Channel Red         1         C1-85         Channel Yellow         15           Channel Scen         2         C1-84         Unused Output         16           Channel Scen         1         C1-85         Channel Yellow         15           Channel Scen         1         C1-89         Channel Yellow         16           Channel Scen         1         C1-91         Unused Output         17           Channel Scen         1         C1-91         Channel Yellow         14           Channel Scen         1         C1-92         Channel Yellow<!--</td--><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-100         Unused Output           Channel Yellow         5         C1-100         Unused Output           Channel Red         4         C1-102         Detector Reset           Channel Red         3         C1-84         Unused Output           Channel Red         2         C1-103         Watchdog           Channel Red         2         C1-84         Unused Output   
       Channel Red         1         C1-84         Unused Output           Channel Green         2         C1-84         Unused Output           Channel Green         1         C1-84         Unused Output           Channel Green         1         C1-84         Unused Output           Channel Green         1         C1-84         Unused Output           Channel Red         1         C1-93         Channel Red         14           Channel Green         1         C1-94         Channel Red         14           Channel Green         1</td><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Yellow         5         C1-37         Unused Output           Channel Yellow         4         C1-100         Unused Output           Channel Yellow         4         C1-103         Watchdog           Channel Red         3         C1-83         Unused Output           Channel Yellow         4         C1-103         Watchdog           Channel Red         3         C1-84         Unused Output           Channel Yellow         2         C1-87         Channel Red         15           Channel Yellow         1         C1-87         Channel Yellow         15           Channel Yellow         1         C1-89         Channel Yellow         16           Channel Yellow         1         C1-91         Channel Yellow         14           Channel Green         1         C1-95         Channel Yellow         17           Channel Green         1         C1-96         Channel Yellow         13           Channel Green         1         C1-96</td></td></td> | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output           Channel Red         4         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         4         C1-102         Detector Reset           Channel Green         3         C1-84         Unused Output           Channel Green         3         C1-84         Unused Output           Channel Green         2         C1-85         Channel Red         15           Channel Green         3         C1-84         Unused Output         16           Channel Green         1         C1-86         Channel Red         15           Channel Selow         1         C1-89         Channel Green         16           Channel Green         1         C1-90         Channel Green         17           Channel Green         1         C1-91         Channel Green | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-37         Unused Output           Channel Scen         5         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-103         Watchdog           Channel Green         3         C1-84         Unused Output           Channel Red         2         C1-85         Channel Red         15           Channel Green         3         C1-84         Unused Output         16           Channel Green         1         C1-85         Channel Red         15           Channel Green         1         C1-86         Channel Red         15           Channel Selow         1         C1-89         Channel Selow         14           Channel Green         1         C1-91         Channel Selow         14           Channel Green         1         C1-91         Channel Selow <td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-137         Unused Output           Channel Scen         5         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-102         Detector Reset           Channel Green         4         C1-102         Detector Reset           Channel Green         3         C1-84         Unused Output           Channel Green         2         C1-85         Channel Yellow           Channel Green         2         C1-85         Channel Yellow           Channel Green         1         C1-89         Channel Yellow           Channel Green         1         C1-90         Channel Yellow           Channel Green         1         C1-91         Unused Output           Channel Green         1         C1-91         Channel Yellow           Channel Green         1         C1-94</td> <td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-100         Unused Output           Channel Yellow         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-103         Watchdog           Channel Red         2         C1-103         Watchdog           Channel Red         2         C1-83         Unused Output           Channel Red         2         C1-84         Unused Output           Channel Green         3         C1-84         Unused Output           Channel Green         1         C1-89         Channel Yellow         I5           Channel Green         1         C1-89         Channel Red         I4           Channel Sellow         1         C1-91         Unused Output         I4           Channel Sellow         1         C1-93         Unused Output         I4           Channel Sellow         1         C1-94         Channel Sellow         I4</td> <td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-100         Unused Output           Channel Yellow         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-103         Watchdog           Channel Red         2         C1-103         Watchdog           Channel Red         2         C1-83         Unused Output           Channel Red         2         C1-84         Unused Output           Channel Red         1         C1-85         Channel Yellow         15           Channel Green         1         C1-86         Channel Yellow         15           Channel Selow         1         C1-89         Channel Red         14           Channel Yellow         1         C1-91         Unused Output         14           Channel Selow         1         C1-91         Channel Yellow         14           Channel Yellow         1         C1-91         Channel Yellow         1</td> <td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-100         Unused Output           Channel Yellow         5         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-103         Watchdog           Channel Red         2         C1-103         Watchdog           Channel Red         3         C1-84         Unused Output           Channel Red         1         C1-85         Channel Yellow         15           Channel Scen         2         C1-84         Unused Output         16           Channel Scen         1         C1-85         Channel Yellow         15           Channel Scen         1         C1-89         Channel Yellow         16           Channel Scen         1         C1-91         Unused Output         17           Channel Scen         1         C1-91         Channel Yellow         14           Channel Scen         1         C1-92         Channel Yellow<!--</td--><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-100         Unused Output           Channel Yellow         5         C1-100         Unused Output           Channel Red         4         C1-102         Detector Reset           Channel Red         3         C1-84         Unused Output           Channel Red         2         C1-103         Watchdog           Channel Red         2         C1-84         Unused Output           Channel Red         1         C1-84         Unused Output           Channel Green         2         C1-84         Unused Output           Channel Green         1         C1-84         Unused Output           Channel Green         1         C1-84         Unused Output           Channel Green         1         C1-84         Unused Output           Channel Red         1         C1-93         Channel Red         14           Channel Green         1         C1-94         Channel Red         14           Channel Green         1</td><td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Yellow         5        
C1-37         Unused Output           Channel Yellow         4         C1-100         Unused Output           Channel Yellow         4         C1-103         Watchdog           Channel Red         3         C1-83         Unused Output           Channel Yellow         4         C1-103         Watchdog           Channel Red         3         C1-84         Unused Output           Channel Yellow         2         C1-87         Channel Red         15           Channel Yellow         1         C1-87         Channel Yellow         15           Channel Yellow         1         C1-89         Channel Yellow         16           Channel Yellow         1         C1-91         Channel Yellow         14           Channel Green         1         C1-95         Channel Yellow         17           Channel Green         1         C1-96         Channel Yellow         13           Channel Green         1         C1-96</td></td> | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-137         Unused Output           Channel Scen         5         C1-100         Unused Output           Channel Red         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-102         Detector Reset           Channel Green         4         C1-102         Detector Reset           Channel Green         3         C1-84         Unused Output           Channel Green         2         C1-85         Channel Yellow           Channel Green         2         C1-85         Channel Yellow           Channel Green         1         C1-89         Channel Yellow           Channel Green         1         C1-90         Channel Yellow           Channel Green         1         C1-91         Unused Output           Channel Green         1         C1-91         Channel Yellow           Channel Green         1         C1-94 | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-100         Unused Output           Channel Yellow         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-103         Watchdog           Channel Red         2         C1-103         Watchdog           Channel Red         2         C1-83         Unused Output           Channel Red         2         C1-84         Unused Output           Channel Green         3         C1-84         Unused Output           Channel Green         1         C1-89         Channel Yellow         I5           Channel Green         1         C1-89         Channel Red         I4           Channel Sellow         1         C1-91         Unused Output         I4           Channel Sellow         1         C1-93         Unused Output         I4           Channel Sellow         1         C1-94         Channel Sellow         I4 | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-100         Unused Output           Channel Yellow         4         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-103         Watchdog           Channel Red         2         C1-103         Watchdog           Channel Red         2         C1-83         Unused Output           Channel Red         2         C1-84         Unused Output           Channel Red         1         C1-85         Channel Yellow         15           Channel Green         1         C1-86         Channel Yellow         15           Channel Selow         1         C1-89         Channel Red         14           Channel Yellow         1         C1-91         Unused Output         14           Channel Selow         1         C1-91         Channel Yellow         14           Channel Yellow         1         C1-91         Channel Yellow         1 | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-100         Unused Output           Channel Yellow         5         C1-101         Flash Status           Channel Red         3         C1-102         Detector Reset           Channel Red         3         C1-103         Watchdog           Channel Red         2         C1-103         Watchdog           Channel Red         3         C1-84         Unused Output           Channel Red         1         C1-85         Channel Yellow         15           Channel Scen         2         C1-84         Unused Output         16           Channel Scen         1         C1-85         Channel Yellow         15           Channel Scen         1         C1-89         Channel Yellow         16           Channel Scen         1         C1-91         Unused Output         17           Channel Scen         1         C1-91         Channel Yellow         14           Channel Scen         1         C1-92         Channel Yellow </td <td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-100         Unused Output           Channel Yellow         5         C1-100         Unused Output           Channel Red         4         C1-102         Detector Reset           Channel Red         3         C1-84         Unused Output           Channel Red         2         C1-103         Watchdog           Channel Red         2         C1-84         Unused Output           Channel Red         1         C1-84         Unused Output           Channel Green         2         C1-84         Unused Output           Channel Green         1         C1-84         Unused Output           Channel Green         1         C1-84         Unused Output           Channel Green         1         C1-84         Unused Output           Channel Red         1         C1-93         Channel Red         14           Channel Green         1         C1-94         Channel Red         14           Channel Green         1</td> <td>Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Yellow         5         C1-37         Unused Output           Channel Yellow         4         C1-100         Unused Output           Channel Yellow         4         C1-103         Watchdog           Channel Red         3         C1-83         Unused Output           Channel Yellow         4         C1-103         Watchdog           Channel Red         3         C1-84         Unused Output           Channel Yellow         2         C1-87         Channel Red         15           Channel Yellow         1         C1-87         Channel Yellow         15           Channel Yellow         1         C1-89         Channel Yellow         16           Channel Yellow         1         C1-91         Channel Yellow         14           Channel Green         1         C1-95         Channel Yellow         17           Channel Green         1         C1-96         Channel Yellow         13           Channel Green         1         C1-96</td> | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Red         5         C1-36         Unused Output           Channel Red         5         C1-100         Unused Output           Channel Yellow         5         C1-100         Unused Output           Channel Red         4         C1-102         Detector Reset           Channel Red         3         C1-84         Unused Output           Channel Red         2         C1-103         Watchdog           Channel Red         2         C1-84         Unused Output           Channel Red         1         C1-84         Unused Output           Channel Green         2         C1-84         Unused Output           Channel Green         1         C1-84         Unused Output           Channel Green         1         C1-84         Unused Output           Channel Green         1         C1-84         Unused Output           Channel Red         1         C1-93         Channel Red         14           Channel Green         1         C1-94         Channel Red         14           Channel Green         1 | Function         IDX         Pins         Function           Channel Red         6         C1-35         Unused Output           Channel Green         6         C1-36         Unused Output           Channel Yellow         5         C1-37         Unused Output           Channel Yellow         4         C1-100         Unused Output           Channel Yellow         4         C1-103         Watchdog           Channel Red         3         C1-83         Unused Output           Channel Yellow         4         C1-103         Watchdog           Channel Red         3         C1-84         Unused Output           Channel Yellow         2         C1-87         Channel Red         15           Channel Yellow         1         C1-87         Channel Yellow         15           Channel Yellow         1         C1-89         Channel Yellow         16           Channel Yellow         1         C1-91         Channel Yellow         14           Channel Green         1         C1-95         Channel Yellow         17           Channel Green         1
        C1-96         Channel Yellow         13           Channel Green         1         C1-96 |

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1.6 Logic Gate		1				1.6 Logic Gate		2				1.6 Logic Gate		3			
	Functions	IDX	1	DLY	EXT		Functions	XQI	=:	DLY	EXT		Functions	XQI	-	DLY	EXT
Type	Unused					Type	Unused					Type	Unused	L	L	L	L
Out Mode	Normal					Out Mode	Normal					Out Mode	Normal	_		L	
IN1	Unused					IN1	Unused					IN1	Unused		L		
IN2	Unused					IN2	Unused					IN2	Unused	_	L	L	
IN3	Unused					IN3	Unused					[N3	Unused				
IN4	Unused					IN4	Unused				Γ	IN4	Unused		L	L	
OUT	Unused					OUT	Unused					OUT	Unused	_	L		
1.6 Logic Gate		4			П	1.6 Logic Gate		S			Γ	1.6 Logic Gate		9		l	
	Functions	IDX	i	DLY	EXT		Functions	IDX		DLY	EXT		Functions	XQI	-	DLY	EXT
Type	Unused					Type	Unused				Γ	Type	Unused	L	L		_
Out Mode	Normal					Out Mode	Normal					Out Mode	Normal				
IN1	Unused					IN1	Unused					IN1	Unused			L	L
IN2	Unused					INZ	Unused				Γ	INZ	Unused	L		L	
IN3	Unused					[N3	Unused					IN3	Unused	L	L	L	
IN4	Unused					IN4	Unused					IN4	Unused		L		
OUT	Unused					OUT	Unused					OUT	Unused				L
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_		7				<u>, 1</u>	1.6 Logic Gate		8				-i	.6 Logic Gate		6			
17	Functions	IDX	F.	DLY	EXT	_		Functions	IDX		DLY	EXT	_		Functions	ΧQI		DLY	EXT
_	Unused					Ţ	уре	Unused					ΙĖ	Type	Unused		Ī	Ī	Γ
	Normal					ō	ut Mode	Normal					ΙÓ	Out Mode	Normal				Γ
$\supset$	Unused					Ξ	11	Unused					Z	11	Unused				
$\Box$	nused					드	12	Unused					ΙĘ	INZ	Unused				Γ
$\supset$	nused					Z	13	Unused					ΙΞ	N3	Unused				Γ
n	pesnu					ΙZ	47	Unused					IΞ	N4	Unused				Γ
$\supset$	Jnused					ō	DUT	Unused					Ιō	OUT	Unused				
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1.6 Logic Gate

Out Mode

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	gency:													pared:		By:	
Lo	cation:		Me	eridia	ın Rd	& W	odm	en Ro	oad		•	Date II	nplem	ented:		By:	
Syst	em ID:																
2.1 Phase Parameters	Set 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Min. Green		5	15	5	15	5	15	5	15								10
Pass/10		25	25	25	25	25	25	25	25								
Max. 1		20	60	15	30	20	60	15	30								
Max. 2			- 00	-10	- 00	- 50	- 00	10	- 50								_
Yel/10		50	50	40	50	50	50	40	50								_
Red/10		35	20	35	20	35	20	35	20								$\vdash$
Walk		- 55	7	55	7	- 55	7	55	7								
Pedestrian Clear			29		32		29		32					_			_
Add In/10					32				32				_				_
Max. Initial											_	_					
TBR								_				_		_			
CBR						-					-	_			_		
TTR		_															
Reduce/10								_						_			
Min Gp/10								-	_				_	_		_	_
DM Limit							_	_		-	_	_	_	_			
DM Stp/10		_			_			_			-		-				
Red Rv/10								_		-	_		_		_	_	
								_									
Cond Svc Min		_				-	_		_		_						
Alt Min Green																	
Alt Ps/10											_		_				_
Alternate Walk											_			_			
Alt Ped Clear									_								
Advanced Walk																	
Delay Walk																	
St Dly/10																	
Green Clear / 10									L								
2.2 Phase Options	Set 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phase Omit																	
Ped Omit																	
Min Recall																	
Max Recall																	
Soft Recall																	
Ped Recall	-																
Pedestrian Recycle																	
Cond Srv													_				
Detector Lock																	=
Dual Entry																	
Simul Gap	-																
Guar Pass	-																
Add Init Calc	-			-	_	_	-								_		
Walk Rest				-	_			_					_				-
Red Rest								-									_
Flash Entry				_						_			-				-
Automatic Flash Exit Phas																$\vdash$	$\vdash$
CNA-1	$\vdash$	- 1			_			<u> </u>					-		_	$\vdash$	$\vdash$
CNA-2	-								_		-		-				
		-															$\vdash$
No Backup												-					-
Max Walk																	-
Max Extension																. 1	

### Omni eX v1.4 - Phase Sequences Page 5 of 23

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Agency:	Date Prepare	d: By: d: By:
ocation:	Date Implemented	d: By:
stem ID:		
2.3 Phase Sequence 1	2.3 Phase Sequence 9	Note: Phases
Ring 1 1,2,3,4	Ring 1	10 through 16
Ring 2 5,6,7,8	Ring 2	are entered as
Ring 3	Ring 3	0,A,B,C,D,E,F
Ring 4	Ring 4	]
2.3 Phase Sequence 2	2.3 Phase Sequence 10	<b>T</b>
Ring 1 2,1,3,4	Ring 1	
Ring 2 5,6,8,7	Ring 2	7
Ring 3	Ring 3	
Ring 4	Ring 4	]
2.3 Phase Sequence 3	2.3 Phase Sequence 11	7
Ring 1	Ring 1	
Ring 2	Ring 2	=
Ring 3	Ring 3	7
Ring 4	Ring 4	
2.3 Phase Sequence 4	2.3 Phase Sequence 12	_
Ring 1	Ring 1	-
Ring 2	Ring 2	
Ring 3	Ring 3	┥
Ring 4	Ring 4	-
King 4	ring 4	
2.3 Phase Sequence 5	2.3 Phase Sequence 13	
Ring 1	Ring 1	
Ring 2	Ring 2	
Ring 3	Ring 3	]
Ring 4	Ring 4	
2.3 Phase Sequence 6	2.3 Phase Sequence 14	7
Ring 1	Ring 1	
Ring 2	Ring 2	
Ring 3	Ring 3	1
Ring 4	Ring 4	<b>_</b>
2.3 Phase Sequence 7	2.3 Phase Sequence 15	٦
Ring 1	Ring 1	_
Ring 2	Ring 2	7
Ring 3	Ring 3	1
Ring 4	Ring 4	ゴ
2.3 Phase Sequence 8	2.3 Phase Sequence 16	7
Ring 1	Ring 1	=
Ring 2	Ring 2	-
Ring 2	Ring 2	-
Ring 4	Ring 4	-

Detector Lock	Detector Lock
No Min Yellow	No Min Yellow

### Omni eX v1.4 - Vehicle Overlaps

Page 6 of <u>23</u>



Agency: Location:		Date Prepared: Date Implemented:	_
System ID:			
3.1 Veh Overlap 1	Set 1 3.1 Veh. Overlap 2		Set 1
Туре	Туре		
Included Phases	Included Phases		
Modifier Phases	Modifier Phases		
Excluded Phases	Excluded Phases		
Excluded Peds	Excluded Peds		
Trail Grn	Trail Grn		
Trailing Yel	Trailing Yel		
Trailing Red	Trailing Red		
Start Delay	Start Delay		
No Trail Grn Phs	No Trail Grn Phs		
Call Phases	Call Phases		
Actuated Only	Actuated Only		
Detector Lock	Detector Lock		
No Min Yellow	No Min Yellow		
3.1 Veh Overlap 3	Set 1 3.1 Veh Overlap 4		L c + 1
Type			Set 1
Included Phases	Type Included Phases		
Modifier Phases	Modifier Phases		
Excluded Phases	Excluded Phases		
Excluded Peds	Excluded Peds		
Trail Grn	Trail Grn		
Trailing Yel	Trailing Yel		
Trailing Red	Trailing Red		
Start Delay	Start Delay		
No Trail Grn Phs	No Trail Grn Phs		
Call Phases	Call Phases		
Actuated Only	Actuated Only		
Detector Lock	Detector Lock		
No Min Yellow	No Min Yellow		
NO PHI TEROW	NO MILITERIOW		
3.1 Veh Overlap 5	Set 1 3.1 Veh Overlap 6		Set 1
Туре	Туре		^
Included Phases	Included Phases		
Modifier Phases	Modifier Phases		-
Excluded Phases	Excluded Phases		
Excluded Peds	Excluded Peds		
Trail Grn	Trail Grn		
Trailing Yel	Trailing Yel		
Frailing Red	Trailing Red		
Start Delay	Start Delay		
No Trail Grn Phs	No Trail Grn Phs		
Call Phases	Call Phases		
Actuated Only	Actuated Only		

Sequential Timing								
No Min Yellow								



Agency:			Date Prepared:	
Location:			Date Implemented:	By:_
System ID:				
3.2 Ped Overlap 1	Set 1	3.2 Ped Overlap 2		Set 1
Included Phases		Included Phases		
Excluded Phases		Excluded Phases		$\neg \neg$
Intervals		Intervals		
Call Phases		Call Phases		
Actuated Only		Actuated Only		
3.2 Ped Overlap 3	Set 1	3.2 Ped Overlap 4		Set 1
Included Phases		Included Phases		
Excluded Phases		Excluded Phases		
Intervals		Intervals		
Call Phases		Call Phases		
Actuated Only		Actuated Only		
3.2 Ped Overlap 5	Set 1	3.2 Ped Overlap 6		Set 1
Included Phases		Included Phases		15001
Excluded Phases		Excluded Phases		
Intervals		Intervals		
Call Phases		Call Phases		-
Actuated Only		Actuated Only		
3.2 Ped Overlap 7	Set 1	3.2 Ped Overlap 8		Set 1
Included Phases	Jet 1	Included Phases		36(1
Excluded Phases		Excluded Phases		
Intervals		Intervals		
Call Phases		Call Phases		
Actuated Only		Actuated Only		
3.2 Ped Overlap 9	Set 1	3.2 Ped Overlap 10		Cat 1
Included Phases	Set 1	Included Phases		Set 1
Excluded Phases		Excluded Phases		-
Intervals		Intervals		-
Call Phases		Call Phases		-
Actuated Only		Actuated Only		$\neg$
	Tava			〓
3.2 Ped Overlap 11 Included Phases	Set 1	3.2 Ped Overlap 12		Set 1
Excluded Phases		Included Phases		-
Intervals		Excluded Phases		-
Call Phases		Intervals Call Phases		-
Actuated Only		Actuated Only		-
nettated only		Actuated Only		
3.2 Ped Overlap 13	Set 1	3.2 Ped Overlap 14		Set 1
Included Phases		Included Phases		
Excluded Phases		Excluded Phases		
Intervals		Intervals		
Call Phases		Call Phases		
Actuated Only		Actuated Only		
3.2 Ped Overlap 15	Set 1	3.2 Ped Overlap 16		Set 1
Included Phases		Included Phases		
Excluded Phases		Excluded Phases		
Intervals		Intervals		
Call Phases		Call Phases		
Actuated Only		Actuated Only		

## Omni eX v1.4 - Vehicle Detectors

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Agency:																						_	DATE	DATE PREPARED:	ARED					Bv:	E.	
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System ID:			1																ï											Î	l	1
4.1 Vehicle Detector								1	1																l	ı	ı	ı	l	ı	ı	Г
Set 1	1	2	3	4	LΩ	9	7	8	9 1	10 1	11 1	12 1.	13 14	4 15	5 16	5 17	18	19	20	21	22	23	24	. 25	26	27	28	29	30	31	32	7~
Call Phase		$\vdash$	H	$\vdash$	H	H	H	H	H	$\vdash$	$\vdash$	$\vdash$	$\vdash$	$\vdash$	┞	L	Ļ	+-	+-	+	+	+-	+	-	+	4-	+-	+	+-	+-	+	T
Switch Phase	_				$\vdash$	H			$\vdash$	$\vdash$	$\vdash$	$\vdash$	$\vdash$	-	L	L	L	-	L	L	L	L		L	L	L	L	╀	1	1	+	T
Call			-		$\vdash$	$\vdash$	$\vdash$	T	$\vdash$		_	-	$\vdash$	-	-	L	_	-	-	-		L	L	-	L	L	L	L	L	L	╀	T
Passage			_	-		$\vdash$		Н	$\vdash$	$\vdash$	-	$\vdash$	$\vdash$	$\vdash$	-	L	_	-		L		L	L	L	L		L	L	L	╀	╀	T
Add Init	-	_	-		$\vdash$				-	-	-		H	$\vdash$	-	L	L	_	-		_	L	L	L	L	L	L	L	╀	╀	╀	Т
Queue			H			H	$\vdash$			H		-	H	-	-	-		-	-	_		L	L	L	L		L	L	L	╀	╀	Т
Yellow Lock		H	$\vdash$	H	Н	H		-	-	-	H	-				-		L		-			L	L	L		_	L	L	_	╀	Т
Red Lock			H	H		Н		Н		H	H	-		H	L			L	L		L		L	L				_	L	1	1	T
Volume		$\vdash$	H	H	$\vdash$	H		H	H	H	H		L		L	L	L							L			L	_	L	L	╀	Т
Occupancy							$\vdash$	$\vdash$	H	$\vdash$	-	H	H	H	$\vdash$	L	L	L				L	L	L				L	L	_	-	Т
Delay		_	_	_		-			-	H	_	_	L		L							L	L	L		L	L	L	L	L	L	Т
Extend				-			_	H	-	-	_	H	L	L	_	_	L	L						L			L	L	L	L	L	Г
Queue Limit				-		-	-	H	_	_	-	-	L			_						L	L	L				_	L	┡	⊢	Т
VOS Length									_	-	-	_	_	_		_		L	L				L	L	L			L	L	L	L	Т
Alt Passage				-	Н		Н		-		-	-	-		_	_		L					L				L	L	L	L	L	Т
Alt Min Green				-			-		-	-	-	H	-				L							L	L			L	L	_	┡	T
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4.1 Vehicle Detector						П															l			ı	L	ı	L	ı	L	L	L	Г
Set 2	1	2	3	4	5	9	7	8	9 1	10 1	11 1	12 13	13 14	4 15	5 16	5 17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	- N
Call Phase	_	H	H	-	$\vdash$	$\vdash$	$\vdash$	H	$\vdash$	H	$\vdash$	$\vdash$	$\vdash$	$\vdash$	L	L		L	L	L	L	L	L	L	L	L		L	L	╀	₩	T
Switch Phase					$\vdash$		$\vdash$	Н	H	H	-	-	-	_			L														L	Т
Call			-	H	$\vdash$			H	$\vdash$	H	H	H	H	H		L		L				L	L					L	L	L	L	Π
Passage		-	-		$\vdash$	$\vdash$		H		H	H	H	H	L	L		L	L	L									L	_	-	_	
Add Init							$\vdash$	H	H	H	$\vdash$	$\vdash$	H	H	L	L	L	L	L				L		L		L	L	L	L	L	Т
Quene						$\vdash$			-	H	$\vdash$	H	L		L		L	L	L				L							L	L	Г
Yellow Lock						-					H	H	H		L		L	L	L				L							L	L	
Red Lock			-						-	-	_	_	L		_		L		L				L	L							L	Г
Volume		H		H	۰												Ш	Ц					L	L						L	L	Г

4.1 Vehicle Detector																												
Set 2 1 2 3	4	2	9	7	8	9 1	10 11	1 12	2 13	3 14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase		Г	H	-	-	H	$\vdash$	H	L	L	L			L	L	L		L	L	L	L	L	L		L			
Switch Phase					H	-	-		_	_	L																	
Call				H	H	H	H	L	L	L	L														L			
Passage			H		H	$\vdash$	H	L	L	L	L																	
Add Init					H	H	L	L	$\vdash$	L										L					L			
Queue			Г					L																				
Yellow Lock							_	L	L	L	_	L		L					L	L								
Red Lock							_		_		_	_								_								
Volume						H	_																					
Occupancy			H		-		_	_	L	_	L											L						
Delay								H	L	L	L																	
Extend			Н	Н			H	L	L	L	L										L							
Queue Limit			Н		_	_	_	_		L	L					L					L	L						
VOS Length		П					H	L	L	L	L										L							
Alt Passage					_	_			L	L	L		L															
Alt Min Green						_	_		_	_											L							

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System ID:																	
2 Ped Detector								П	l	ı	l	П	П	П	П	Γ	D2-
Set 1	1	2	3	4	2	9	7	80	6	10	11	12	13	14	15	16	
hase	L							Γ						Ī	Ī	Γ	
alt PED Time					Г	Г								T		Γ	

4.2 Ped Detector																	
	Set 2	1	2	3	4	2	9	7	8	6	10	11	12	13	14	15	16
Phase			Ī				Ī				Γ		Ī			I	Γ
Alt PED Time						Γ	Γ				Γ			Ī	T	T	Τ

4.2 Ped Detector																	
	Set 3 1	1	2	3	4	2	9	7	8	6	10	11	12	13	14	15	16
Phase								Г	Г	Ī			Γ	Ī	T	Γ	
Alt PED Time													Ī	Ī	T	Ī	

4.2 Ped Detector			ı				Ш	l	ı	ı	l	l	l	l	ı	l	l
Se	Set 4 1	1	2	က	4	ro	9	7	∞	6	10	Ξ	12	12 13 14	14	15	16
Phase	H	Г	Г										Г	T	T	Ī	
Alt PED Time	Н	Т											Γ	Ī	Γ	Ī	

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# Omni eX v1.4 - Vehicle Detector Diagnostics

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4.3 Vehicle Detector Diag																									l	ı	l	ı	
Set 1 1 3	2 3	4		9	7	8	6	10	11	12	13	14	15 1	16 17	7 18	3 19	20	) 21	22	23	24	25	26	27	28	29	30	31	32
No Act		L	L	L	L	L	L				Г		$\vdash$	H	$\vdash$	$\vdash$	┞	┞	L	L	L	L	L	L	L	L	L		
Max Pr					L	L								H	$\vdash$	L	H	$\vdash$	L			L	L	L	L	L			
Err Cnts	_				_								-		-		L	$\vdash$	L	L	L	L	L	L	L	L			
Fail Time	L				L								-	-	-	-	-	-	L		_		L		L	L			
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4.3 Vehicle Detector Diag																	l									l	l	ı	
Set 2 1	2 3	4	r.	9	7	ω	6	10	11	12	13	14	15 1	16 17	7   18	3 19	20	) 21	22	23	24	25	26	27	28	29	30	31	32
No Act	_	L	L	L	L					Γ	T	t	+	┝	┞	┞	╀	$\vdash$	+-	╌	L	L	-	-	L	+-			
Max Pr	L	L	_								Г				-	H	L	L		L	L	L	L	L	L		L		
Err Cnts			_		_										-	-	L	_	L	L	L	L	L	L	L				
Fail Time													$\vdash$	-	-	$\vdash$	H	$\vdash$	_	L	L	L	L	L	L				
																	l							ļ					
4.3 Vehicle Detector Diag																											l	l	Γ
Set 3 1 7	2 3	4	5	9	4	8	6	10	11	12	13	14	15 1	16 17	7 18	3 19	20	21	22	23	24	25	26	27	28	29	30	31	32
No Act		L		L	L							H	$\vdash$	L	H	H	L		L	L	L	L	L						
Max Pr		L											$\vdash$			H	L	L											
Err Cnts												H		H	H	L	L	L				L							
Fail Time	L	L	L									F			_		L	L	L			L	L	L	L				
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4.3 Vehicle Detector Diag																	l							l	ı	l	l	l	Г
Set 4 1 2	2 3	4	2	9	7	8	6	10	11	12	13	14	15 1	16 17	7 18	3 19	20	) 21	22	23	24	25	26	27	28	29	30	31	32
No Act	_	L	L	L								F	H	H	-	-	L	L	L		L	L			L				
Max Pr		Ц	Н													H			L										
Err Cnts											Г		-			H	_	L		L		L	L		L	L			

# Omni eX v1.4 - Pedestrian Detector Diagnostics

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DATE PREPARED: By:	DATE IMPLEMENTED: By:	
Agency:	Location:	System ID:

Location: System ID:	DATE	DATE IMPLEMENTED: By:
4.4 Ped Detector Diag	4.5 Extra VEH Detector Calls	4,6 Extra PED Detector Calls
Set 1 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	DET Call Phases Call VEH Overlap	DET Call Phases Call PED Overl
No Activity	1	L
Max. Presence	2	2
Erratic Counts	8	æ
	4	4
4.4 Ped Detector Diag	5	S
Set 2 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	9	9
No Activity	7	7
Max. Presence	82	00
Erratic Counts	6	6
	10	10
4.4 Ped Detector Diag	11	11
Set 3 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	12	12
No Activity	13	13
Max. Presence	14	14
Erratic Counts	15	15
	16	16
4.4 Ped Detector Diag	17	
Set 4 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	18	
No Activity	19	
Max. Presence	20	
Erratic Counts	21	
	22	
	23	
	24	
	25	
	26	
	27	
	28	
	29	
	30	
	31	
	32	

or Calls	Call PED Overlap																
4.6 Extra PED Detector Calls	Call Phases (																
4,6	DET	1	2	3	4	2	9	7	00	σı	10	11	12	13	14	15	3.0

4.6 Extra PED Detector Calls  DET Call Phases Call PEI  2 3 4 5 6 7 7 8 8 9 10 11 12 13 15
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### Omni eX v1.4 - Patterns



Location: Meridian Road & Woodmen Road DATE II	Agency:		DATE PREPARED:	By:
	Location:	an Road & Woodmen R	DATE IMPLEMENTED:	By:
	System ID:			

ers 4																					
5.2 Pattern Parameters	Cycle Time	Offset Time	Split	Sequence	Correction Mode	Maximum Mode	Force Mode	Perm Strategy	Omit Strategy	Early Return	Texas Diamond	Max2 Phases	Phase Timing Set	Phase Option Set	Overlap Set	Veh. Det. Set	Veh. Det. Diag Set	Ped. Det. Diag Set	Priority Set	Ped Ovlp Set	Dot Dogot
s 3	120	37	3	1			Fixed														
5.2 Pattern Parameters	Cycle Time	Offset Time	Split	Sequence	Correction Mode	Maximum Mode	Force Mode	Perm Strategy	Omit Strategy	Early Return	Texas Diamond	Max2 Phases	Phase Timing Set	Phase Option Set	Overlap Set	Veh. Det. Set	Veh. Det. Diag Set	Ped. Det. Diag Set	Priority Set	Ped Ovlp Set	Dot Dogot
2	100	52	2	1			Fixed														
5.2 Pattern Parameters	Cycle Time	Offset Time	Split	Sequence	Correction Mode	Maximum Mode	Force Mode	Perm Strategy	Omit Strategy	Early Return	Texas Diamond	Max2 Phases	Phase Timing Set	Phase Option Set	Overlap Set	Veh. Det. Set	Veh. Det. Diag Set	Ped. Det. Diag Set	Priority Set	Ped Ovlp Set	Det Beset
1	120	30	1	2			Fixed														
5.2 Pattern Parameters	Cycle Time	Offset Time	Split	Sequence	Correction Mode	Maximum Mode	Force Mode	Perm Strategy	Omit Strategy	Early Return	Texas Diamond	Max2 Phases	Phase Timing Set	Phase Option Set	Overlap Set	Veh. Det. Set	Veh. Det. Diag Set	Ped. Det. Diag Set	Priority Set	Ped Ovlp Set	Nat Baset

### Omni eX v1.4 - Splits



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Location:	Meridian Road & Woodmen Road	DATE IMPLEMENTED:	'ii   

5.3 Split Table 1																
	1	2	3	4	2	9	7	8	6	10	11	12	13	14	15	16
Time (sec)	18	42	24	36	18	42	27	33								
Mode																
Coord. Phase		×				×										
Manual Permit																
Manual Omit																
5.3 Split Table 2																
	1	2	3	4	5	9	2	8	6	10	11	12	13	14	15	16
Time (sec)	20	32	16	32	20	32	25	23								
Mode																
Coord. Phase		×				×										
Manual Permit																
Manual Omit																
5.3 Split Table 3																
	1	2	3	4	5	9	7	8	6	10	11	12	13	14	15	16
Time (sec)	18	68	56	37	18	39	38	25								
Mode																
Coord. Phase		×				×										
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### Omni eX v1.4 - Schedule

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 Omni eX v1.4 - Day Plans
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Agency: Location:		Meridia	n Road & F	Eastonville	Road		DATE PREPA E IMPLEMEN	
System I	D:				1101111			
6.5 DayPlan 1								
Event#	1	2	3	4	5	6	7	8
Hour	6	9	13	19				
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Action	1	2	3	20				
6.5 DayPlan 1								
Event#	9	10	11	12	13	14	15	16
Hour								
Minute								
Action								
6.5 DayPlan 1								
Event#	17	18	19	20	21	22	23	24
Hour								
Minute								
Action								
6.5 DayPlan 1								
Event#	25	26	27	28	29	30	31	32
Hour								
Minute						7		
Action								
6.5 DayPlan 2								
Event#	1	2	3	4	5	6	7	8
Hour	10	19					7	
Minute	0	0						
Action	2	20						
6.5 DayPlan 2								
Event#	9	10	11	12	13	14	15	16
Hour								
Minute								
Action								
5.5 DayPlan 2								
Event#	17	18	19	20	21	22	23	24
Hour		7						
Minute								
Action								
6.5 DayPlan 2								
Event#	25	26	27	28	29	30	31	32
Hour								
Minute								
Action								



Agency:		Date Prepared: By:
Location:		Date Implemented: By:
System ID:		
6.6 Action Parameters 1	6.6 Action Parameters 2	6.6 Action Parameters 3
Pattern	Pattern	Pattern
Auxiliary Function	Auxiliary Function	Auxiliary Function
Special Function	Special Function	Special Function
Special Function	Special Function	Special Function
Detector VOS Log	Detector VOS Log	Detector VOS Log
Speed Trap Log	Speed Trap Log	Speed Trap Log
Cycle MOE Log	Cycle MOE Log	Cycle MOE Log
Detector Reset	Detector Reset	Detector Reset
6.6 Action Parameters 4	6.6 Action Parameters 5	6.6 Action Parameters 6
Pattern	Pattern	Pattern
Auxiliary Function	Auxiliary Function	Auxiliary Function
Special Function	Special Function	Special Function
Special Function	Special Function	Special Function
Detector VOS Log	Detector VOS Log	Detector VOS Log
Speed Trap Log	Speed Trap Log	Speed Trap Log
Cycle MOE Log	Cycle MOE Log	Cycle MOE Log
Detector Reset	Detector Reset	Detector Reset
6.6 Action Parameters 7	6.6 Action Parameters 8	6.6 Action Parameters 9
Pattern	Pattern	Pattern
Auxiliary Function	Auxiliary Function	Auxiliary Function
Special Function	Special Function	Special Function
Special Function	Special Function	Special Function
Detector VOS Log	Detector VOS Log	Detector VOS Log
Speed Trap Log	Speed Trap Log	Speed Trap Log
Cycle MOE Log	Cycle MOE Log	Cycle MOE Log
Detector Reset	Detector Reset	Detector Reset
6.6 Action Parameters 10	6.6 Action Parameters 11	6.6 Action Parameters 12
Pattern	Pattern	Pattern
Auxiliary Function	Auxiliary Function	Auxiliary Function
Special Function	Special Function	Special Function
Special Function	Special Function	Special Function
Detector VOS Log	Detector VOS Log	Detector VOS Log
Speed Trap Log	Speed Trap Log	Speed Trap Log
Cycle MOE Log	Cycle MOE Log	Cycle MOE Log
Detector Reset	Detector Reset	Detector Reset
	<u> </u>	
6.6 Action Parameters 13	6.6 Action Parameters 14	6.6 Action Parameters 15
Pattern	Pattern	Pattern
Auxiliary Function	Auxiliary Function	Auxiliary Function
Special Function	Special Function	Special Function
Special Function	Special Function	Special Function
Detector VOS Log	Detector VOS Log	Detector VOS Log
Speed Trap Log	Speed Trap Log	Speed Trap Log
Cycle MOE Log	Cycle MOE Log	Cycle MOE Log
Detector Reset	Detector Reset	Detector Reset

## Omni eX v1.4 - Preemption

Page 17 of 23

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Agency:						Date Prepared:		By:
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Track Phases								
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Cycling Phases								
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Cycling Ped Overlap								
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Flash Dwell								
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Maximum Presence								
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Enter Min Green								
Enter Min Walk								
Enter Min Ped Clear								
Enter Min Yellow								
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			Strategy 2 Set 1																					Strategy 51 Set 1																					
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			Strategy 11 Set 1																					Strategy 4 Set 1																					
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## Omni eX v1.4 - Transit Priority

Page 19 of 23

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8.3 TSP Phase Adjustment Times	4	8.3 TSP Phase Adjustment Times Phase 1 2 3 4 5 Reduce	8.3.TSP Phase Adjustment Times Phase 1 2 3 4 5 Reduce Reduce Adjusted Adjusted Adjusted Adjusted Adjump	8.3 TSP Phase Adjustment Times Phase 1 2 3 4 5 Reduce Extend Qlump	8.3 TSP Phase Adjustment Times Phase 1 2 3 4 5 Reduce Extend	8.3 TSP Phase Adjustment Times Phase 1 2 3 4 5 Feduce Extend Qjump	8.3 TSP Phase Adjustment Times Phase 1 2 3 4 5 Reduce Extend	8.3 TSP Phase Adjustment Times Phase 1 2 3 4 5 6 Reduce
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8.3 15P Phase Adjustment Times	Phase Reduce Extend	8.3 TSP Phase Adjustment Times Phase 1 2 3 4 5 Reduce	8.3.TSP Phase Adjustment Times Phase 1 2 3 4 5 Reduce Reduce Cartend	8.3 TSP Phase Adjustment Times Phase 1 2 3 4 5 Reduce Extend	8.3 TSP Phase Adjustment Times Phase 1 2 3 4 5 Reduce Extend	.3 TSP Phase Adjustment Times hase 1 2 3 4 5 educe teduce txend	2.3 TSP Phase Adjustment Times Thase 1 2 3 4 5 Reduce Ecduce	8.3 TSP Phase Adjustment Times Phase 1 2 3 4 5 Reduce
	70 - 1 F	3 TS hase educ	8.3 TSF Phase Reduce Extend Olumn	8.3 TSF Phase Reduce Extend Ofump	8.3 TS Phase Reduc Extend	3.3 TSF Phase Reduce Extend Olump	3.3 TSP Phase Seduce Extend	3 TS hase educ

### Omni eX v1.4 - Speed Traps

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Agency:	DATE PREPARED:	By:
Location:	DATE IMPLEMENTED:	By:
System ID:		

9.3.3.2 Speed	l Trap															
Speed Trap	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Detector 1																
Detector 2																
Distance																

9.3.3.3 Speed	l Trap l	Bin Rar	iges													
Bin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Range																

# Omni eX v1.4 - Log Configuration

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	Date Prepared: By:	Date Implemented: By:	
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System ID:																				
9.3-4 Log Configuration	6.2 Time Zone	o,					_													
Volume Occupancy Period	Global DST			r		ı	_													
VOS Log Combined Periods	Standard Time Zone	±۱	/- hr)	r			_													
Speed Trap Log Period				1		l	7													
Display Metric	A.3 Unit Comms	ns			_															
Speed Trap Log Mode	Unit Backup Time	Time			_															
VOS Log Mode					1															
Cycle MOE Log Mode	1.7 Port 1									l	l	l	l	l		l		l	l	Γ
Power On/Off	Device		2	3	4	r2	9	7	∞	6	10	11	12	13	14	15	16	17	18	<u>0</u>
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Coord Fault			ł	ł				]		1	1	1	1	1	1	1	1	1	1	1
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Cycle Fail	Function				_															
MMU Flash	Index				_															
Local Flash					1															
Local Free																				
Preempt Status Change																				
Response Fault	A.5-6 Time Sync	nc				Γ														
Alarm Status Change	NTP Server Address	ddress																		
Door Status Change	NTP Start Hour	ır				Г														
Pattern Change	NTP Start Minut	ute																		
Detector Status Change	NTP Interval Hour	Hour																		
Comm Status Change	NTP Interval Minute	Minute																		
Command Change	GPS Start Hour	r																		
Data Change Keyboard	GPS Start Minute	ute				Γ														
Controller Download	GPS Interval Hour	lour																		
Access Code	GPS Interval Minute	finute																		
Priority	Fnable NTD Com					Γ														

### Omni eX v1.4 - Communicaitons

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Avency:	Date Prepared: By:	
Location:	Date Implemented: By:	
System ID:		_

A.1 Serial Comms						
Port	1	2	3	4	5	8
Protocol						
Speed						
Parity						
Flow Control						
Address						
Group Address						
Data Bits						
Stop Bits						
CTS Delay						
RTS Extend						

A.2 Ethernet Comms			
Port	1	2	
IP Address			
Net Mask			
Gateway			
NTCIP Port			
NTCIP Mode			
AB3418 Port			
AB3418 Mode			
AB3418 Address			
AB3418 Group Address			

## Omni eX v1.4 - Menu Security

d: By:	id: Bv:	
Date Prepare	Date Implemented	
Agency:	Location:	System ID:

B.1.1 Menu Security Options	ty Optio	ns													
Enable:		Allow Read-Only:	d-Only:		T	Timeout (min):	ı);								
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B.1.2 Menu Security Users	ty Users														
	1	2	3	4	2	9	7	8	6	10	11	12	13	14	<u>ل</u> 7
User Id															2
Pin															
Operation															
Unit															
I/0 Map															
Phase															
Overlap															
Detector															
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Logs															
Comm															
Security															
Database															
SW Update															

### **APPENDIX B**

**Level of Service Definitions** 

The following information can be found in the <u>Highway Capacity Manual</u>, Transportation Research Board, 2016: Chapter 19 – Signalized Intersections and Chapter 20 – Two-Way Stop Controlled Intersections.

### <u>Automobile Level of Service (LOS) for Signalized Intersections</u>

Levels of service are defined to represent reasonable ranges in control delay.

### LOS A

Describes operations with a control delay of 10 s/veh or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.

### LOS B

Describes operations with control delay between 10 and 20 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.

### LOS C

Describes operations with control delay between 20 and 35 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate. Individual *cycle failures* (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.

### LOS D

Describes operations with control delay between 35 and 55 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.

### LOS E

Describes operations with control delay between 55 and 80 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.

### LOS F

Describes operations with control delay exceeding 80 s/veh or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

### Level of Service (LOS) for Unsignalized TWSC Intersections

Level of Service (v/c ≤ 1.0)	Average Control Delay (s/veh)
А	0 - 10
В	> 10 - 15
С	> 15 - 25
D	> 25 - 35
E	> 35 - 50
F	> 50

### APPENDIX C Capacity Worksheets

	۶	<b>→</b>	•	•	<b>←</b>	•	4	<b>†</b>	<i>&gt;</i>	<b>&gt;</b>	ļ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሾሾ	<b>†</b> †	7	ሻሻ	<b>^</b>	7	ቪቪ	<b>^</b>	7	ቪቪ	<b>†</b> †	7
Traffic Volume (vph)	241	246	117	59	378	64	127	216	17	59	512	551
Future Volume (vph)	241	246	117	59	378	64	127	216	17	59	512	551
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			245			182			245			599
Lane Group Flow (vph)	262	267	127	64	411	70	138	235	18	64	557	599
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			8			Free			Free
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	15.0	5.0	15.0		5.0	15.0	
Minimum Split (s)	12.5	22.0		12.5	22.0	22.0	13.5	22.0		13.5	22.0	
Total Split (s)	27.0	36.0		24.0	33.0	33.0	18.0	42.0		18.0	42.0	
Total Split (%)	22.5%	30.0%		20.0%	27.5%	27.5%	15.0%	35.0%		15.0%	35.0%	
Yellow Time (s)	4.0	5.0		4.0	5.0	5.0	5.0	5.0		5.0	5.0	
All-Red Time (s)	3.5	2.0		3.5	2.0	2.0	3.5	2.0		3.5	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.5	7.0		7.5	7.0	7.0	8.5	7.0		8.5	7.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Act Effct Green (s)	14.4	28.7	120.0	7.6	19.3	19.3	10.2	51.6	120.0	7.6	46.2	120.0
Actuated g/C Ratio	0.12	0.24	1.00	0.06	0.16	0.16	0.08	0.43	1.00	0.06	0.38	1.00
v/c Ratio	0.64	0.32	0.08	0.29	0.72	0.17	0.48	0.15	0.01	0.29	0.41	0.38
Control Delay	57.2	38.7	0.1	56.6	55.3	0.9	57.5	24.0	0.0	47.1	30.4	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.2	38.7	0.1	56.6	55.3	0.9	57.5	24.0	0.0	47.1	30.4	0.6
LOS	E	D	Α	Е	E	Α	E	С	Α	D	С	Α
Approach Delay		38.6			48.5			34.7			16.6	
Approach LOS		D			D			С			В	
Queue Length 50th (ft)	101	92	0	24	161	0	53	60	0	24	192	0
Queue Length 95th (ft)	140	124	0	47	207	0	85	102	0	m43	278	0
Internal Link Dist (ft)		1105			882			544			1159	
Turn Bay Length (ft)	720			440			420			460		460
Base Capacity (vph)	557	899	1583	472	766	485	305	1521	1583	271	1361	1583
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.30	0.08	0.14	0.54	0.14	0.45	0.15	0.01	0.24	0.41	0.38

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 30 (25%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 70

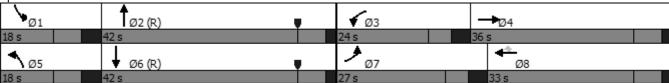
Maximum v/c Ratio: 0.72

Intersection Signal Delay: 30.5 Intersection LOS: C
Intersection Capacity Utilization 62.7% ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.





	•	•	4	<b>†</b>	Ţ	4
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	ሻሻ	7	ሻ	<b>†</b> †	<u> </u>	7
Traffic Volume (vph)	62	86	65	380	1270	107
Future Volume (vph)	62	86	65	380	1270	107
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950	.000	0.139			
Satd. Flow (perm)	3433	1583	259	3539	3539	1583
Satd. Flow (RTOR)	0.00	93				116
Lane Group Flow (vph)	67	93	71	413	1380	116
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4	. 0	5	2	6	. 0
Permitted Phases	•	4	2	_	•	6
Detector Phase	4	4	5	2	6	6
Switch Phase	•	•		_	•	J
Minimum Initial (s)	8.0	8.0	5.0	15.0	15.0	15.0
Minimum Split (s)	15.5	15.5	13.5	22.5	22.5	22.5
Total Split (s)	28.0	28.0	20.0	92.0	72.0	72.0
Total Split (%)	23.3%	23.3%	16.7%	76.7%	60.0%	60.0%
Yellow Time (s)	4.0	4.0	5.0	5.5	5.5	5.5
All-Red Time (s)	3.5	3.5	3.5	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	8.5	7.5	7.5	7.5
Lead/Lag	7.0	7.0	Lead	7.0	Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	8.7	8.7	95.3	96.3	84.1	84.1
Actuated g/C Ratio	0.07	0.07	0.79	0.80	0.70	0.70
v/c Ratio	0.27	0.47	0.75	0.15	0.76	0.10
Control Delay	55.2	18.3	7.6	0.13	10.7	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.2	18.3	7.6	0.6	10.7	1.5
LOS	55.2 E	10.3 B	7.0 A	0.0 A	10.7 B	1.5 A
Approach Delay	33.8	D D	Α	1.6	10.0	
Approach LOS	33.6 C			1.0 A	10.0 A	
Queue Length 50th (ft)	25	0	3	4	264	0
Queue Length 95th (ft)	48	52	25	8	360	20
Internal Link Dist (ft)	763	52	20	1273	472	20
Turn Bay Length (ft)	160		700	12/3	412	330
Base Capacity (vph)	586	347	350	2840	2480	1144
Starvation Cap Reductn		0	350			
	0	0	0	0	0	0
Spillback Cap Reductn Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.27	0.20	0.15	0.56	0.10
Neduced V/C Ratio	0.11	0.27	0.20	0.13	0.50	0.10

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 95 (79%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow

Natural Ocle: 65

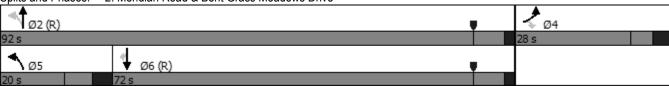
Control Type: Actuated-Coordinated

September 2022 Synchro Report SM ROCHA LLC

Maximum v/c Ratio: 0.56

Intersection Signal Delay: 9.9 Intersection LOS: A
Intersection Capacity Utilization 65.5% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 2: Meridian Road & Bent Grass Meadows Drive



Intersection								
Int Delay, s/veh	1.3							
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations	ሻ	7	<b>^</b>	7	ሻ	<b>^</b>		
Traffic Vol, veh/h	96	36	481	40	110	1250		
Future Vol, veh/h	96	36	481	40	110	1250		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Stop	Stop	Free	Free	Free	Free		
RT Channelized	-	None	-	None	-	None		
Storage Length	100	0	-	400	375	-		
Veh in Median Storage	e,# 0	-	0	-	-	0		
Grade, %	0	-	0	-	-	0		
Peak Hour Factor	92	92	92	92	92	92		
Heavy Vehicles, %	2	2	2	2	2	2		
Mvmt Flow	104	39	523	43	120	1359		
Major/Minor	Minor1	N	Major1	N	Major2	-		
Conflicting Flow All	1443	262	0	0	566	0		
Stage 1	523		-	-	-	-		
Stage 2	920	-	-	-	-	-		
Critical Hdwy	6.84	6.94	-	-	4.14	-		
Critical Hdwy Stg 1	5.84	-	-	-	-	-		
Critical Hdwy Stg 2	5.84	-	-	-	-	_		
ollow-up Hdwy	3.52	3.32	-	_	2.22	-		
Pot Cap-1 Maneuver	*524	*902	-	-	1265	-		
Stage 1	*827	-	-	-	_	-		
Stage 2	*541	-	-	-	-	-		
Platoon blocked, %	1	1	-	_	1	-		
Mov Cap-1 Maneuver		*902	-	-	1265	-		
Mov Cap-2 Maneuver		-	-	-	-	-		
Stage 1	*827	-	-	-	-	-		
Stage 2	*490	-	-	-	_	-		
<b>J</b>								
Approach	WB		NB		SB			
HCM Control Delay, s	13.2		0		0.7			
HCM LOS	В							
Minor Lane/Major Mvr	nt	NBT	NBRV	VBLn1V	VBLn2	SBL	SBT	
Capacity (veh/h)		-		474	902	1265	-	
HCM Lane V/C Ratio		-	_			0.095	-	
HCM Control Delay (s	)	_	_	14.7	9.2	8.1	-	
HCM Lane LOS	,	-	_	В	Α.	A	-	
HCM 95th %tile Q(veh	1)	-	-	0.8	0.1	0.3	-	
	7			3.0	J. 1	0.0		
Notes		<b>^</b> -			\ <u>\</u>			* * * * * * * * * * * * * * * * * * * *
~: Volume exceeds ca	pacity	\$: De	lay exc	eeds 30	)0s	+: Comp	outation Not Defined	*: All major volume in platoon

Intersection								
Int Delay, s/veh	0.1							
		EDD	NDI	NDT	ODT	000		
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
ane Configurations	^		Ţ	<b>^</b>	<b>↑</b> ↑	^		
raffic Vol, veh/h	0	6	5	512	1354	2		
uture Vol, veh/h	0	6	5	512	1354	2		
conflicting Peds, #/h		0	0	0	0	0		
ign Control T Channelized	Stop -	Stop	Free	Free	Free	Free		
	-	None 0	275	None	-	None		
Storage Length /eh in Median Storag		-	213	0	0	-		
Grade, %	ge, # 0	-	-	0	0	-		
eak Hour Factor	92	92	92	92	92	92		
eavy Vehicles, %	2	2	2	2	2	2		
Ivmt Flow	0	7	5	557	1472	2		
IVIIIL I IOVV	0	1	J	001	1712			
lajor/Minor	Minor2		Major1		Major2			
onflicting Flow All	-	737	1474	0	-	0		
Stage 1	-	-	-	-	-	-		
Stage 2	-	-	-	-	-	-		
ritical Hdwy	-	6.94	4.14	-	-	-		
itical Hdwy Stg 1	-	-	-	-	-	-		
ritical Hdwy Stg 2	-	-	-	-	-	-		
ollow-up Hdwy	-	3.32	2.22	-	-	-		
ot Cap-1 Maneuver		*523	*782	-	-	-		
Stage 1	0	-	-	-	-	-		
Stage 2	0	-	-	-	-	-		
latoon blocked, %		1 *500	1 *700	-	-	-		
Nov Cap-1 Maneuve		*523	*782	-	-	-		
Nov Cap-2 Maneuve Stage 1		-	-	-	-	-		
	-	-	-	-	-	-		
Stage 2	-	_	-	-	-	-		
pproach	EB		NB		SB			
ICM Control Delay,	s 12		0.1		0			
ICM LOS	В							
inor Lane/Major Mv	/mt	NBL	NBT	EBLn1	SBT	SBR		
apacity (veh/h)		* 782	-		-	-		
CM Lane V/C Ratio	)	0.007	-	0.012	-	-		
CM Control Delay (		9.6	-	12	-	-		
CM Lane LOS	,	Α	-	В	-	-		
ICM 95th %tile Q(ve	eh)	0	-	0	-	-		
lotes	anasih.	ф. D	Januari	d- 00	10-	0	utation Nat Define	*. All majours lives in all (
: Volume exceeds of	capacity	\$: De	elay exc	eeds 30	JUS ·	+: Comp	outation Not Defined	*: All major volume in platoo

	۶	<b>→</b>	•	•	<b>←</b>	•	4	<b>†</b>	/	<b>&gt;</b>	ļ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሾሾ	<b>†</b> †	7	ሻሻ	<b>^</b>	7	ቪቪ	<b>^</b>	7	ቪቪ	<b>†</b> †	7
Traffic Volume (vph)	671	509	160	112	330	136	164	664	106	100	384	375
Future Volume (vph)	671	509	160	112	330	136	164	664	106	100	384	375
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			314			250			314			408
Lane Group Flow (vph)	729	553	174	122	359	148	178	722	115	109	417	408
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			8			Free			Free
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	15.0	5.0	15.0		5.0	15.0	
Minimum Split (s)	12.5	22.0		12.5	22.0	22.0	13.5	22.0		13.5	22.0	
Total Split (s)	38.0	37.0		26.0	25.0	25.0	18.0	39.0		18.0	39.0	
Total Split (%)	31.7%	30.8%		21.7%	20.8%	20.8%	15.0%	32.5%		15.0%	32.5%	
Yellow Time (s)	4.0	5.0		4.0	5.0	5.0	5.0	5.0		5.0	5.0	
All-Red Time (s)	3.5	2.0		3.5	2.0	2.0	3.5	2.0		3.5	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.5	7.0		7.5	7.0	7.0	8.5	7.0		8.5	7.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Act Effct Green (s)	28.8	36.0	120.0	9.6	16.8	16.8	9.5	35.8	120.0	8.6	34.8	120.0
Actuated g/C Ratio	0.24	0.30	1.00	0.08	0.14	0.14	0.08	0.30	1.00	0.07	0.29	1.00
v/c Ratio	0.88	0.52	0.11	0.44	0.73	0.34	0.65	0.68	0.07	0.44	0.41	0.26
Control Delay	57.3	36.7	0.1	57.4	58.5	2.1	65.5	42.0	0.1	68.4	30.2	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.3	36.7	0.1	57.4	58.5	2.1	65.5	42.0	0.1	68.4	30.2	0.4
LOS	E	D	Α	Е	E	Α	E	D	Α	E	С	Α
Approach Delay		42.6			45.0			41.4			21.6	
Approach LOS		D			D			D			С	
Queue Length 50th (ft)	276	181	0	47	141	0	69	268	0	35	141	0
Queue Length 95th (ft)	#352	243	0	77	193	0	108	344	0	67	193	0
Internal Link Dist (ft)		1105			882			544			1159	
Turn Bay Length (ft)	720			440			420			460		460
Base Capacity (vph)	872	1061	1583	529	530	449	279	1055	1583	271	1027	1583
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.52	0.11	0.23	0.68	0.33	0.64	0.68	0.07	0.40	0.41	0.26

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 37 (31%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 90

Maximum v/c Ratio: 0.88

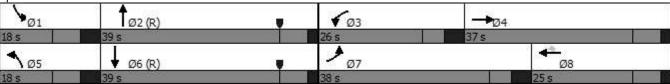
Intersection Signal Delay: 37.8 Intersection LOS: D
Intersection Capacity Utilization 78.7% ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Meridian Road & E Woodmen Road



	•	•	1	<b>†</b>	<b>↓</b>	4
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	ሻሻ	7	ሻ	<b>†</b>	<u>↑</u>	7
Traffic Volume (vph)	79	72	62	1356	779	98
Future Volume (vph)	79	72	62	1356	779	98
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
FIt Permitted	0.950		0.284			
Satd. Flow (perm)	3433	1583	529	3539	3539	1583
Satd. Flow (RTOR)		78				107
Lane Group Flow (vph)	86	78	67	1474	847	107
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	8.0	8.0	5.0	15.0	15.0	15.0
Minimum Split (s)	15.5	15.5	13.5	22.5	22.5	22.5
Total Split (s)	27.0	27.0	20.0	93.0	73.0	73.0
Total Split (%)	22.5%	22.5%	16.7%	77.5%	60.8%	60.8%
Yellow Time (s)	4.0	4.0	5.0	5.5	5.5	5.5
All-Red Time (s)	3.5	3.5	3.5	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	8.5	7.5	7.5	7.5
Lead/Lag	7.0	7.0	Lead	7.0	Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	8.9	8.9	95.1	96.1	84.0	84.0
Actuated g/C Ratio	0.07	0.07	0.79	0.80	0.70	0.70
v/c Ratio	0.34	0.41	0.14	0.52	0.34	0.09
Control Delay	56.3	18.2	1.5	4.6	8.2	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.3	18.2	1.5	4.6	8.2	1.6
LOS	50.5 E	10.2 B	1.5 A	4.0 A	0.2 A	1.0 A
Approach Delay	38.2	Ь	Α	4.5	7.5	A
Approach LOS	30.2 D				7.5 A	
	33	0	2	A 223	131	0
Queue Length 50th (ft)	59	48	m4	191	181	19
Queue Length 95th (ft) Internal Link Dist (ft)	763	40	1114	1273	472	19
. ,	160		700	12/3	412	330
Turn Bay Length (ft) Base Capacity (vph)	557	322	538	2835	2477	1140
Starvation Cap Reductn						
•	0	0	0	0	0	0
Spillback Cap Reductn Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.24	0.12	0.52	0.34	0.09
Reduced V/C Ratio	0.10	0.24	0.12	0.52	0.34	0.09

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 28 (23%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow

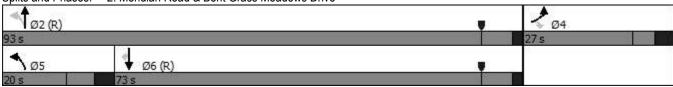
Natural Oycle: 55

Maximum v/c Ratio: 0.52

Intersection Signal Delay: 7.6	Intersection LOS: A	
Intersection Capacity Utilization 56.7%	ICU Level of Service B	
Analysis Period (min) 15		

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Meridian Road & Bent Grass Meadows Drive



Intersection								
Int Delay, s/veh	2.8							
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations	ኝ	7	<b>^</b>	7	ሻ	<b>^</b>		
Traffic Vol, veh/h	31	133	1356	115	82	772		
Future Vol, veh/h	31	133	1356	115	82	772		
Conflicting Peds, #/hr		0	0	0	0	0		
Sign Control	Stop	Stop	Free	Free	Free	Free		
RT Channelized	-	None	-	None	-	None		
Storage Length	100	0	-	400	375	-		
Veh in Median Storag	e,# 0	-	0	-	-	0		
Grade, %	0	-	0	-	-	0		
Peak Hour Factor	92	92	92	92	92	92		
Heavy Vehicles, %	2	2	2	2	2	2		
Mvmt Flow	34	145	1474	125	89	839		
Major/Minor	Minor1	N	Major1	1	Major2			
Conflicting Flow All	2072	737	0	0	1599	0		
Stage 1	1474	-	-	-	-	-		
Stage 2	598	-	_	-	_	-		
Critical Hdwy	6.84	6.94	-	-	4.14	_		
Critical Hdwy Stg 1	5.84	-	-	-	-	-		
Critical Hdwy Stg 2	5.84	_	-	-	-	_		
Follow-up Hdwy	3.52	3.32	_	-	2.22	-		
Pot Cap-1 Maneuver	*65	*523	-	-	721	_		
Stage 1	*493	-	-	-	-	-		
Stage 2	*732	-	_	_	-	-		
Platoon blocked, %	1	1	-	-	1	-		
Mov Cap-1 Maneuver		*523	-	-	721	-		
Mov Cap-2 Maneuver		-	-	-	-	-		
Stage 1	*493	-	-	-	-	-		
Stage 2	*642	-	-	-	_	-		
Approach	WB		NB		SB			
HCM Control Delay, s			0		1			
HCM LOS	, 07.0 E							
	_							
Minor Lane/Major Mvi	mt	NBT	NBRV	VBLn1V	VBI n2	SBL	SBT	
Capacity (veh/h)		-	۱۱۵۱۱۷	57	523	721	-	
HCM Lane V/C Ratio		-	_			0.124	- -	
HCM Control Delay (s	2)	-		135.1	14.5	10.7	-	
HCM Lane LOS	2)	<u> </u>	_	F	14.5 B	10.7 B	- -	
HCM 95th %tile Q(vel	h)	-	_	2.4	1.1	0.4	-	
	11)			2.4	1.1	0.4	•	
Notes								
~: Volume exceeds ca	apacity	\$: De	lay exc	eeds 30	00s	+: Comp	outation Not Defined	*: All major volume in platoon

tersection	_		-	-	-	-		
t Delay, s/veh	0.1							
·			NDI	NDT	ODT	000		
ovement	EBL	EBR	NBL	NBT	SBT	SBR		
ane Configurations		<u>*</u>	<u>ነ</u>	<b>↑</b> ↑	<b>↑</b> }	4		
raffic Vol, veh/h	0	7	11	1478	847	4		
iture Vol, veh/h	0	7	11	1478	847	4		
onflicting Peds, #/h		0	0	0	0	0		
ign Control	Stop	Stop	Free	Free	Free	Free		
T Channelized	-	None		None	-			
torage Length eh in Median Stora	ge,# 0	0	275	0	0	-		
	ge, # 0			0				
rade, % eak Hour Factor	92	92	92	92	92	92		
	92	92	92	92	92	92		
eavy Vehicles, % vmt Flow	0	8	12	1607	921	4		
VIIIL FIOW	U	0	12	1007	9Z I	4		
ajor/Minor	Minor2		Major1	١	/lajor2			
onflicting Flow All	-	463	925	0	-	0		
Stage 1	-	-	-	-	-	-		
Stage 2	-	-	-	-	-	-		
itical Hdwy	-	6.94	4.14	-	-	-		
itical Hdwy Stg 1	-	-	-	-	-	-		
ritical Hdwy Stg 2	-	-	-	-	-	-		
llow-up Hdwy	-	3.32	2.22	-	-	-		
ot Cap-1 Maneuver		*750	1119	-	-	-		
Stage 1	0	-	-	-	-	-		
Stage 2	0	-	-	-	-	-		
atoon blocked, %		1	1	-	-	-		
ov Cap-1 Maneuve		*750	1119	-	-	-		
ov Cap-2 Maneuve	er -	-	-	-	-	-		
Stage 1	-	-	-	-	-	-		
Stage 2	-	-	-	-	-	-		
proach	EB		NB		SB			
CM Control Delay,			0.1		0			
CM LOS	A							
inor Lane/Major My	ımt	NBL	NIPT	EBLn1	SBT	SBR		
	VIIIL					אמט		
apacity (veh/h)		1119	-	750	-	-		
CM Cantrol Dolay (		0.011	-	0.01	-	-		
CM Control Delay ( CM Lane LOS	(5)	8.3	-	9.8	-	-		
	ah)	A	-	A	-	-		
CM 95th %tile Q(ve	en)	0	-	0	-	-		
otes								
	capacity			eeds 30		_	utation Not Defined	*: All major volume in platoon

	۶	<b>→</b>	•	•	<b>←</b>	•	4	<b>†</b>	<i>&gt;</i>	<b>&gt;</b>	ļ	✓
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሾሾ	<b>†</b> †	7	ሻሻ	<b>^</b>	7	ቪቪ	<b>^</b>	7	ቪቪ	<b>†</b> †	7
Traffic Volume (vph)	268	226	122	61	417	95	178	251	18	105	573	602
Future Volume (vph)	268	226	122	61	417	95	178	251	18	105	573	602
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			245			182			245			654
Lane Group Flow (vph)	291	246	133	66	453	103	193	273	20	114	623	654
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			8			Free			Free
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	15.0	5.0	15.0		5.0	15.0	
Minimum Split (s)	12.5	22.0		12.5	22.0	22.0	13.5	22.0		13.5	22.0	
Total Split (s)	27.0	36.0		24.0	33.0	33.0	18.0	42.0		18.0	42.0	
Total Split (%)	22.5%	30.0%		20.0%	27.5%	27.5%	15.0%	35.0%		15.0%	35.0%	
Yellow Time (s)	4.0	5.0		4.0	5.0	5.0	5.0	5.0		5.0	5.0	
All-Red Time (s)	3.5	2.0		3.5	2.0	2.0	3.5	2.0		3.5	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.5	7.0		7.5	7.0	7.0	8.5	7.0		8.5	7.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Act Effct Green (s)	15.4	31.0	120.0	7.7	20.7	20.7	11.0	45.1	120.0	8.9	43.0	120.0
Actuated g/C Ratio	0.13	0.26	1.00	0.06	0.17	0.17	0.09	0.38	1.00	0.07	0.36	1.00
v/c Ratio	0.66	0.27	0.08	0.30	0.74	0.24	0.61	0.21	0.01	0.45	0.49	0.41
Control Delay	57.0	36.2	0.1	56.6	54.8	1.4	61.4	27.7	0.0	66.5	29.7	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.0	36.2	0.1	56.6	54.8	1.4	61.4	27.7	0.0	66.5	29.7	0.6
LOS	E	D	Α	Е	D	Α	E	С	Α	E	С	Α
Approach Delay		38.1			46.1			39.9			19.0	
Approach LOS		D			D			D			В	
Queue Length 50th (ft)	112	82	0	25	177	0	74	74	0	48	107	0
Queue Length 95th (ft)	153	110	0	48	223	0	#124	123	0	m65	197	0
Internal Link Dist (ft)		1105			882			544			1159	
Turn Bay Length (ft)	720			440			420			460		460
Base Capacity (vph)	557	940	1583	472	766	485	317	1329	1583	276	1267	1583
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.26	0.08	0.14	0.59	0.21	0.61	0.21	0.01	0.41	0.49	0.41

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 30 (25%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 75

AM Peak Hour - Year 2024

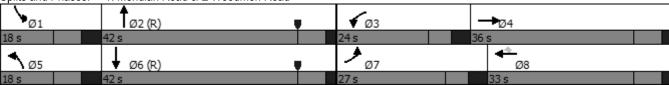
Maximum v/c Ratio: 0.74

Intersection LOS: C Intersection Signal Delay: 31.6 Intersection Capacity Utilization 66.1% ICU Level of Service C

Analysis Period (min) 15

- 95th percentile volume exceeds capacity, queue may be longer.
  - Queue shown is maximum after two cycles.
- Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Meridian Road & E Woodmen Road



Synchro Report September 2022

	•	•	1	<b>†</b>	<b>↓</b>	4
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	ሻሻ	7	ሻ	<b>^</b>	<b>†</b> †	7
Traffic Volume (vph)	64	89	68	481	1387	111
Future Volume (vph)	64	89	68	481	1387	111
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.114			
Satd. Flow (perm)	3433	1583	212	3539	3539	1583
Satd. Flow (RTOR)		97				121
Lane Group Flow (vph)	70	97	74	523	1508	121
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases	•	4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase	7			_		
Minimum Initial (s)	8.0	8.0	5.0	15.0	15.0	15.0
Minimum Split (s)	15.5	15.5	13.5	22.5	22.5	22.5
Total Split (s)	28.0	28.0	20.0	92.0	72.0	72.0
Total Split (%)	23.3%	23.3%	16.7%	76.7%	60.0%	60.0%
Yellow Time (s)	4.0	4.0	5.0	5.5	5.5	5.5
All-Red Time (s)	3.5	3.5	3.5	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	8.5	7.5	7.5	7.5
Lead/Lag	7.5	1.5	Lead	1.5	Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	8.7	8.7	95.3	96.3	83.9	83.9
. ,	0.07		0.79	0.80	0.70	0.70
Actuated g/C Ratio		0.07				
v/c Ratio	0.28	0.47	0.29	0.18	0.61	0.11
Control Delay	55.3	18.1	9.1	0.7	11.7	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.3	18.1	9.1	0.7	11.7	1.5
LOS	E	В	Α	A	В	Α
Approach Delay	33.7			1.8	10.9	
Approach LOS	С		_	A	В	
Queue Length 50th (ft)	27	0	5	6	307	0
Queue Length 95th (ft)	50	52	19	10	424	21
Internal Link Dist (ft)	763			1273	472	
Turn Bay Length (ft)	160		700			330
Base Capacity (vph)	586	350	317	2839	2475	1143
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.28	0.23	0.18	0.61	0.11
Internación Cumanan						

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 95 (79%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow

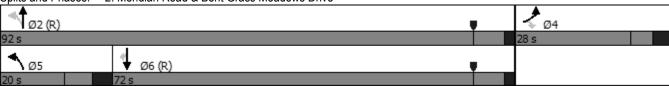
Natural Cycle: 70

AM Peak Hour - Year 2024

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 10.2 Intersection LOS: B
Intersection Capacity Utilization 68.8% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 2: Meridian Road & Bent Grass Meadows Drive



	٠	<b>→</b>	•	•	<b>←</b>	•	1	<b>†</b>	~	<b>/</b>	ţ	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	<u></u>	7	7	<u></u>	7	ሻ	<b>^</b>	7	ሻ	<b>^</b>	7
Traffic Volume (vph)	86	48	86	100	58	37	110	451	42	114	1309	57
Future Volume (vph)	86	48	86	100	58	37	110	451	42	114	1309	57
Satd. Flow (prot)	3433	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.716			0.567			0.081			0.457		
Satd. Flow (perm)	2587	1863	1583	1056	1863	1583	151	3539	1583	851	3539	1583
Satd. Flow (RTOR)			186			186			177			177
Lane Group Flow (vph)	93	52	93	109	63	40	120	490	46	124	1423	62
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	8.0	8.0	5.0	8.0	8.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	12.5	14.5	14.5	12.5	14.5	14.5	12.5	22.5	22.5	13.5	22.5	22.5
Total Split (s)	18.0	20.0	20.0	18.0	20.0	20.0	18.0	67.0	67.0	15.0	64.0	64.0
Total Split (%)	15.0%	16.7%	16.7%	15.0%	16.7%	16.7%	15.0%	55.8%	55.8%	12.5%	53.3%	53.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	5.0	5.5	5.5
All-Red Time (s)	3.5	2.5	2.5	3.5	2.5	2.5	3.5	2.0	2.0	3.5	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	0.0
Total Lost Time (s)	7.5	6.5	6.5	7.5	6.5	6.5	7.5	7.5	7.5	8.5	7.5	7.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	16.5	9.4	9.4	21.2	13.9	13.9	71.9	62.7	62.7	69.6	62.6	62.6
Actuated g/C Ratio	0.14	0.08	0.08	0.18	0.12	0.12	0.60	0.52	0.52	0.58	0.52	0.52
v/c Ratio	0.23	0.36	0.32	0.44	0.29	0.11	0.56	0.26	0.05	0.22	0.77	0.07
Control Delay	39.0	58.8	2.8	45.0	54.2	0.7	36.0	24.6	2.2	19.1	43.3	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.0	58.8	2.8	45.0	54.2	0.7	36.0	24.6	2.2	19.1	43.3	1.9
LOS	D	E	Α	D	D	Α	D	С	Α	В	D	Α
Approach Delay		29.2			39.4			25.1			39.9	
Approach LOS		С			D			С			D	
Queue Length 50th (ft)	30	39	0	71	47	0	49	111	2	60	544	0
Queue Length 95th (ft)	51	79	0	120	92	0	120	142	m11	123	676	m5
Internal Link Dist (ft)		511			570			1159			643	
Turn Bay Length (ft)	100		100	100		100	100		400	375		400
Base Capacity (vph)	481	209	343	250	239	366	239	1850	912	555	1846	910
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.25	0.27	0.44	0.26	0.11	0.50	0.26	0.05	0.22	0.77	0.07

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 45 (38%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 80

AM Peak Hour - Year 2024

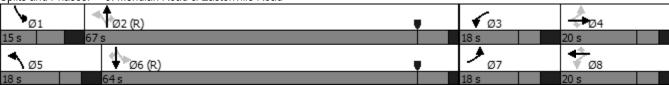
Maximum v/c Ratio: 0.77

Intersection Signal Delay: 35.3 Intersection LOS: D
Intersection Capacity Utilization 72.4% ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Meridian Road & Eastonville Road



Intersection								
Int Delay, s/veh	0.1							
		EDD	NDI	NDT	CDT	CDD		
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations			<u> </u>	<b>^</b>	<b>†</b>			
Traffic Vol, veh/h	0	6	5	569	1474	2		
Future Vol, veh/h	0	6	5	569	1474	2		
Conflicting Peds, #/hr		0	_ 0	_ 0	_ 0	_ 0		
Sign Control	Stop	Stop	Free	Free	Free	Free		
RT Channelized	-		-	None	-	None		
Storage Length	-	0	275	-	-	-		
Veh in Median Storag		-	-	0	0	-		
Grade, %	0	-	-	0	0	-		
Peak Hour Factor	92	92	92	92	92	92		
Heavy Vehicles, %	2	2	2	2	2	2		
Mvmt Flow	0	7	5	618	1602	2		
Major/Minor	Minor2		Major1	N	Major2			
Conflicting Flow All	-	802	1604	0	- viajoiz	0		
Stage 1	-	-	-	-	_	-		
Stage 2	-	-	-	-	-	-		
Critical Hdwy	_	6.94	4.14	_	-	-		
Critical Hdwy Stg 1	-	0.34	4.14	-	-	_		
Critical Hdwy Stg 2	-	-	_	-	_	_		
Follow-up Hdwy	-	3.32	2.22	-	-	-		
Pot Cap-1 Maneuver	0	*472	*706	-	_			
•	0	4/2	700	-	-	-		
Stage 1 Stage 2	0							
	U	1	1	-	-	-		
Platoon blocked, %		*472	*706	-	-	-		
Mov Cap-1 Maneuver			700	-	-	-		
Mov Cap-2 Maneuver		-	-	-	-	-		
Stage 1	-	-	-	-	-	-		
Stage 2	-	-	-	-	-	-		
Approach	EB		NB		SB			
HCM Control Delay, s	12.7		0.1		0			
HCM LOS	В							
Minor Lane/Major Mvi	mt	NBL	NRT	EBLn1	SBT	SBR		
	1111	* 706	NDII					
Capacity (veh/h) HCM Lane V/C Ratio					-	-		
	,\	0.008		0.014	-	-		
HCM Long LOS	P)	10.1	-		-	-		
HCM Lane LOS	L\	В	-	В	-	-		
HCM 95th %tile Q(vel	n)	0	-	0	-	-		
Notes								
~: Volume exceeds ca	apacity	\$: De	lay exc	eeds 30	)0s	+: Comi	outation Not Defined	*: All major volume in plat
			•					,

September 2022

	٠	<b>→</b>	•	•	<b>←</b>	•	4	<b>†</b>	/	<b>&gt;</b>	ļ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	<b>†</b> †	7	ሻሻ	<b>^</b>	7	ቪቪ	<b>†</b> †	7	ሻሻ	<b>†</b> †	7
Traffic Volume (vph)	718	473	166	116	393	168	233	737	110	187	503	437
Future Volume (vph)	718	473	166	116	393	168	233	737	110	187	503	437
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			314			250			314			475
Lane Group Flow (vph)	780	514	180	126	427	183	253	801	120	203	547	475
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			8			Free			Free
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	15.0	5.0	15.0		5.0	15.0	
Minimum Split (s)	12.5	22.0		12.5	22.0	22.0	13.5	22.0		13.5	22.0	
Total Split (s)	38.0	37.0		26.0	25.0	25.0	18.0	39.0		18.0	39.0	
Total Split (%)	31.7%	30.8%		21.7%	20.8%	20.8%	15.0%	32.5%		15.0%	32.5%	
Yellow Time (s)	4.0	5.0		4.0	5.0	5.0	5.0	5.0		5.0	5.0	
All-Red Time (s)	3.5	2.0		3.5	2.0	2.0	3.5	2.0		3.5	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.5	7.0		7.5	7.0	7.0	8.5	7.0		8.5	7.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Act Effct Green (s)	29.7	37.3	120.0	9.8	17.4	17.4	10.0	33.4	120.0	9.5	32.8	120.0
Actuated g/C Ratio	0.25	0.31	1.00	0.08	0.14	0.14	0.08	0.28	1.00	0.08	0.27	1.00
v/c Ratio	0.92	0.47	0.11	0.45	0.83	0.41	0.88	0.81	0.08	0.75	0.57	0.30
Control Delay	60.7	35.0	0.1	57.3	64.6	4.2	85.0	48.5	0.1	62.0	61.5	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.7	35.0	0.1	57.3	64.6	4.2	85.0	48.5	0.1	62.0	61.5	0.5
LOS	E	D	Α	Е	E	Α	F	D	Α	Е	E	Α
Approach Delay		44.3			48.3			51.4			37.9	
Approach LOS		D			D			D			D	
Queue Length 50th (ft)	302	165	0	48	170	0	102	310	0	84	230	0
Queue Length 95th (ft)	#409	225	0	78	#243	17	#182	#393	0	#137	290	0
Internal Link Dist (ft)		1105			882			544			1159	
Turn Bay Length (ft)	720			440			420			460		460
Base Capacity (vph)	872	1100	1583	529	530	449	287	985	1583	272	968	1583
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.89	0.47	0.11	0.24	0.81	0.41	0.88	0.81	0.08	0.75	0.57	0.30

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 37 (31%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 90

Maximum v/c Ratio: 0.92

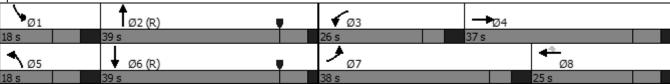
Intersection Signal Delay: 45.1 Intersection LOS: D
Intersection Capacity Utilization 83.3% ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Meridian Road & E Woodmen Road



	•	•	1	<b>†</b>	<b>↓</b>	4
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	ሻሻ	1	ሻ	<b>^</b>	<b>†</b> †	7
Traffic Volume (vph)	82	75	64	1630	909	102
Future Volume (vph)	82	75	64	1630	909	102
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
FIt Permitted	0.950		0.238			
Satd. Flow (perm)	3433	1583	443	3539	3539	1583
Satd. Flow (RTOR)		82				111
Lane Group Flow (vph)	89	82	70	1772	988	111
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	8.0	8.0	5.0	15.0	15.0	15.0
Minimum Split (s)	15.5	15.5	13.5	22.5	22.5	22.5
Total Split (s)	27.0	27.0	20.0	93.0	73.0	73.0
Total Split (%)	22.5%	22.5%	16.7%	77.5%	60.8%	60.8%
Yellow Time (s)	4.0	4.0	5.0	5.5	5.5	5.5
All-Red Time (s)	3.5	3.5	3.5	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	8.5	7.5	7.5	7.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	8.9	8.9	95.1	96.1	83.8	83.8
Actuated g/C Ratio	0.07	0.07	0.79	0.80	0.70	0.70
v/c Ratio	0.35	0.42	0.17	0.63	0.40	0.10
Control Delay	56.4	18.0	1.1	1.6	8.9	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.4	18.0	1.1	1.6	8.9	1.6
LOS	50.4 E	10.0 B	Α	1.0 A	0.9 A	1.0 A
Approach Delay	38.0	U		1.6	8.1	
Approach LOS	30.0 D			1.0 A	Α	
Queue Length 50th (ft)	34	0	1	16	163	0
Queue Length 95th (ft)	60	49	m2	22	222	19
Internal Link Dist (ft)	763	#3	IIIZ	1273	472	13
Turn Bay Length (ft)	160		700	1273	412	330
Base Capacity (vph)	557	325	478	2832	2472	1139
Starvation Cap Reductn	0	0	0	2032	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductin	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.25	0.15	0.63	0.40	0.10
Interposition Commons	0.10	0.23	0.13	0.03	0.40	0.10

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 28 (23%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow

Natural Oycle: 60

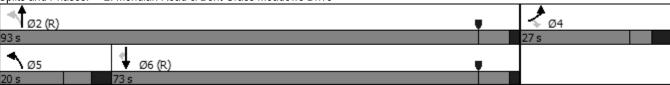
PM Peak Hour - Year 2024

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 5.9	Intersection LOS: A	
Intersection Capacity Utilization 64.2%	ICU Level of Service C	
Analysis Period (min) 15		

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Meridian Road & Bent Grass Meadows Drive



	٠	<b>→</b>	•	•	<b>←</b>	•	1	<b>†</b>	<b>/</b>	<b>/</b>	ţ	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	44	<u></u>	7	7	<b>†</b>	7	, j	<b>^</b>	7	J.	<b>^</b>	7
Traffic Volume (vph)	220	131	125	32	86	138	203	1286	120	85	835	67
Future Volume (vph)	220	131	125	32	86	138	203	1286	120	85	835	67
Satd. Flow (prot)	3433	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.510			0.666			0.205			0.075		
Satd. Flow (perm)	1843	1863	1583	1241	1863	1583	382	3539	1583	140	3539	1583
Satd. Flow (RTOR)			186			186			177			177
Lane Group Flow (vph)	239	142	136	35	93	150	221	1398	130	92	908	73
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	8.0	8.0	5.0	8.0	8.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	12.5	14.5	14.5	12.5	14.5	14.5	12.5	22.5	22.5	13.5	22.5	22.5
Total Split (s)	18.0	22.0	22.0	18.0	22.0	22.0	25.0	62.0	62.0	18.0	55.0	55.0
Total Split (%)	15.0%	18.3%	18.3%	15.0%	18.3%	18.3%	20.8%	51.7%	51.7%	15.0%	45.8%	45.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	5.0	5.5	5.5
All-Red Time (s)	3.5	2.5	2.5	3.5	2.5	2.5	3.5	2.0	2.0	3.5	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	0.0
Total Lost Time (s)	7.5	6.5	6.5	7.5	6.5	6.5	7.5	7.5	7.5	8.5	7.5	7.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	25.4	20.1	20.1	18.0	11.7	11.7	72.2	60.0	60.0	63.7	56.8	56.8
Actuated g/C Ratio	0.21	0.17	0.17	0.15	0.10	0.10	0.60	0.50	0.50	0.53	0.47	0.47
v/c Ratio	0.45	0.46	0.32	0.16	0.51	0.47	0.60	0.79	0.15	0.51	0.54	0.09
Control Delay	39.9	52.0	4.2	36.3	60.9	7.9	14.6	9.7	0.7	29.4	42.3	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.9	52.0	4.2	36.3	60.9	7.9	14.6	9.7	0.7	29.4	42.3	5.7
LOS	D	D	Α	D	Е	Α	В	Α	Α	С	D	Α
Approach Delay		33.8			29.2			9.7			38.7	
Approach LOS		С			С			Α			D	
Queue Length 50th (ft)	78	106	0	21	70	0	24	307	2	47	389	5
Queue Length 95th (ft)	110	172	21	47	121	34	m35	374	m7	88	462	24
Internal Link Dist (ft)		552			570			1159			643	
Turn Bay Length (ft)	100		100	100		100	100		400	375		400
Base Capacity (vph)	529	315	422	265	240	366	445	1769	880	205	1674	842
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.45	0.32	0.13	0.39	0.41	0.50	0.79	0.15	0.45	0.54	0.09

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 89 (74%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 90

PM Peak Hour - Year 2024

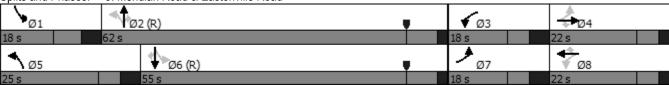
Maximum v/c Ratio: 0.79

Intersection Signal Delay: 23.2 Intersection LOS: C
Intersection Capacity Utilization 78.0% ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Meridian Road & Eastonville Road



Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
	EDL	EBR				SDK
Lane Configurations	^		<u>ነ</u>	<b>↑</b> ↑	<b>↑</b> ↑	1
Traffic Vol, veh/h	0	7	11	1633	980	4
Future Vol, veh/h	0	7	11	1633	980	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	275	-	-	-
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	_	_	0	0	_
Peak Hour Factor	92	92	92	92	92	92
		2				
Heavy Vehicles, %	2		2	2	2	2
Mvmt Flow	0	8	12	1775	1065	4
Major/Minor M	linor2	N	Major1	N	Major2	
Conflicting Flow All	-	535	1069	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-		-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	_	_	-	-
Follow-up Hdwy	_	3.32	2.22			_
				-		
Pot Cap-1 Maneuver	0	*700	1038	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	-	*700	1038	_	-	_
Mov Cap-2 Maneuver	-		.000	_	_	_
			-			_
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Annroach	EB		NB		SB	
Approach						
HCM Control Delay, s	10.2		0.1		0	
HCM LOS	В					
Minar Lang/Mais and		NDI	NDT	EDL 4	CDT	CDD
Minor Lane/Major Mvmt		NBL	NRI	EBLn1	SBT	SBR
Capacity (veh/h)		1038	-	700	-	-
HCM Lane V/C Ratio		0.012	-	0.011	-	-
HCM Control Delay (s)		8.5	-	10.2	-	-
HCM Lane LOS		Α	-	В	_	_
HCM 95th %tile Q(veh)		0		0		
HOW SOUL WILLE CALACTER		U	-	U	-	-
Notes						
~: Volume exceeds capa	acity	\$: Do	lav ovo	eeds 30	ηne	+: Com
	TO IIV	φ. De	iay exc	<del>ccus 3</del> (	.05	r. Com

September 2022 Synchro Report SM ROCHA LLC

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሾሾ	<b>†</b> †	7	ቪቪ	<b>^</b>	7	ቪቪ	<b>^</b>	7	ቪቪ	<b>†</b> †	7
Traffic Volume (vph)	379	339	176	89	591	124	237	350	26	133	809	856
Future Volume (vph)	379	339	176	89	591	124	237	350	26	133	809	856
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			314			250			314			628
Lane Group Flow (vph)	412	368	191	97	642	135	258	380	28	145	879	930
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			8			Free			Free
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	15.0	5.0	15.0		5.0	15.0	
Minimum Split (s)	12.5	22.0		12.5	22.0	22.0	13.5	22.0		13.5	22.0	
Total Split (s)	25.2	42.4		14.8	32.0	32.0	20.4	44.5		18.3	42.4	
Total Split (%)	21.0%	35.3%		12.3%	26.7%	26.7%	17.0%	37.1%		15.3%	35.3%	
Yellow Time (s)	4.0	5.0		4.0	5.0	5.0	5.0	5.0		5.0	5.0	
All-Red Time (s)	3.5	2.0		3.5	2.0	2.0	3.5	2.0		3.5	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.5	7.0		7.5	7.0	7.0	8.5	7.0		8.5	7.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Act Effct Green (s)	17.2	34.4	120.0	7.1	24.3	24.3	11.7	39.3	120.0	9.2	36.8	120.0
Actuated g/C Ratio	0.14	0.29	1.00	0.06	0.20	0.20	0.10	0.33	1.00	0.08	0.31	1.00
v/c Ratio	0.84	0.36	0.12	0.48	0.90	0.26	0.77	0.33	0.02	0.55	0.81	0.59
Control Delay	66.0	35.1	0.2	62.7	62.8	1.2	69.2	32.0	0.0	46.6	56.3	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.0	35.1	0.2	62.7	62.8	1.2	69.2	32.0	0.0	46.6	56.3	1.5
LOS	E	D	Α	Е	Е	Α	E	С	Α	D	E	Α
Approach Delay		41.3			53.3			45.0			29.5	
Approach LOS		D			D			D			С	
Queue Length 50th (ft)	161	117	0	38	255	0	102	118	0	59	332	0
Queue Length 95th (ft)	#235	162	0	67	#351	0	#160	162	0	m62	m344	m0
Internal Link Dist (ft)		1105			882			544			1159	
Turn Bay Length (ft)	720			440		_	420			460		460
Base Capacity (vph)	506	1044	1583	208	737	527	340	1158	1583	280	1086	1583
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.35	0.12	0.47	0.87	0.26	0.76	0.33	0.02	0.52	0.81	0.59

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 90

AM Peak Hour - Year 2040

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 39.0 Intersection LOS: D
Intersection Capacity Utilization 81.3% ICU Level of Service D

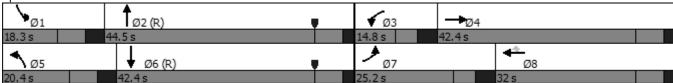
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Meridian Road & E Woodmen Road



	•	•	1	<b>†</b>	ļ	4
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	ሻሻ	7	ሻ	<b>†</b> †	<b>†</b> †	7
Traffic Volume (vph)	93	129	98	656	1971	161
Future Volume (vph)	93	129	98	656	1971	161
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.045			
Satd. Flow (perm)	3433	1583	84	3539	3539	1583
Satd. Flow (RTOR)		101				175
Lane Group Flow (vph)	101	140	107	713	2142	175
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	8.0	8.0	5.0	15.0	15.0	15.0
Minimum Split (s)	15.5	15.5	13.5	22.5	22.5	22.5
Total Split (s)	16.8	16.8	15.6	103.2	87.6	87.6
Total Split (%)	14.0%	14.0%	13.0%	86.0%	73.0%	73.0%
Yellow Time (s)	4.0	4.0	5.0	5.5	5.5	5.5
All-Red Time (s)	3.5	3.5	3.5	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	8.5	7.5	7.5	7.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	8.7	8.7	95.3	96.3	80.9	80.9
Actuated g/C Ratio	0.07	0.07	0.79	0.80	0.67	0.67
v/c Ratio	0.41	0.67	0.65	0.25	0.90	0.16
Control Delay	58.2	34.8	55.4	0.5	22.9	1.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.2	34.8	55.4	0.5	22.9	1.3
LOS	E	С	E	Α	C	Α
Approach Delay	44.6		_	7.6	21.3	
Approach LOS	D			A	C	
Queue Length 50th (ft)	39	29	33	4	672	0
Queue Length 95th (ft)	68	#106	#106	5	817	22
Internal Link Dist (ft)	763	,,,,,,		1273	472	
Turn Bay Length (ft)	160		700	1210		330
Base Capacity (vph)	266	215	167	2840	2384	1123
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.65	0.64	0.25	0.90	0.16
Intersection Summary	0.00	0.00	0.01	0.20	0.00	0.10

Cycle Length: 120 Actuated Cycle Length: 120

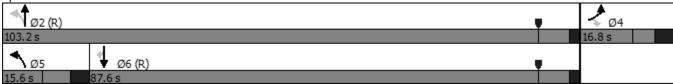
Offset: 95 (79%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow

Natural Cycle: 90

AM Peak Hour - Year 2040

Maximum v/c Ratio: 0.90
Intersection Signal Delay: 19.6
Intersection Capacity Utilization 86.2%
ICU Level of Service E
Analysis Period (min) 15
# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Meridian Road & Bent Grass Meadows Drive



	۶	<b>→</b>	•	•	+	•	•	<b>†</b>	~	<b>/</b>	<b>↓</b>	-√
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	<b>ሻ</b> ሻ	<b>↑</b>	7	ሻ	<b>↑</b>	7	ሻ	<b>^</b>	7	Ť	<b>^</b>	7
Traffic Volume (vph)	86	48	86	144	58	54	110	673	60	165	1884	57
Future Volume (vph)	86	48	86	144	58	54	110	673	60	165	1884	57
Satd. Flow (prot)	3433	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.600			0.723			0.061			0.310		
Satd. Flow (perm)	2168	1863	1583	1347	1863	1583	114	3539	1583	577	3539	1583
Satd. Flow (RTOR)			177			177			168			168
Lane Group Flow (vph)	93	52	93	157	63	59	120	732	65	179	2048	62
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	8.0	8.0	5.0	8.0	8.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	12.5	14.5	14.5	12.5	14.5	14.5	12.5	22.5	22.5	13.5	22.5	22.5
Total Split (s)	12.5	14.5	14.5	14.2	16.2	16.2	13.0	73.3	73.3	18.0	78.3	78.3
Total Split (%)	10.4%	12.1%	12.1%	11.8%	13.5%	13.5%	10.8%	61.1%	61.1%	15.0%	65.3%	65.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	5.0	5.5	5.5
All-Red Time (s)	3.5	2.5	2.5	3.5	2.5	2.5	3.5	2.0	2.0	3.5	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	0.0
Total Lost Time (s)	7.5	6.5	6.5	7.5	6.5	6.5	7.5	7.5	7.5	8.5	7.5	7.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	13.8	8.0	8.0	13.7	9.4	9.4	71.9	66.4	66.4	78.7	70.8	70.8
Actuated g/C Ratio	0.12	0.07	0.07	0.11	0.08	0.08	0.60	0.55	0.55	0.66	0.59	0.59
v/c Ratio	0.28	0.42	0.34	0.89	0.43	0.21	0.83	0.37	0.07	0.38	0.98	0.06
Control Delay	44.5	64.5	3.5	92.7	62.4	1.6	72.3	3.2	0.1	12.4	50.9	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.5	64.5	3.5	92.7	62.4	1.6	72.3	3.2	0.1	12.4	50.9	0.1
LOS	D	Е	Α	F	Е	Α	Е	Α	Α	В	D	Α
Approach Delay		32.8			66.6			12.0			46.5	
Approach LOS		С			Е			В			D	
Queue Length 50th (ft)	31	39	0	111	47	0	40	19	1	74	844	0
Queue Length 95th (ft)	56	82	0	#224	95	0	m#119	23	m0	m75	#977	m0
Internal Link Dist (ft)		511			570			1159			643	
Turn Bay Length (ft)	100		100	100		100	100		400	375		400
Base Capacity (vph)	336	124	270	176	150	290	144	1958	950	475	2088	1002
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.42	0.34	0.89	0.42	0.20	0.83	0.37	0.07	0.38	0.98	0.06

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 45 (38%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 110

Maximum v/c Ratio: 0.98

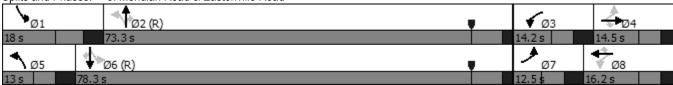
Intersection Signal Delay: 38.6 Intersection LOS: D
Intersection Capacity Utilization 90.7% ICU Level of Service E
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Meridian Road & Eastonville Road



Intersection								
Int Delay, s/veh	0.1							
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
	EDL					ODK		
Lane Configurations Traffic Vol, veh/h	0	<b></b>	<b>`</b>	<b>↑↑</b> 805	<b>†</b>	3		
	0	9	8		2097			
future Vol, veh/h	0	9	8	805	2097	3		
Conflicting Peds, #/hr	0	0		0	0	0		
Sign Control	Stop	Stop	Free	Free	Free	Free		
RT Channelized	-			None	-			
Storage Length	-	0	275	-	-	-		
Veh in Median Storage		-	-	0	0	-		
Grade, %	0	-	-	0	0	-		
Peak Hour Factor	92	92	92	92	92	92		
leavy Vehicles, %	2	2	2	2	2	2		
/Ivmt Flow	0	10	9	875	2279	3		
lajor/Minor	Minor2	1	Major1	1	Major2			
Conflicting Flow All	-	1141	2282	0	-	0		
Stage 1	-	-	-	-	-	-		
Stage 2	-	-	-	-	-	-		
ritical Hdwy	-	6.94	4.14	-	-	-		
ritical Hdwy Stg 1	-	-	-	-	-	-		
ritical Hdwy Stg 2	-	-	-	-	-	-		
ollow-up Hdwy	-	3.32	2.22	-	-	-		
ot Cap-1 Maneuver	0	*219	*328	-	-	-		
Stage 1	0	-	-	-	-	-		
Stage 2	0	-	-	-	-	-		
latoon blocked, %		1	1	-	-	-		
Nov Cap-1 Maneuver	-	*219	*328	-	-	-		
Nov Cap-2 Maneuver			-	-	-	-		
Stage 1	-	-	_	-	-	-		
Stage 2	-	_	_	-	-	_		
2.032 2								
pproach	EB		NB		SB			
ICM Control Delay, s			0.2		0			
HCM LOS	22.2 C		0.2		U			
IOWI LOG	U							
dinor Long/Maior M	~4	NDI	NDT	CDL-4	CDT	CDD		
Minor Lane/Major Mvn	TIT	NBL * 200		EBLn1	SBT	SBR		
Capacity (veh/h)		* 328	-		-	-		
ICM Lane V/C Ratio	,	0.027		0.045	-	-		
ICM Control Delay (s	)	16.3	-		-	-		
CM Lane LOS	,	С	-	С	-	-		
ICM 95th %tile Q(veh	1)	0.1	-	0.1	-	-		
lotes								
Volume exceeds ca	pacity	\$: De	elay exc	eeds 30	00s	+: Com	outation Not Defined	*: All major volume in platoor
	1	Ţ. <b>_</b> 0	.,					

September 2022

	٠	<b>→</b>	•	•	<b>←</b>	•	4	<b>†</b>	~	<b>&gt;</b>	ļ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	<b>^</b>	7	ቪቪ	<b>^</b>	7	ቪቪ	<b>^</b>	7	ቪቪ	<b>†</b> †	7
Traffic Volume (vph)	1027	708	240	168	545	231	308	1042	159	233	680	610
Future Volume (vph)	1027	708	240	168	545	231	308	1042	159	233	680	610
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			314			250			314			663
Lane Group Flow (vph)	1116	770	261	183	592	251	335	1133	173	253	739	663
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			8			Free			Free
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	15.0	5.0	15.0		5.0	15.0	
Minimum Split (s)	12.5	22.0		12.5	22.0	22.0	13.5	22.0		13.5	22.0	
Total Split (s)	38.0	43.1		18.9	24.0	24.0	21.0	42.0		16.0	37.0	
Total Split (%)	31.7%	35.9%		15.8%	20.0%	20.0%	17.5%	35.0%		13.3%	30.8%	
Yellow Time (s)	4.0	5.0		4.0	5.0	5.0	5.0	5.0		5.0	5.0	
All-Red Time (s)	3.5	2.0		3.5	2.0	2.0	3.5	2.0		3.5	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.5	7.0		7.5	7.0	7.0	8.5	7.0		8.5	7.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Act Effct Green (s)	30.5	36.9	120.0	10.6	17.0	17.0	12.5	35.0	120.0	7.5	30.0	120.0
Actuated g/C Ratio	0.25	0.31	1.00	0.09	0.14	0.14	0.10	0.29	1.00	0.06	0.25	1.00
v/c Ratio	1.28	0.71	0.16	0.60	1.18	0.57	0.94	1.10	0.11	1.18	0.84	0.42
Control Delay	172.3	41.3	0.2	61.3	145.4	11.4	87.9	98.9	0.1	157.4	75.0	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	172.3	41.3	0.2	61.3	145.4	11.4	87.9	98.9	0.1	157.4	75.0	1.0
LOS	F	D	Α	Е	F	В	F	F	Α	F	Е	Α
Approach Delay		104.4			97.6			86.2			58.0	
Approach LOS		F			F			F			Е	
Queue Length 50th (ft)	~564	280	0	71	~289	1	135	~523	0	~123	318	0
Queue Length 95th (ft)	#696	352	0	109	#406	78	#225	#658	0	#211	#386	4
Internal Link Dist (ft)		1105			882			544			1159	
Turn Bay Length (ft)	720			440			420			460		460
Base Capacity (vph)	872	1087	1583	326	501	438	357	1032	1583	214	884	1583
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.28	0.71	0.16	0.56	1.18	0.57	0.94	1.10	0.11	1.18	0.84	0.42

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 37 (31%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 150

PM Peak Hour - Year 2040

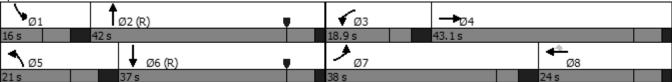
Maximum v/c Ratio: 1.28

Intersection Signal Delay: 86.8 Intersection LOS: F
Intersection Capacity Utilization 104.4% ICU Level of Service G

Analysis Period (min) 15

- Volume exceeds capacity, queue is theoretically infinite.
  - Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
  - Queue shown is maximum after two cycles.

Splits and Phases: 1: Meridian Road & E Woodmen Road



	•	•	1	<b>†</b>	<b>↓</b>	4
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	ሻሻ	7	ሻ	<b>†</b>	<u>→</u>	7
Traffic Volume (vph)	119	108	93	2254	1268	147
Future Volume (vph)	119	108	93	2254	1268	147
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.136			.000
Satd. Flow (perm)	3433	1583	253	3539	3539	1583
Satd. Flow (RTOR)	0.100	117	200	0000	0000	160
Lane Group Flow (vph)	129	117	101	2450	1378	160
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4	. 51111	5	2	6	. 51111
Permitted Phases	-т	4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase	7	7			- 0	
Minimum Initial (s)	8.0	8.0	5.0	15.0	15.0	15.0
Minimum Split (s)	15.5	15.5	13.5	22.5	22.5	22.5
Total Split (s)	17.0	17.0	15.4	103.0	87.6	87.6
Total Split (%)	14.2%	14.2%	12.8%	85.8%	73.0%	73.0%
Yellow Time (s)	4.0	4.0	5.0	5.5	5.5	5.5
All-Red Time (s)	3.5	3.5	3.5	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	8.5	7.5	7.5	7.5
Lead/Lag	7.5	7.5	Lead	1.5	Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	9.0	9.0	95.0	96.0	80.8	80.8
Actuated g/C Ratio	0.08	0.08	0.79	0.80	0.67	0.67
v/c Ratio	0.50	0.00	0.79	0.87	0.67	0.07
	60.2	17.8	1.8	10.3	11.8	1.4
Control Delay	0.0		0.0			0.0
Queue Delay		0.0		0.0	0.0	
Total Delay	60.2	17.8	1.8	10.3	11.8	1.4
LOS	E 40.4	В	A	В	B	Α
Approach Delay	40.1			9.9	10.7	
Approach LOS	D 50	^	•	A	В	•
Queue Length 50th (ft)	50	0	3	950	280	0
Queue Length 95th (ft)	82	58	m3	m936	338	22
Internal Link Dist (ft)	763			1273	472	
Turn Bay Length (ft)	160	222	700		2224	330
Base Capacity (vph)	271	233	287	2830	2384	1118
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.50	0.35	0.87	0.58	0.14
Intono action Common .						

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 28 (23%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow

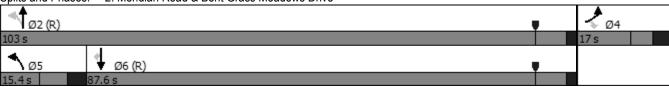
Natural Cycle: 90

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 11.9	Intersection LOS: B	
Intersection Capacity Utilization 81.5%	ICU Level of Service D	
Analysis Period (min) 15		

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Meridian Road & Bent Grass Meadows Drive



	•	<b>→</b>	•	•	+	•	•	<b>†</b>	~	<b>/</b>	<b></b>	-√
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	<b>†</b>	7	ሻ	<b>†</b>	7	۲	<b>^</b>	7	J.	<b>^</b>	7
Traffic Volume (vph)	220	131	125	47	86	200	203	1910	173	123	1190	67
Future Volume (vph)	220	131	125	47	86	200	203	1910	173	123	1190	67
Satd. Flow (prot)	3433	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.632			0.564			0.110			0.064		
Satd. Flow (perm)	2284	1863	1583	1051	1863	1583	205	3539	1583	119	3539	1583
Satd. Flow (RTOR)			255			255			188			245
Lane Group Flow (vph)	239	142	136	51	93	217	221	2076	188	134	1293	73
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	8.0	8.0	5.0	8.0	8.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	12.5	14.5	14.5	12.5	14.5	14.5	12.5	22.5	22.5	13.5	22.5	22.5
Total Split (s)	12.6	16.2	16.2	12.5	16.1	16.1	24.2	76.9	76.9	14.4	67.1	67.1
Total Split (%)	10.5%	13.5%	13.5%	10.4%	13.4%	13.4%	20.2%	64.1%	64.1%	12.0%	55.9%	55.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	5.0	5.5	5.5
All-Red Time (s)	3.5	2.5	2.5	3.5	2.5	2.5	3.5	2.0	2.0	3.5	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	0.0
Total Lost Time (s)	7.5	6.5	6.5	7.5	6.5	6.5	7.5	7.5	7.5	8.5	7.5	7.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	15.0	11.9	11.9	13.3	9.3	9.3	81.4	69.4	69.4	69.1	63.9	63.9
Actuated g/C Ratio	0.12	0.10	0.10	0.11	0.08	0.08	0.68	0.58	0.58	0.58	0.53	0.53
v/c Ratio	0.72	0.77	0.35	0.35	0.65	0.61	0.72	1.01	0.19	0.87	0.69	0.08
Control Delay	59.7	81.0	2.5	49.6	74.5	10.9	31.6	19.4	0.1	62.9	42.7	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.7	81.0	2.5	49.6	74.5	10.9	31.6	19.4	0.1	62.9	42.7	0.5
LOS	Е	F	Α	D	Е	В	С	В	Α	Е	D	Α
Approach Delay		50.5			32.7			19.0			42.5	
Approach LOS		D			С			В			D	
Queue Length 50th (ft)	85	111	0	34	71	0	81	~537	1	63	556	0
Queue Length 95th (ft)	#138	#240	0	71	#141	45	m60	m102	m1	#182	633	m2
Internal Link Dist (ft)		552			570			1159			643	
Turn Bay Length (ft)	100		100	100		100	100		400	375		400
Base Capacity (vph)	333	184	386	146	149	361	361	2046	994	154	1884	957
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.77	0.35	0.35	0.62	0.60	0.61	1.01	0.19	0.87	0.69	0.08

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 89 (74%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 130

PM Peak Hour - Year 2040

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 30.6 Intersection LOS: C
Intersection Capacity Utilization 97.3% ICU Level of Service F

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

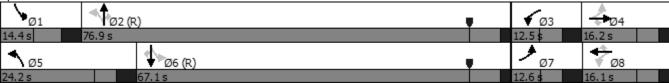
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Meridian Road & Eastonville Road



Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	LUL	7	<u> </u>	<b>↑</b> ↑	<b>↑</b> ↑	ODIN
Traffic Vol, veh/h	0	11	17	2313	1370	6
Future Vol, veh/h	0	11	17	2313	1370	6
Conflicting Peds, #/hr	0	0	0	2313	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	Stop -					
			-	None	-	
Storage Length	- 4 0	0	275	-	-	-
Veh in Median Storage,		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	12	18	2514	1489	7
	linor2		Major1		Major2	
Conflicting Flow All	-	748	1496	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	_	6.94	4.14	-	-	-
Critical Hdwy Stg 1	_	-	-	_	_	_
Critical Hdwy Stg 2	_	_	_	_	_	
	_	3.32	2.22		_	
Follow-up Hdwy				_		-
Pot Cap-1 Maneuver	0	*523	*782	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	-	*523	*782	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	_	-	_	-	_	
Stage 2		_	_			_
Glaye Z	_	_	_	_		-
Approach	EB		NB		SB	
HCM Control Delay, s	12		0.1		0	
HCM LOS	B		0.1		•	
TIOWI LOO	U					
Minor Lane/Major Mvmt		NBL	NBT I	EBLn1	SBT	SBR
Capacity (veh/h)		* 782	_	523	-	-
HCM Lane V/C Ratio		0.024		0.023	_	_
		9.7				
HCM Control Delay (s)			-	12	-	-
HCM Lane LOS		A	-	В	-	-
HCM 95th %tile Q(veh)		0.1	-	0.1	-	-
Notes						
~: Volume exceeds capa	!4	ф D	1	eeds 30	١٥-	+: Comp

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	٠	<b>→</b>	•	•	<b>←</b>	•	1	†	<i>&gt;</i>	<b>/</b>	ţ	✓
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1,1	<b>†</b> †	7	ሻሻ	<b>^</b>	7	1/4	<b>^</b>	7	ቪቪ	<b>†</b> †	7
Traffic Volume (vph)	281	226	122	61	417	121	178	291	18	131	611	615
Future Volume (vph)	281	226	122	61	417	121	178	291	18	131	611	615
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			245			182			245			668
Lane Group Flow (vph)	305	246	133	66	453	132	193	316	20	142	664	668
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			8			Free			Free
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	15.0	5.0	15.0		5.0	15.0	
Minimum Split (s)	12.5	22.0		12.5	22.0	22.0	13.5	22.0		13.5	22.0	
Total Split (s)	27.0	36.0		24.0	33.0	33.0	18.0	42.0		18.0	42.0	
Total Split (%)	22.5%	30.0%		20.0%	27.5%	27.5%	15.0%	35.0%		15.0%	35.0%	
Yellow Time (s)	4.0	5.0		4.0	5.0	5.0	5.0	5.0		5.0	5.0	
All-Red Time (s)	3.5	2.0		3.5	2.0	2.0	3.5	2.0		3.5	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.5	7.0		7.5	7.0	7.0	8.5	7.0		8.5	7.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Act Effct Green (s)	15.8	31.4	120.0	7.7	20.7	20.7	11.0	44.0	120.0	9.5	42.6	120.0
Actuated g/C Ratio	0.13	0.26	1.00	0.06	0.17	0.17	0.09	0.37	1.00	0.08	0.36	1.00
v/c Ratio	0.68	0.27	0.08	0.30	0.74	0.31	0.61	0.24	0.01	0.52	0.53	0.42
Control Delay	57.2	35.9	0.1	56.6	54.8	3.7	61.4	28.7	0.0	63.2	34.8	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.2	35.9	0.1	56.6	54.8	3.7	61.4	28.7	0.0	63.2	34.8	0.5
LOS	Е	D	Α	Е	D	Α	Е	С	Α	Ε	С	Α
Approach Delay		38.5			44.6			39.6			22.0	
Approach LOS		D			D			D			С	
Queue Length 50th (ft)	117	82	0	25	177	0	74	90	0	60	151	0
Queue Length 95th (ft)	160	110	0	48	223	19	#124	140	0	m74	m214	m0
Internal Link Dist (ft)		1105			882			544			1159	
Turn Bay Length (ft)	720			440			420			460		460
Base Capacity (vph)	557	945	1583	472	766	485	317	1298	1583	287	1255	1583
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.26	0.08	0.14	0.59	0.27	0.61	0.24	0.01	0.49	0.53	0.42

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 30 (25%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 75

## **Timings**

## 1: Meridian Road & E Woodmen Road

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 32.5 Intersection LOS: C Intersection Capacity Utilization 67.5% ICU Level of Service C

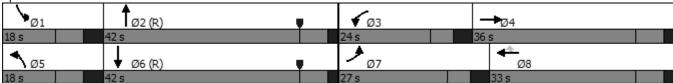
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Meridian Road & E Woodmen Road



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Cycle Length: 120 Actuated Cycle Length: 120

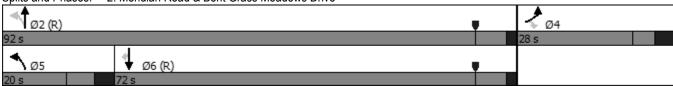
Offset: 95 (79%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow

Natural Cycle: 70

# 2: Meridian Road & Bent Grass Meadows Drive

Maximum v/c Ratio: 0.63
Intersection Signal Delay: 10.5
Intersection Capacity Utilization 69.9%
ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 2: Meridian Road & Bent Grass Meadows Drive



	٠	<b>→</b>	•	•	<b>←</b>	•	•	<b>†</b>	/	<b>&gt;</b>	<b>↓</b>	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	<u></u>	7	ሻ	<b>†</b>	7	ሻ	<b>^</b>	7	ሻ	<b>^</b>	7
Traffic Volume (vph)	215	61	160	100	71	37	231	409	42	114	1311	96
Future Volume (vph)	215	61	160	100	71	37	231	409	42	114	1311	96
Satd. Flow (prot)	3433	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.524			0.714			0.066			0.494		
Satd. Flow (perm)	1894	1863	1583	1330	1863	1583	123	3539	1583	920	3539	1583
Satd. Flow (RTOR)			186			186			177			177
Lane Group Flow (vph)	234	66	174	109	77	40	251	445	46	124	1425	104
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	8.0	8.0	5.0	8.0	8.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	12.5	14.5	14.5	12.5	14.5	14.5	12.5	22.5	22.5	13.5	22.5	22.5
Total Split (s)	18.0	20.0	20.0	18.0	20.0	20.0	18.0	67.0	67.0	15.0	64.0	64.0
Total Split (%)	15.0%	16.7%	16.7%	15.0%	16.7%	16.7%	15.0%	55.8%	55.8%	12.5%	53.3%	53.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	5.0	5.5	5.5
All-Red Time (s)	3.5	2.5	2.5	3.5	2.5	2.5	3.5	2.0	2.0	3.5	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	0.0
Total Lost Time (s)	7.5	6.5	6.5	7.5	6.5	6.5	7.5	7.5	7.5	8.5	7.5	7.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	21.1	10.6	10.6	17.9	10.5	10.5	75.4	62.1	62.1	63.0	56.5	56.5
Actuated g/C Ratio	0.18	0.09	0.09	0.15	0.09	0.09	0.63	0.52	0.52	0.52	0.47	0.47
v/c Ratio	0.47	0.40	0.56	0.47	0.48	0.13	0.93	0.24	0.05	0.23	0.86	0.12
Control Delay	41.7	58.5	13.4	45.5	61.4	0.9	80.9	23.4	1.7	20.3	49.2	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay LOS	41.7 D	58.5	13.4 B	45.5 D	61.4	0.9	80.9 F	23.4	1.7	20.3 C	49.2 D	6.5
	U	33.6	Б	U	43.0	Α	Г	C 41.5	A	U	44.4	Α
Approach Delay Approach LOS		33.0 C			43.0 D			41.5 D			44.4 D	
Queue Length 50th (ft)	77	49	0	70	58	0	165	96	1	60	547	6
Queue Length 95th (ft)	110	94	57	118	106	0	#360	128	m8	m120	681	m37
Internal Link Dist (ft)	110	511	31	110	570	U	#300	1159	1110	111120	643	11137
Turn Bay Length (ft)	100	JII	100	100	310	100	100	1100	400	375	043	400
Base Capacity (vph)	497	209	343	244	209	343	270	1830	904	536	1666	838
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.32	0.51	0.45	0.37	0.12	0.93	0.24	0.05	0.23	0.86	0.12
reduced vio realio	0.77	0.02	0.01	0.70	0.01	0.12	0.00	0.27	0.00	0.20	0.00	0.12

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 45 (38%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 90

# **Timings**

### 3: Meridian Road & Eastonville Road

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 41.9 Intersection LOS: D Intersection Capacity Utilization 79.8% ICU Level of Service D

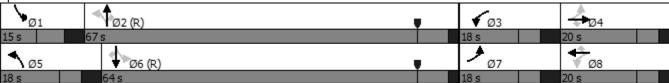
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Meridian Road & Eastonville Road



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Intersection								
Int Delay, s/veh	0.9							
•		EDD	NDI	NDT	CDT	CDD		
Novement	EBL	EBR	NBL	NBT	SBT	SBR		
ane Configurations	0	<b>*</b>	<u> </u>	<b>^</b>	<b>↑</b> }	0.4		
affic Vol, veh/h	0	99	55	571	1432	84		
iture Vol, veh/h	0	99	55	571	1432	84		
onflicting Peds, #/hr		0	0	0	0	0		
ign Control	Stop	Stop	Free	Free	Free	Free		
T Channelized	-			None	-			
orage Length	- 4 0	0	275	-	-	-		
eh in Median Storag	ge,# 0 0	-	-	0	0	-		
rade, % eak Hour Factor	92	92	92	92	92	92		
		2	2	2	92	2		
eavy Vehicles, % vmt Flow	2	108	60	621	1557	91		
VIIIL FIUW	U	100	00	021	1007	91		
ajor/Minor	Minor2	1	Major1	N	/lajor2			
onflicting Flow All	-	824	1648	0	-	0		
Stage 1	-	-	-	-	-	-		
Stage 2	-	-	-	-	-	-		
tical Hdwy	-	6.94	4.14	-	-	-		
tical Hdwy Stg 1	-	-	-	-	-	-		
itical Hdwy Stg 2	-	-	-	-	-	-		
llow-up Hdwy	-	3.32	2.22	-	-	-		
ot Cap-1 Maneuver	0	*497	710	-	-	-		
Stage 1	0	-	-	-	-	-		
Stage 2	0	-	-	-	-	-		
atoon blocked, %		1	1	-	-	-		
ov Cap-1 Maneuve		*497	710	-	-	-		
ov Cap-2 Maneuve	r -	-	-	-	-	-		
Stage 1	-	-	-	-	-	-		
Stage 2	-	-	-	-	-	-		
pproach	EB		NB		SB			
CM Control Delay, s			0.9		0			
CM LOS	B		3.5					
J 200								
		NE	NST	EDL 4	057	055		
nor Lane/Major Mv	mt	NBL		EBLn1	SBT	SBR		
pacity (veh/h)		710	-		-	-		
CM Lane V/C Ratio		0.084		0.217	-	-		
CM Control Delay (	S)	10.5	-		-	-		
CM Lane LOS		В	-	В	-	-		
ICM 95th %tile Q(ve	h)	0.3	-	8.0	-	-		
otes								
Volume exceeds c	apacity	\$: De	lav exc	eeds 30	00s	+. Com	outation Not Defined	*: All major volume in platoo
TOTAL TO CAUCUUS O	apaonty	Ψ. Δ0	hay one	5545 56	30		atation Not Domina	

	۶	<b>→</b>	•	•	<b>←</b>	•	4	<b>†</b>	/	<b>&gt;</b>	ļ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሾሾ	<b>†</b> †	7	ሻሻ	<b>^</b>	7	ቪቪ	<b>^</b>	7	ቪቪ	<b>†</b> †	7
Traffic Volume (vph)	733	473	166	116	393	198	233	781	110	216	546	451
Future Volume (vph)	733	473	166	116	393	198	233	781	110	216	546	451
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			314			250			314			490
Lane Group Flow (vph)	797	514	180	126	427	215	253	849	120	235	593	490
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			8			Free			Free
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	15.0	5.0	15.0		5.0	15.0	
Minimum Split (s)	12.5	22.0		12.5	22.0	22.0	13.5	22.0		13.5	22.0	
Total Split (s)	38.0	37.0		26.0	25.0	25.0	18.0	39.0		18.0	39.0	
Total Split (%)	31.7%	30.8%		21.7%	20.8%	20.8%	15.0%	32.5%		15.0%	32.5%	
Yellow Time (s)	4.0	5.0		4.0	5.0	5.0	5.0	5.0		5.0	5.0	
All-Red Time (s)	3.5	2.0		3.5	2.0	2.0	3.5	2.0		3.5	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.5	7.0		7.5	7.0	7.0	8.5	7.0		8.5	7.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Act Effct Green (s)	29.9	37.5	120.0	9.8	17.4	17.4	10.0	32.9	120.0	9.7	32.7	120.0
Actuated g/C Ratio	0.25	0.31	1.00	0.08	0.14	0.14	0.08	0.27	1.00	0.08	0.27	1.00
v/c Ratio	0.93	0.46	0.11	0.45	0.83	0.49	0.88	0.87	0.08	0.85	0.62	0.31
Control Delay	62.4	34.9	0.1	57.3	64.6	6.9	85.3	53.1	0.1	67.7	57.4	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.4	34.9	0.1	57.3	64.6	6.9	85.3	53.1	0.1	67.7	57.4	0.4
LOS	E	С	Α	E	E	Α	F	D	Α	E	E	Α
Approach Delay		45.4			47.3			54.5			38.1	
Approach LOS		D			D			D			D	
Queue Length 50th (ft)	310	165	0	48	170	0	102	334	0	96	248	0
Queue Length 95th (ft)	#423	225	0	78	#243	43	#182	#448	0	#168	312	0
Internal Link Dist (ft)		1105			882			544			1159	
Turn Bay Length (ft)	720			440			420			460		460
Base Capacity (vph)	872	1106	1583	529	530	449	286	971	1583	278	963	1583
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.91	0.46	0.11	0.24	0.81	0.48	0.88	0.87	0.08	0.85	0.62	0.31

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 37 (31%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 100

## 1: Meridian Road & E Woodmen Road

Maximum v/c Ratio: 0.93

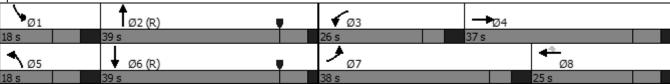
Intersection Signal Delay: 46.0 Intersection LOS: D Intersection Capacity Utilization 85.7% ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Meridian Road & E Woodmen Road



	•	•	1	<b>†</b>	<b>↓</b>	4
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	ሻሻ	1	ሻ	<b>^</b>	<b>†</b> †	7
Traffic Volume (vph)	82	75	64	1674	953	102
Future Volume (vph)	82	75	64	1674	953	102
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.223			
Satd. Flow (perm)	3433	1583	415	3539	3539	1583
Satd. Flow (RTOR)		82				111
Lane Group Flow (vph)	89	82	70	1820	1036	111
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases	•	4	2	_		6
Detector Phase	4	4	5	2	6	6
Switch Phase		<b>T</b>				
Minimum Initial (s)	8.0	8.0	5.0	15.0	15.0	15.0
Minimum Split (s)	15.5	15.5	13.5	22.5	22.5	22.5
Total Split (s)	27.0	27.0	20.0	93.0	73.0	73.0
Total Split (%)	22.5%	22.5%	16.7%	77.5%	60.8%	60.8%
Yellow Time (s)	4.0	4.0	5.0	5.5	5.5	5.5
All-Red Time (s)	3.5	3.5	3.5	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	8.5	7.5	7.5	7.5
Lead/Lag	7.5	7.5	Lead	7.5	Lag	Lag
			Yes		Yes	Yes
Lead-Lag Optimize? Recall Mode	None	None		C-Max		C-Max
	None	None	None		C-Max	
Act Effct Green (s)	8.9	8.9	95.1	96.1	83.8	83.8
Actuated g/C Ratio	0.07	0.07	0.79	0.80	0.70	0.70
v/c Ratio	0.35	0.42	0.17	0.64	0.42	0.10
Control Delay	56.4	18.0	1.4	1.5	9.1	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.4	18.0	1.4	1.5	9.1	1.6
LOS	E	В	Α	A	A	Α
Approach Delay	38.0			1.5	8.3	
Approach LOS	D	_		A	A	
Queue Length 50th (ft)	34	0	2	20	174	0
Queue Length 95th (ft)	60	49	m4	38	236	19
Internal Link Dist (ft)	763			1273	472	
Turn Bay Length (ft)	160		700			330
Base Capacity (vph)	557	325	458	2832	2472	1139
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.25	0.15	0.64	0.42	0.10
Internación Cumanan						

Cycle Length: 120 Actuated Cycle Length: 120

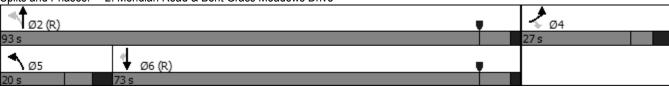
Offset: 28 (23%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow Natural Cycle: 60

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 5.9	Intersection LOS: A	
Intersection Capacity Utilization 65.4%	ICU Level of Service C	
Analysis Pariod (min) 15		

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Meridian Road & Bent Grass Meadows Drive



	٠	<b>→</b>	•	•	<b>←</b>	•	4	<b>†</b>	<b>/</b>	<b>/</b>	ţ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	<b>†</b>	7	Ţ	<b>†</b>	7	ሻ	<b>^</b>	7	7	<b>^</b>	7
Traffic Volume (vph)	330	146	194	32	100	138	317	1261	120	85	851	101
Future Volume (vph)	330	146	194	32	100	138	317	1261	120	85	851	101
Satd. Flow (prot)	3433	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.498			0.656			0.161			0.086		
Satd. Flow (perm)	1800	1863	1583	1222	1863	1583	300	3539	1583	160	3539	1583
Satd. Flow (RTOR)			211			186			177			177
Lane Group Flow (vph)	359	159	211	35	109	150	345	1371	130	92	925	110
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	8.0	8.0	5.0	8.0	8.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	12.5	14.5	14.5	12.5	14.5	14.5	12.5	22.5	22.5	13.5	22.5	22.5
Total Split (s)	18.0	22.0	22.0	18.0	22.0	22.0	25.0	62.0	62.0	18.0	55.0	55.0
Total Split (%)	15.0%	18.3%	18.3%	15.0%	18.3%	18.3%	20.8%	51.7%	51.7%	15.0%	45.8%	45.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	5.0	5.5	5.5
All-Red Time (s)	3.5	2.5	2.5	3.5	2.5	2.5	3.5	2.0	2.0	3.5	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	0.0
Total Lost Time (s)	7.5	6.5	6.5	7.5	6.5	6.5	7.5	7.5	7.5	8.5	7.5	7.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	26.2	20.9	20.9	18.7	12.3	12.3	75.3	59.2	59.2	58.1	51.2	51.2
Actuated g/C Ratio	0.22	0.17	0.17	0.16	0.10	0.10	0.63	0.49	0.49	0.48	0.43	0.43
v/c Ratio	0.67	0.49	0.47	0.16	0.57	0.46	0.87	0.79	0.15	0.50	0.61	0.14
Control Delay	45.4	52.3	9.9	35.7	62.5	7.6	41.6	10.0	0.7	29.4	46.5	10.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.4	52.3	9.9	35.7	62.5	7.6	41.6	10.0	0.7	29.4	46.5	10.2
LOS	D	D	Α	D	Е	Α	D	В	Α	С	D	В
Approach Delay		36.6			31.3			15.3			41.6	
Approach LOS		D			С			В			D	
Queue Length 50th (ft)	129	119	0	21	82	0	106	306	2	46	393	12
Queue Length 95th (ft)	161	192	71	47	139	34	m#168	m373	m6	86	464	46
Internal Link Dist (ft)		552			570			1159			643	
Turn Bay Length (ft)	100		100	100		100	100		400	375		400
Base Capacity (vph)	535	324	449	270	240	366	410	1745	870	207	1508	776
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.49	0.47	0.13	0.45	0.41	0.84	0.79	0.15	0.44	0.61	0.14

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 89 (74%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 90

### 3: Meridian Road & Eastonville Road

Maximum v/c Ratio: 0.87

Intersection LOS: C Intersection Signal Delay: 27.8 Intersection Capacity Utilization 80.5% ICU Level of Service D

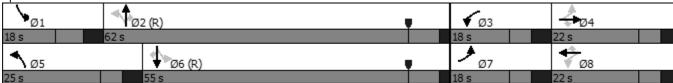
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Meridian Road & Eastonville Road



Synchro Report September 2022

Intersection									
nt Delay, s/veh	0.5								
lovement	EBL	EBR	NBL	NBT	SBT	SBR			
ane Configurations		7	ሻ	<b>^</b>	<b>↑</b> ↑				
raffic Vol, veh/h	0	89	53	1650	955	73			
uture Vol, veh/h	0	89	53	1650	955	73			
onflicting Peds, #/hr	0	0	0	0	0	0			
gn Control	Stop	Stop	Free	Free	Free	Free			
Channelized	_		-	None	-	None			
torage Length	-	0	275	-	-	-			
eh in Median Storage	e. # 0	-	-	0	0	-			
Grade, %	0	-	-	0	0	-			
eak Hour Factor	92	92	92	92	92	92			
eavy Vehicles, %	2	2	2	2	2	2			
vmt Flow	0	97	58	1793	1038	79			
oior/Minor	Minor2		Jaior1		10ior2	_			_
,			<u>Major1</u> 1117	0	Major2	^			
onflicting Flow All Stage 1	-	559	1117	-	-	0			
	-	-		-					
Stage 2	-	6.94	111	-	-	-			
itical Hdwy	-		4.14	-	-	-			
itical Hdwy Stg 1	-	-	-	-	-	-			
itical Hdwy Stg 2	-	- 20	-	-	-	-			
ollow-up Hdwy	-	3.32	2.22	-	-	-			
ot Cap-1 Maneuver	0	*700	975	-	-	-			
Stage 1	0	-	-	-	-	-			
Stage 2	0	-	-	-	-	-			
latoon blocked, %		1	1	-	-	-			
lov Cap-1 Maneuver	-	*700	975	-	-	-			
ov Cap-2 Maneuver	-	-	-	-	-	-			
Stage 1	-	-	-	-	-	-			
Stage 2	-	-	-	-	-	-			
pproach	EB		NB		SB				
CM Control Delay, s	11		0.3		0				
CM LOS	В								
inor Lane/Major Mvm	nt	NBL	NBT I	EBLn1	SBT	SBR			
apacity (veh/h)		975	-	700	-	-			
CM Lane V/C Ratio		0.059	-	0.138	-	-			
CM Control Delay (s)		8.9	-	11	-	-			
CM Lane LOS		A	-	В	-	-			
CM 95th %tile Q(veh)	)	0.2	-	0.5	-	-			
otes	!!	<b>6</b> D	la		١٥-			*- All	1-4.
Volume exceeds cap	pacity	\$: De	lay exc	eeds 30	JUS ·	+: Comp	outation Not Defined	*: All major volume in p	latoon

	•	<b>→</b>	•	•	<b>←</b>	•	4	<b>†</b>	<i>&gt;</i>	<b>&gt;</b>	ļ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1/1/	<b>†</b> †	7	ቪቪ	<b>†</b> †	7	ሻሻ	<b>^</b>	7	ቪቪ	<b>^</b>	7
Traffic Volume (vph)	393	339	176	89	591	150	237	390	26	159	847	869
Future Volume (vph)	393	339	176	89	591	150	237	390	26	159	847	869
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			314			250			314			628
Lane Group Flow (vph)	427	368	191	97	642	163	258	424	28	173	921	945
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			8			Free			Free
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	15.0	5.0	15.0		5.0	15.0	
Minimum Split (s)	12.5	22.0		12.5	22.0	22.0	13.5	22.0		13.5	22.0	
Total Split (s)	25.2	42.4		14.8	32.0	32.0	20.4	44.5		18.3	42.4	
Total Split (%)	21.0%	35.3%		12.3%	26.7%	26.7%	17.0%	37.1%		15.3%	35.3%	
Yellow Time (s)	4.0	5.0		4.0	5.0	5.0	5.0	5.0		5.0	5.0	
All-Red Time (s)	3.5	2.0		3.5	2.0	2.0	3.5	2.0		3.5	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.5	7.0		7.5	7.0	7.0	8.5	7.0		8.5	7.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Act Effct Green (s)	17.3	34.5	120.0	7.1	24.3	24.3	11.7	38.9	120.0	9.5	36.7	120.0
Actuated g/C Ratio	0.14	0.29	1.00	0.06	0.20	0.20	0.10	0.32	1.00	0.08	0.31	1.00
v/c Ratio	0.86	0.36	0.12	0.48	0.90	0.31	0.77	0.37	0.02	0.64	0.85	0.60
Control Delay	68.2	35.0	0.2	62.7	62.8	1.7	69.2	32.7	0.0	42.9	59.7	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.2	35.0	0.2	62.7	62.8	1.7	69.2	32.7	0.0	42.9	59.7	2.2
LOS	Е	С	Α	Е	Е	Α	Е	С	Α	D	Е	Α
Approach Delay		42.6			51.8			44.7			31.6	
Approach LOS		D			D			D			С	
Queue Length 50th (ft)	168	117	0	38	255	0	102	134	0	71	376	0
Queue Length 95th (ft)	#248	162	0	67	#351	0	#160	181	0	m70	m361	m0
Internal Link Dist (ft)		1105			882			544			1159	
Turn Bay Length (ft)	720			440			420			460		460
Base Capacity (vph)	506	1044	1583	208	737	527	340	1146	1583	280	1083	1583
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.35	0.12	0.47	0.87	0.31	0.76	0.37	0.02	0.62	0.85	0.60

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Oycle: 90

## 1: Meridian Road & E Woodmen Road

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 39.9 Intersection LOS: D
Intersection Capacity Utilization 82.7% ICU Level of Service E

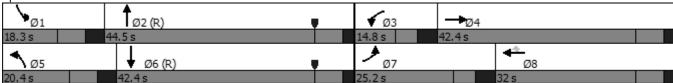
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Meridian Road & E Woodmen Road



September 2022 Synchro Report
SM ROCHA LLC

	•	•	1	<b>†</b>	<b>↓</b>	4
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	ሻሻ	7	ሻ	<b>^</b>	<b>^</b>	7
Traffic Volume (vph)	93	129	98	695	2011	161
Future Volume (vph)	93	129	98	695	2011	161
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.045			
Satd. Flow (perm)	3433	1583	84	3539	3539	1583
Satd. Flow (RTOR)		100				175
Lane Group Flow (vph)	101	140	107	755	2186	175
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	8.0	8.0	5.0	15.0	15.0	15.0
Minimum Split (s)	15.5	15.5	13.5	22.5	22.5	22.5
Total Split (s)	16.8	16.8	15.6	103.2	87.6	87.6
Total Split (%)	14.0%	14.0%	13.0%	86.0%	73.0%	73.0%
Yellow Time (s)	4.0	4.0	5.0	5.5	5.5	5.5
All-Red Time (s)	3.5	3.5	3.5	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	8.5	7.5	7.5	7.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	8.7	8.7	95.3	96.3	80.9	80.9
Actuated g/C Ratio	0.07	0.07	0.79	0.80	0.67	0.67
v/c Ratio	0.41	0.68	0.65	0.27	0.92	0.16
Control Delay	58.2	35.4	50.5	1.2	24.5	1.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.2	35.4	50.5	1.2	24.5	1.3
LOS	Е	D	D	Α	С	Α
Approach Delay	44.9			7.3	22.8	
Approach LOS	D			Α	С	
Queue Length 50th (ft)	39	30	33	11	710	0
Queue Length 95th (ft)	68	#108	m#97	26	863	22
Internal Link Dist (ft)	763			1273	472	
Turn Bay Length (ft)	160		700			330
Base Capacity (vph)	266	214	167	2840	2384	1123
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.65	0.64	0.27	0.92	0.16
	- 0.00	- 0.00	3.01	J,	3.02	J. 10

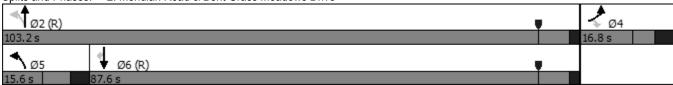
Cycle Length: 120 Actuated Cycle Length: 120

Offset: 95 (79%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow

Natural Cycle: 90

Maximum v/c Ratio: 0.92
Intersection Signal Delay: 20.5
Intersection LOS: C
Intersection Capacity Utilization 87.3%
ICU Level of Service E
Analysis Period (min) 15
# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Meridian Road & Bent Grass Meadows Drive



	۶	<b>→</b>	•	•	<b>←</b>	•	4	<b>†</b>	<b>/</b>	<b>/</b>	ţ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	<b>†</b>	7	Ţ	<b>†</b>	7	ሻ	<b>^</b>	7	7	<b>^</b>	7
Traffic Volume (vph)	215	61	160	144	71	54	231	631	60	165	1886	96
Future Volume (vph)	215	61	160	144	71	54	231	631	60	165	1886	96
Satd. Flow (prot)	3433	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.523			0.714			0.061			0.361		
Satd. Flow (perm)	1890	1863	1583	1330	1863	1583	114	3539	1583	672	3539	1583
Satd. Flow (RTOR)			186			186			177			177
Lane Group Flow (vph)	234	66	174	157	77	59	251	686	65	179	2050	104
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	8.0	8.0	5.0	8.0	8.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	12.5	14.5	14.5	12.5	14.5	14.5	12.5	22.5	22.5	13.5	22.5	22.5
Total Split (s)	13.0	15.0	15.0	13.5	15.5	15.5	19.0	72.5	72.5	19.0	72.5	72.5
Total Split (%)	10.8%	12.5%	12.5%	11.3%	12.9%	12.9%	15.8%	60.4%	60.4%	15.8%	60.4%	60.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	5.0	5.5	5.5
All-Red Time (s)	3.5	2.5	2.5	3.5	2.5	2.5	3.5	2.0	2.0	3.5	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	0.0
Total Lost Time (s)	7.5	6.5	6.5	7.5	6.5	6.5	7.5	7.5	7.5	8.5	7.5	7.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	14.4	8.3	8.3	12.3	8.7	8.7	78.0	66.4	66.4	73.3	65.0	65.0
Actuated g/C Ratio	0.12	0.07	0.07	0.10	0.07	0.07	0.65	0.55	0.55	0.61	0.54	0.54
v/c Ratio	0.70	0.51	0.62	0.99	0.57	0.21	1.07	0.35	0.07	0.36	1.07	0.11
Control Delay	58.4	68.2	16.4	119.2	70.6	1.6	122.0	3.1	0.1	12.3	79.4	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.4	68.2	16.4	119.2	70.6	1.6	122.0	3.1	0.1	12.3	79.4	2.3
LOS	E	E	В	F	E	Α	F	Α	Α	В	E	Α
Approach Delay		44.4			82.8			32.7			70.8	
Approach LOS		D			F			С			E	
Queue Length 50th (ft)	83	50	0	111	59	0	~164	20	0	70	~912	0
Queue Length 95th (ft)	#150	98	60	#242	#111	0	m#306	m25	m0	m74	#1055	m0
Internal Link Dist (ft)		511			570			1159			643	
Turn Bay Length (ft)	100		100	100		100	100		400	375		400
Base Capacity (vph)	336	131	284	158	139	290	235	1956	954	513	1916	938
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.50	0.61	0.99	0.55	0.20	1.07	0.35	0.07	0.35	1.07	0.11

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 45 (38%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 150

## 3: Meridian Road & Eastonville Road

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 59.3 Intersection LOS: E
Intersection Capacity Utilization 97.5% ICU Level of Service F

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

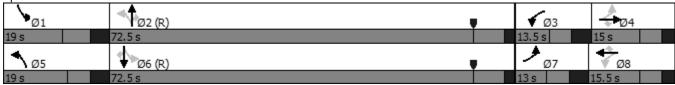
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Meridian Road & Eastonville Road



ntersection									
Delay, s/veh	1.3								
vement	EBL	EBR	NBL	NBT	SBT	SBR			
ne Configurations		7	ሻ	<b>^</b>	<b>†</b> 1>				
iffic Vol, veh/h	0	102	58	807	2055	85			
ure Vol, veh/h	0	102	58	807	2055	85			
nflicting Peds, #/hr	0	0	0	0	0	0			
n Control	Stop	Stop	Free	Free	Free	Free			
Channelized	-	None	-	None	-	None			
orage Length	-	0	275	-	-	-			
h in Median Storage	e. # 0	-	-	0	0	-			
ade, %	0	-	-	0	0	-			
ak Hour Factor	92	92	92	92	92	92			
avy Vehicles, %	2	2	2	2	2	2			
mt Flow	0	111	63	877	2234	92			
jor/Minor	Minor2		Major1	N	Major2				
nflicting Flow All			Major1 2326	0		0			
Stage 1	-	1103	2320		-	0			
Stage 1	-	-	-	-	-	-			
ical Hdwy		6.94	4.14	-	-	-			
cal Hdwy Stg 1	-	0.34	4.14	-		-			
ical Hdwy Stg 1	-	-	-	-	_	-			
low-up Hdwy	_	3.32	2.22	-		-			
Cap-1 Maneuver	0	*245	361	_	-	-			
Stage 1	0	245	301	_	_	_			
Stage 2	0	_	_	_	_	-			
toon blocked, %	- 0	1	1	_	_	_			
ov Cap-1 Maneuver	_	*245	361	_	_	_			
ov Cap-1 Maneuver	_	245	- 501	_	_	_			
Stage 1	_	_	-	-	-	_			
Stage 2	_	-	-	_	_	_			
2.0.90 2									
nraaah	ED		ND		CD				
proach	EB		NB		SB				
CM Control Delay, s	31.3		1.1		0				
CM LOS	D								
or Lane/Major Mvm	nt	NBL	NBT	EBLn1	SBT	SBR			
pacity (veh/h)		361	-	245	-	-			
M Lane V/C Ratio		0.175	-	0.453	-	-			
M Control Delay (s)		17.1	-	31.3	-	-			
M Lane LOS		С	-	D	-	-			
M 95th %tile Q(veh	)	0.6	-	2.2	-	-			
ites									
olume exceeds ca	nacity	\$. Da	alay aya	eeds 30	ηne	T. Com	outation Not Defined	*: All major volume in plat	toon
Olullie exceeds (d)	pacity	φ. De	ay exc	ceus st	005	r. Comp	Julation Not Delined	. Ali major volume in piai	UUII

	•	<b>→</b>	•	•	<b>←</b>	•	4	<b>†</b>	<i>&gt;</i>	<b>&gt;</b>	ļ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	<b>†</b> †	7	ሻሻ	<b>^</b>	7	ሻሻ	<b>^</b>	7	ሻሻ	<b>†</b> †	7
Traffic Volume (vph)	1042	708	240	168	545	261	308	1086	159	262	723	624
Future Volume (vph)	1042	708	240	168	545	261	308	1086	159	262	723	624
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			314			250			314			678
Lane Group Flow (vph)	1133	770	261	183	592	284	335	1180	173	285	786	678
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			8			Free			Free
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	15.0	5.0	15.0		5.0	15.0	
Minimum Split (s)	12.5	22.0		12.5	22.0	22.0	13.5	22.0		13.5	22.0	
Total Split (s)	38.0	43.1		18.9	24.0	24.0	21.0	42.0		16.0	37.0	
Total Split (%)	31.7%	35.9%		15.8%	20.0%	20.0%	17.5%	35.0%		13.3%	30.8%	
Yellow Time (s)	4.0	5.0		4.0	5.0	5.0	5.0	5.0		5.0	5.0	
All-Red Time (s)	3.5	2.0		3.5	2.0	2.0	3.5	2.0		3.5	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.5	7.0		7.5	7.0	7.0	8.5	7.0		8.5	7.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Act Effct Green (s)	30.5	36.9	120.0	10.6	17.0	17.0	12.5	35.0	120.0	7.5	30.0	120.0
Actuated g/C Ratio	0.25	0.31	1.00	0.09	0.14	0.14	0.10	0.29	1.00	0.06	0.25	1.00
v/c Ratio	1.30	0.71	0.16	0.60	1.18	0.65	0.94	1.14	0.11	1.33	0.89	0.43
Control Delay	180.2	41.3	0.2	61.3	145.4	16.4	87.9	115.4	0.1	210.4	79.0	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	180.2	41.3	0.2	61.3	145.4	16.4	87.9	115.4	0.1	210.4	79.0	0.9
LOS	F	D	Α	Е	F	В	F	F	Α	F	Е	Α
Approach Delay		109.1			96.3			98.1			70.2	
Approach LOS		F			F			F			Е	
Queue Length 50th (ft)	~578	280	0	71	~289	23	135	~563	0	~151	338	0
Queue Length 95th (ft)	#710	352	0	109	#406	113	#225	#700	0	m#205	m#427	m0
Internal Link Dist (ft)		1105			882			544			1159	
Turn Bay Length (ft)	720			440			420			460		460
Base Capacity (vph)	872	1087	1583	326	501	438	357	1032	1583	214	884	1583
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.30	0.71	0.16	0.56	1.18	0.65	0.94	1.14	0.11	1.33	0.89	0.43

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 53 (44%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow Natural Cycle: 150

Control Type: Actuated-Coordinated

September 2022

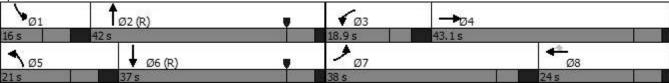
#### 1: Meridian Road & E Woodmen Road

Maximum v/c Ratio: 1.33
Intersection Signal Delay: 94.0
Intersection Capacity Utilization 106.9%
ICU Level of Service G

Analysis Period (min) 15

- Volume exceeds capacity, queue is theoretically infinite.
  - Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
  - Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.





	•	•	•	<b>†</b>	<b>↓</b>	1
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	ሻሻ	7	<u>ች</u>	<b>†</b> †	<u>↑</u>	7
Traffic Volume (vph)	119	108	93	2298	1312	147
Future Volume (vph)	119	108	93	2298	1312	147
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.126			.000
Satd. Flow (perm)	3433	1583	235	3539	3539	1583
Satd. Flow (RTOR)	0100	117	200	- 5555	- 5555	160
Lane Group Flow (vph)	129	117	101	2498	1426	160
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4	1 01111	5	2	6	ı Giili
Permitted Phases	7	4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase	4	4	ວ		U	U
	0.0	0.0	F 0	15.0	15.0	15.0
Minimum Initial (s)	8.0	8.0	5.0	15.0	15.0	15.0
Minimum Split (s)	15.5	15.5	13.5	22.5	22.5	22.5
Total Split (s)	17.0	17.0	15.4	103.0	87.6	87.6
Total Split (%)	14.2%	14.2%	12.8%	85.8%	73.0%	73.0%
Yellow Time (s)	4.0	4.0	5.0	5.5	5.5	5.5
All-Red Time (s)	3.5	3.5	3.5	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	8.5	7.5	7.5	7.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	9.0	9.0	95.0	96.0	80.8	80.8
Actuated g/C Ratio	0.08	0.08	0.79	0.80	0.67	0.67
v/c Ratio	0.50	0.52	0.37	0.88	0.60	0.14
Control Delay	60.2	17.8	2.0	8.8	12.1	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.2	17.8	2.0	8.8	12.1	1.4
LOS	E	17.0 B	2.0 A	Α	12.1 B	Α
Approach Delay	40.1	U	Α	8.6	11.0	
Approach LOS	40.1 D			0.0 A	11.0 B	
	50	0	2	920	296	0
Queue Length 50th (ft)		0				0
Queue Length 95th (ft)	82	58	m1	m900	357	22
Internal Link Dist (ft)	763		700	1273	472	000
Turn Bay Length (ft)	160	000	700	0000	0007	330
Base Capacity (vph)	271	233	274	2830	2384	1118
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.50	0.37	0.88	0.60	0.14
Intersection Summary						

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 28 (23%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow

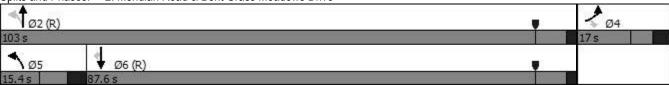
Natural Oycle: 90

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 11.2	Intersection LOS: B	
Intersection Capacity Utilization 82.7%	ICU Level of Service E	
Analysis Period (min) 15		

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Meridian Road & Bent Grass Meadows Drive



Bane Group		۶	<b>→</b>	•	•	<b>←</b>	•	4	<b>†</b>	<b>/</b>	<b>/</b>	ţ	✓
Traffic Volume (vph)   330	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Future Volume (vph)   330	Lane Configurations	14.14	<b>†</b>	7	Ţ	<b>†</b>	7	ሻ	<b>^</b>	7	Ţ	<b>^</b>	7
Satis   Flow (proft)   Satis			146		47		200	317	1885	173		1206	
Fit Permitted	Future Volume (vph)	330	146	194	47	100	200	317	1885	173	123	1206	101
Satd. Flow (perm)   1655   1863   1583   1222   1863   1583   127   3539   1583   145   3539   1583   Satd. Flow (RTCR)   255   255   188   241   31	Satd. Flow (prot)	3433	1863	1583	1770	1863	1583	1770	3539	1583		3539	1583
Satt   Flow (RTOR)   Sat   S													
Lane Group Flow (vph)   359   159   211   51   109   217   345   2049   188   134   1311   110     Turn Type	(1 /	1655	1863		1222	1863		127	3539		145	3539	
Turn Type	Satd. Flow (RTOR)												
Protected Phases	,	359			51		217	345			134		
Permitted Phases		pm+pt		Perm	pm+pt		Perm	pm+pt		Perm	pm+pt		Perm
Detector Phase   7			4			8			2			6	
Switch Phase   Swit											6		
Minimum Initial (s)   5.0   8.0   8.0   5.0   8.0   8.0   5.0   15.0   15.0   15.0   15.0   15.0   Minimum Spit (s)   12.5   14.5   14.5   12.5   14.5   12.5   14.5   12.5   2		7	4	4	3	8	8	5	2	2	1	6	6
Minimum Split (s)   12.5													
Total Split (s)	` ,												
Total Split (%)	Minimum Split (s)												
Yellow Time (s)         4.0         4.0         4.0         4.0         4.0         4.0         4.0         5.5         4.0         2.0													
All-Red Time (s)         3.5         2.5         2.5         3.5         2.5         2.5         3.5         2.0         2.0         3.5         2.0         2.0           Lost Time Adjust (s)         0.0													
Lost Time Adjust (s)   0.0													
Total Lost Time (s)   7.5   6.5   6.5   7.5   6.5   6.5   7.5   6.5   6.5   7.5   7.5   7.5   7.5   7.5   7.5   7.5   7.5   1.5													
Lead/Lag         Lead         Lag         Lead         Lag													
Lead-Lag Optimize?         Yes			6.5							7.5		7.5	
Recall Mode         None         None         None         None         None         None         None         None         C-Max         C													
Act Effct Green (s)         19.9         14.1         14.1         13.0         8.5         8.5         81.5         67.5         67.5         57.2         52.7         52.7           Actuated g/C Ratio         0.17         0.12         0.12         0.11         0.07         0.07         0.68         0.56         0.56         0.48         0.44         0.44           v/c Ratio         0.90         0.73         0.51         0.32         0.83         0.62         0.91         1.03         0.19         0.94         0.84         0.13           Control Delay         71.3         72.2         7.4         46.6         98.9         11.5         54.9         36.3         2.7         80.6         55.6         3.2           Queue Delay         0.0         0													
Actuated g/C Ratio         0.17         0.12         0.12         0.11         0.07         0.07         0.68         0.56         0.48         0.44         0.44           v/c Ratio         0.90         0.73         0.51         0.32         0.83         0.62         0.91         1.03         0.19         0.94         0.84         0.13           Control Delay         71.3         72.2         7.4         46.6         98.9         11.5         54.9         36.3         2.7         80.6         55.6         3.2           Queue Delay         0.0 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>													
V/c Ratio         0.90         0.73         0.51         0.32         0.83         0.62         0.91         1.03         0.19         0.94         0.84         0.13           Control Delay         71.3         72.2         7.4         46.6         98.9         11.5         54.9         36.3         2.7         80.6         55.6         3.2           Queue Delay         0.0	. ,												
Control Delay         71.3         72.2         7.4         46.6         98.9         11.5         54.9         36.3         2.7         80.6         55.6         3.2           Queue Delay         0.0													
Queue Delay         0.0 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>													
Total Delay         71.3         72.2         7.4         46.6         98.9         11.5         54.9         36.3         2.7         80.6         55.6         3.2           LOS         E         E         E         A         D         F         B         D         D         A         F         E         A           Approach Delay         53.0         41.5         36.3         36.3         54.0         54.0           Approach LOS         D         A         15         55         1         14         D         D         15         15         15         15         15	•												
LOS         E         E         A         D         F         B         D         D         A         F         E         A           Approach Delay         53.0         41.5         36.3         54.0           Approach LOS         D         D         D         D         D           Queue Length 50th (ft)         129         124         0         33         85         0         236         ~738         13         64         565         1           Queue Length 95th (ft)         #174         #253         39         69         #189         46         m201         m300         m9         #180         642         m25           Internal Link Dist (ft)         552         570         1159         643         1159         643           Turn Bay Length (ft)         100         100         100         100         100         400         375         400           Base Capacity (vph)         400         218         411         157         131         349         394         1990         972         143         1553         832           Starvation Cap Reductn         0         0         0         0         0 <td< td=""><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	•												
Approach Delay         53.0         41.5         36.3         54.0           Approach LOS         D         D         D         D         D           Queue Length 50th (ft)         129         124         0         33         85         0         236         ~738         13         64         565         1           Queue Length 95th (ft)         #174         #253         39         69         #189         46         m201         m300         m9         #180         642         m25           Internal Link Dist (ft)         552         570         1159         643           Turn Bay Length (ft)         100         100         100         100         400         375         400           Base Capacity (vph)         400         218         411         157         131         349         394         1990         972         143         1553         832           Starvation Cap Reductn         0								54.9					
Approach LOS         D         D         D         D         D           Queue Length 50th (ft)         129         124         0         33         85         0         236         ~738         13         64         565         1           Queue Length 95th (ft)         #174         #253         39         69         #189         46         m201         m300         m9         #180         642         m25           Internal Link Dist (ft)         552         570         1159         643           Turn Bay Length (ft)         100         100         100         100         400         375         400           Base Capacity (vph)         400         218         411         157         131         349         394         1990         972         143         1553         832           Starvation Cap Reductn         0	LOS	E		Α	D		В	D		Α	F		Α
Queue Length 50th (ft)         129         124         0         33         85         0         236         ~738         13         64         565         1           Queue Length 95th (ft)         #174         #253         39         69         #189         46         m201         m300         m9         #180         642         m25           Internal Link Dist (ft)         552         570         1159         643         Turn Bay Length (ft)         100         100         100         100         400         375         400           Base Capacity (vph)         400         218         411         157         131         349         394         1990         972         143         1553         832           Starvation Cap Reductn         0												54.0	
Queue Length 95th (ft)         #174         #253         39         69         #189         46         m201         m300         m9         #180         642         m25           Internal Link Dist (ft)         552         570         1159         643           Turn Bay Length (ft)         100         100         100         100         400         375         400           Base Capacity (vph)         400         218         411         157         131         349         394         1990         972         143         1553         832           Starvation Cap Reductn         0         0         0         0         0         0         0         0         0         0         0         0           Spillback Cap Reductn         0 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>													
Internal Link Dist (ft)         552         570         1159         643           Turn Bay Length (ft)         100         100         100         100         400         375         400           Base Capacity (vph)         400         218         411         157         131         349         394         1990         972         143         1553         832           Starvation Cap Reductn         0	Queue Length 50th (ft)		124	0	33	85		236	~738	13		565	1
Turn Bay Length (ft)         100         100         100         100         100         400         375         400           Base Capacity (vph)         400         218         411         157         131         349         394         1990         972         143         1553         832           Starvation Cap Reductn         0 <td></td> <td>#174</td> <td></td> <td>39</td> <td>69</td> <td></td> <td>46</td> <td>m201</td> <td></td> <td>m9</td> <td>#180</td> <td></td> <td>m25</td>		#174		39	69		46	m201		m9	#180		m25
Base Capacity (vph)         400         218         411         157         131         349         394         1990         972         143         1553         832           Starvation Cap Reductn         0			552			570			1159			643	
Starvation Cap Reductn         0					100			100					
Spillback Cap Reductn         0		400	218	411	157	131	349	394	1990	972	143	1553	832
Storage Cap Reductn 0 0 0 0 0 0 0 0 0 0 0	Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio 0.90 0.73 0.51 0.32 0.83 0.62 0.88 1.03 0.19 0.94 0.84 0.13													
	Reduced v/c Ratio	0.90	0.73	0.51	0.32	0.83	0.62	0.88	1.03	0.19	0.94	0.84	0.13

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 89 (74%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 140

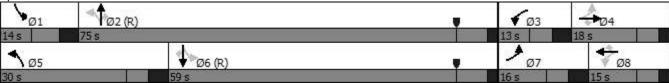
## 3: Meridian Road & Eastonville Road

Maximum v/c Ratio: 1.03 Intersection Signal Delay: 44.3 Intersection LOS: D Intersection Capacity Utilization 99.2% ICU Level of Service F

Analysis Period (min) 15

- Volume exceeds capacity, queue is theoretically infinite.
  - Queue shown is maximum after two cycles.
- 95th percentile volume exceeds capacity, queue may be longer.
  - Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Meridian Road & Eastonville Road





Intersection						
Int Delay, s/veh	0.5					
Mayamant	EDI	EDD	NDI	NDT	CDT	CDD
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		7	<u>ነ</u>	<b>^</b>	<b>↑</b> ↑	
Traffic Vol, veh/h	0	93	59	2330	1345	75
Future Vol, veh/h	0	93	59	2330	1345	75
Conflicting Peds, #/hr		0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	275	-	-	-
Veh in Median Storag	ie.# 0	-	-	0	0	-
Grade, %	0	_	_	0	0	_
Peak Hour Factor	92	92	92	92	92	92
	2	2	2	2	2	2
Heavy Vehicles, %						
Mvmt Flow	0	101	64	2533	1462	82
Major/Minor	Minor2	ľ	Major1	N	Major2	
Conflicting Flow All	-	772	1544	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	- 0.04	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	*548	740	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	_	_	_	-
Platoon blocked, %		1	1	_	_	_
Mov Cap-1 Maneuve	r -	*548	740		_	_
			740	-	_	-
Mov Cap-2 Maneuver	r -	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Annroach	EB	-	NB	-	SB	-
Approach						
HCM Control Delay, s			0.3		0	
HCM LOS	В					
Minor Lane/Major Mv	mt	NBL	NRT	EBLn1	SBT	SBR
	IIIC		ווטוו			אומט
Capacity (veh/h)		740	-	548	-	-
HCM Lane V/C Ratio		0.087	-	0.184	-	-
HCM Control Delay (s	5)	10.3	-	13	-	-
HCM Lane LOS		В	-	В	-	-
HCM 95th %tile Q(ve	h)	0.3	-	0.7	-	-
Notos						
Notes		A -			\ <u>\</u>	
~: Volume exceeds ca	apacity	\$: De	lay exc	eeds 30	)Us -	+: Comp