

TRAFFIC IMPACT STUDY

For

KT Development Superior, Colorado

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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 KT Development.

This proposed lodging development consists of a 114-suite hotel. The development is located near the east corner of McCaslin Boulevard and Marshall Road in Superior, Colorado.

Study Area Boundaries

The study area to be examined in this analysis encompasses the intersections of McCaslin Boulevard with the U.S. Highway 36 interchange, Marshall Road, and Main Street and includes proposed site access drives.

Figure 1 illustrates location of the site and study intersections.

Site Description

Land for the development is currently vacant and surrounded by a mix of commercial, residential, recreational, and lodging land uses.

The proposed development is understood to entail the new construction of an all-suites hotel accommodating 114 rooms.

Access to the development is existing and provided via two full-movement access drives onto Marshall Road (referred to as Access A and Access B).

For purposes of this study, it is anticipated that development construction would be completed by end of Year 2025.

General site and access locations are shown on Figure 1.

A conceptual site plan, as prepared by Entitlement and Engineering Solutions, Inc. is shown on Figure 2. This plan is provided for illustrative purposes only.



Not to Scale



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Figure 1
SITE LOCATION

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Existing and Committed Surface Transportation Network

Within the study area, Marshall Road is the primary roadway that will accommodate traffic to and from the proposed development. The secondary roadways include McCaslin Boulevard, U.S. Highway 36, and Main Street. A brief description of each roadway, based on the Town's Transportation Plan¹, is provided below:

Marshall Road west of McCaslin Boulevard is generally an east-west state highway having four through lanes (two lanes in each direction) with a combination of shared and exclusive turn lanes at the intersection within the study area. The Colorado Department of Transportation (CDOT) categorizes the adjacent segment of Marshall Road (State Highway 170) as a Non-Rural Arterial (NR-B) and provides a posted speed limit of 35 MPH.

East of McCaslin Boulevard, Marshall Road is generally a north-south collector roadway that provides two to three through lanes with a combination of shared and exclusive turn lanes at the intersections within the study area. Marshall Road provides a posted speed limit of 15 MPH.

McCaslin Boulevard north of Marshall Road is a north-south state highway having six through lanes (three lanes in each direction) with a combination of shared and exclusive turn lanes at the intersections within the study area. CDOT categorizes the adjacent segment of Marshall Road (State Highway 170) as a Non-Rural Arterial (NR-B) and provides a posted speed limit of 35 MPH.

South of Marshall Road, McCaslin Boulevard is a north-south major arterial roadway providing four to six through lanes (two to three in each direction) with a combination of shared and exclusive turn lanes at the intersections within the study area. McCaslin Boulevard continues to provide a posted speed limit of 35 MPH.

Main Street is an east-west collector 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. Main Street provides a posted speed limit of 15 MPH.

U.S. Highway 36 (Denver Boulder Turnpike) at McCaslin Boulevard is an existing diverging diamond interchange with U.S. Highway 36 travel below McCaslin Boulevard. The interchange is within CDOT jurisdiction. Eastbound and westbound on/off ramps have a posted advisory speed limit of 45 MPH. The eastbound interchange ramp has four approach lanes and the westbound interchange ramp has two approach lanes with exclusive turn lanes at McCaslin Boulevard.

¹ Transportation Plan 2014 Update, Town of Superior, February 2014.

The study intersections of McCaslin Boulevard with U.S. Highway 36 eastbound ramp, U.S. Highway 36 westbound ramp, and Marshall Road are signalized. The McCaslin Boulevard intersection with Main Street operates as a roundabout. 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.

No regional or specific improvements for the above described roadways are known to be planned or committed at this time. The study area roadways appear to be built to their ultimate cross-sections.

II. Existing Traffic Conditions

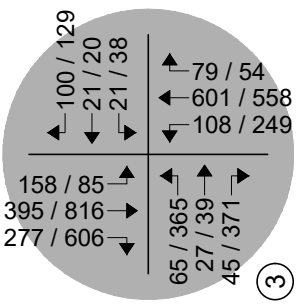
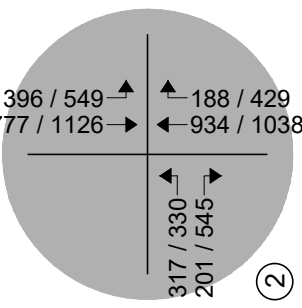
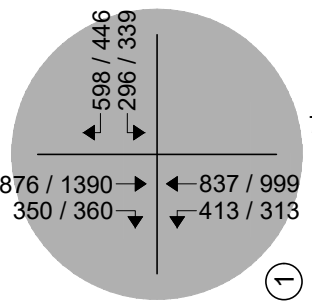
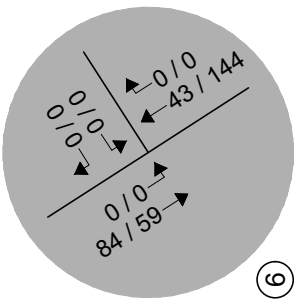
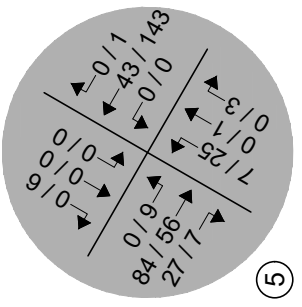
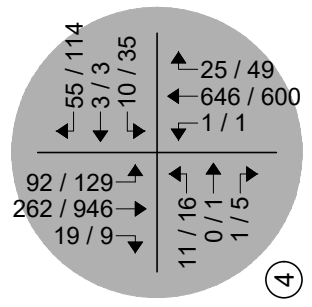
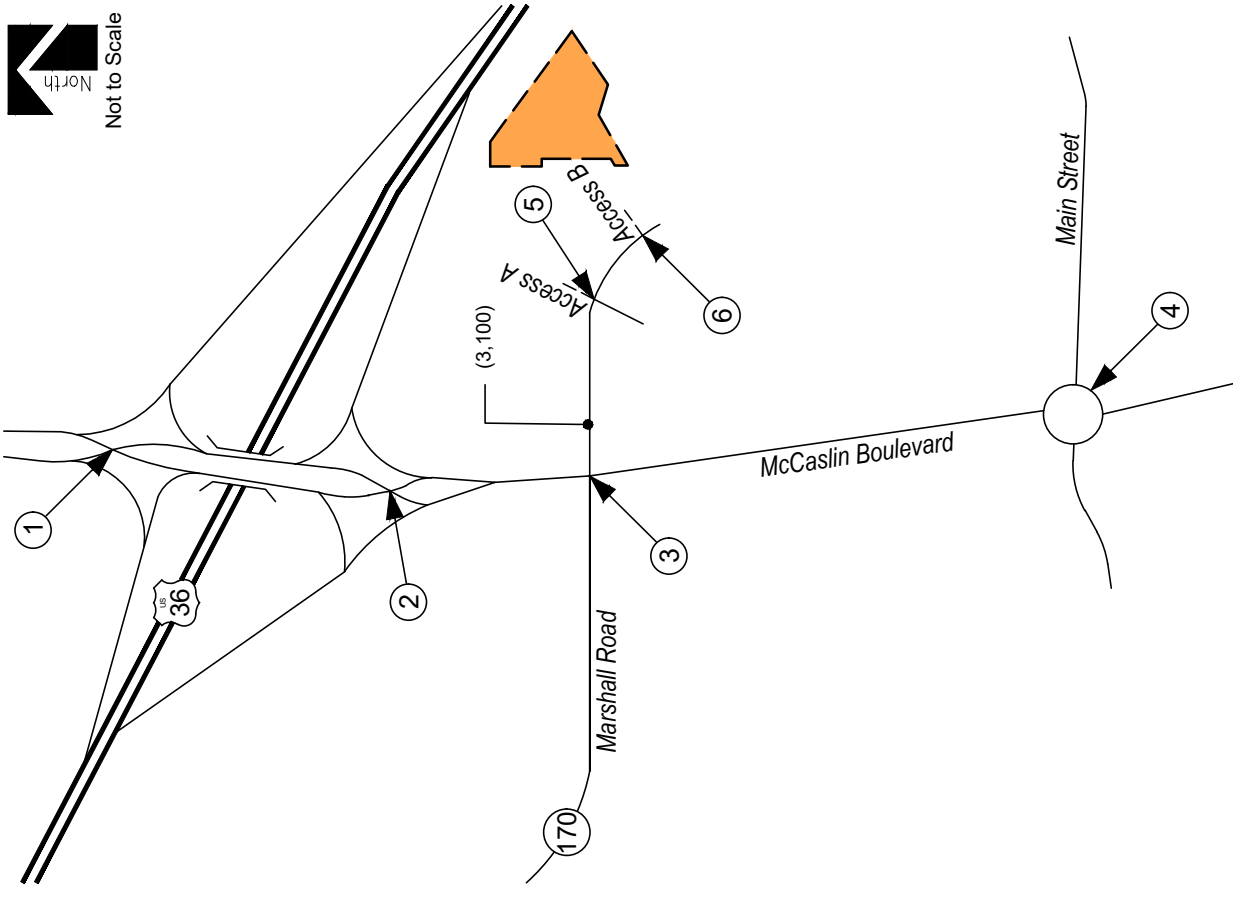
Morning (AM) and afternoon (PM) peak hour traffic counts were collected at the intersections of McCaslin Boulevard with the U.S. Highway 36 eastbound and westbound on/off ramps and the intersection of Marshall Road and Access A. Counts were collected on October 17, 2023, with AM peak hour counts being 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 shown for the intersections of McCaslin Boulevard with Marshall Road and Main Street along with 24-hour traffic volumes on Marshall Road were obtained from the Coal Creek Innovation Park Traffic Impact Analysis². Referenced traffic count data was collected April 5, 2023.

Newly collected and referenced counts representing existing traffic volumes are shown on Figure 3. Existing intersection geometry is shown on Figure 3a. Traffic count data is included for reference in Appendix A.

Existing signal timing parameters for the intersections of McCaslin Boulevard with U.S. Highway 36 eastbound off ramps, U.S. Highway 36 westbound off ramps, and Marshall Road were obtained from the Town of Superior and used throughout this study to the best extent possible in order to remain consistent with existing signal coordination plans. Town signal timing information received is included for reference in Appendix A.

² Coal Creek Innovation Park Traffic Impact Analysis, LSC Transportation Consultants, LLC, July 2023.



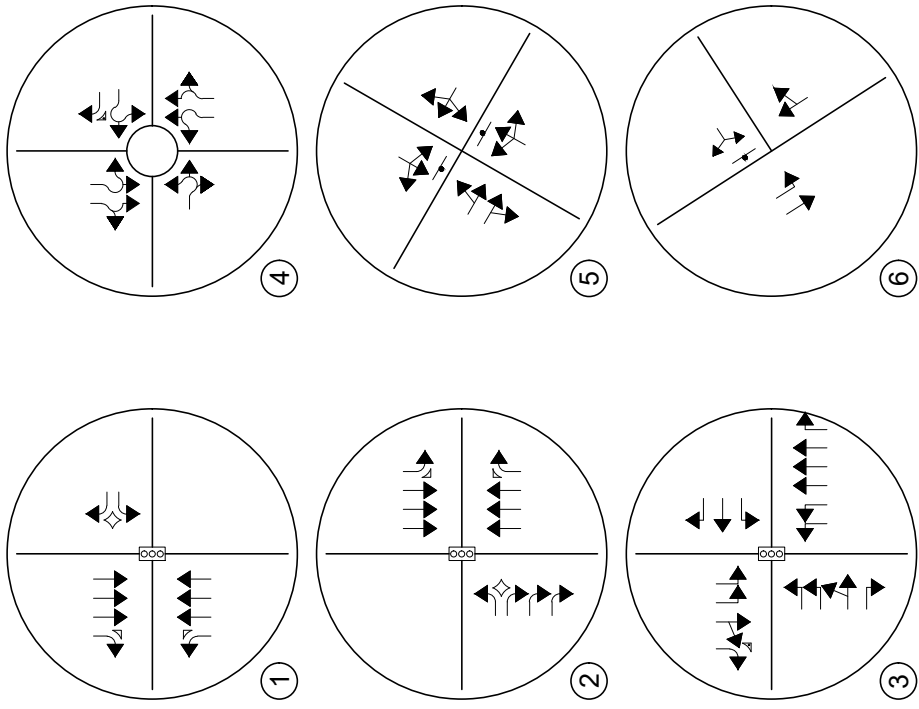
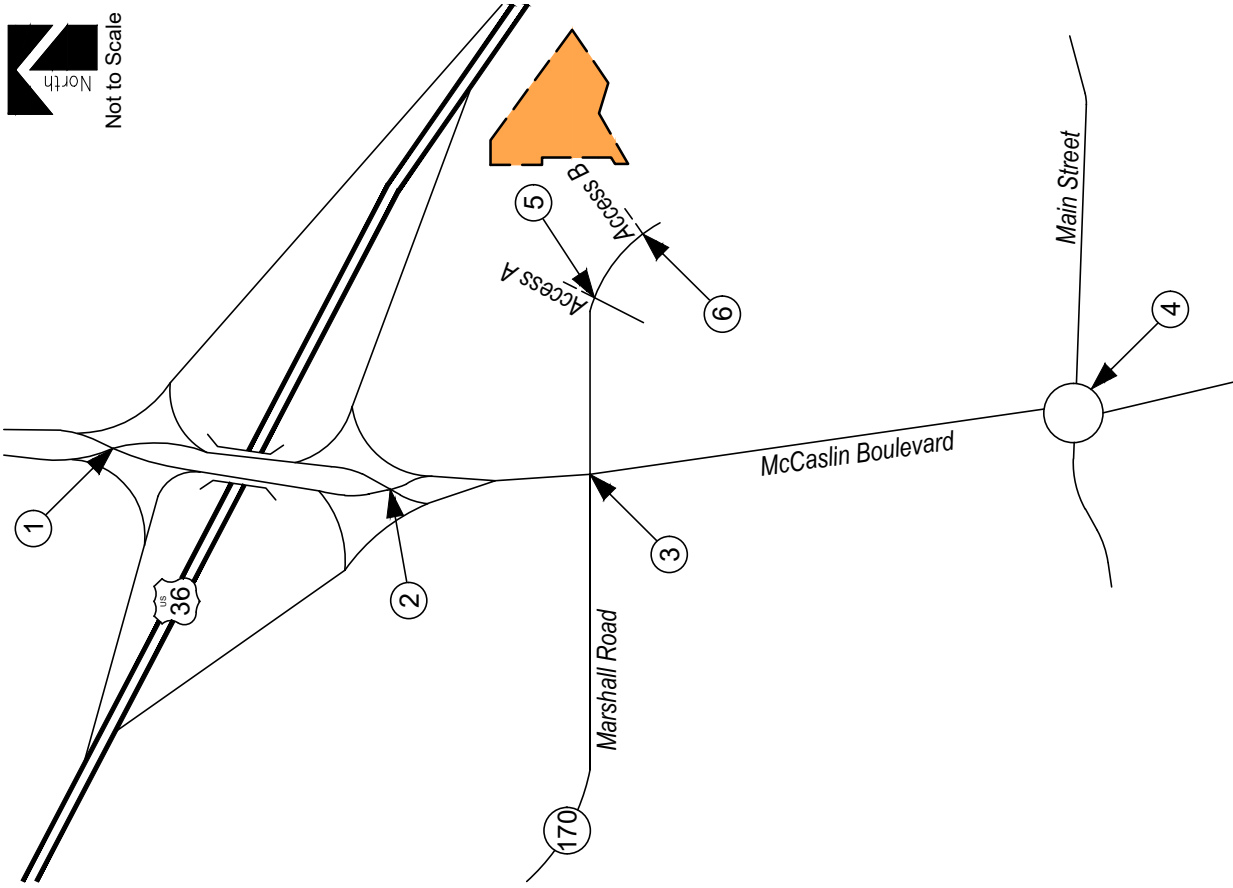
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- Study Intersection
- Volumes
- Development Site

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Figure 3
EXISTING TRAFFIC
Volumes
AM / PM Peak Hour
(ADT) : Average Daily Traffic



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

-  Study Intersection
-  Lane Geometry
-  Development Site

Figure 3a
EXISTING TRAFFIC
 Intersection Geometry
 AM / PM Peak Hour
 (ADT) : Average Daily Traffic

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Peak Hour Intersection Levels of Service – Existing Traffic

The Signalized, Unsignalized, and Roundabout Intersection Analysis techniques, as published in the Highway Capacity Manual (HCM), 6th 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 for Signalized and Unsignalized intersections and based on the volume to capacity ratio and control delay for each approach for Roundabout intersections.

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 LANE GROUPS	LEVEL OF SERVICE	
	AM PEAK HOUR	PM PEAK HOUR
McCaslin Boulevard / U.S. 36 Eastbound Ramp (Signalized)	C (24.1)	C (23.5)
McCaslin Boulevard / U.S. 36 Eastbound Ramp (Stop-Controlled) Eastbound Left	C	C
McCaslin Boulevard / U.S. 36 Westbound Ramp (Signalized)	C (30.4)	C (28.5)
McCaslin Boulevard / U.S. 36 Westbound Ramp (Stop-Controlled) Westbound Left	C	D
McCaslin Boulevard / Marshall Road (Signalized)	A (10.0)	B (16.8)
McCaslin Boulevard / Main Street (Roundabout) Eastbound Left, Through and Right Westbound Left and Through Northbound Left and Through Northbound Through and Right Southbound Left and Through Southbound Through and Right	A A A A A A	A A A A A A
Marshall Road / Access A (Stop-Controlled) Eastbound Left and Through Westbound Left, Through and Right Northbound Left, Through and Right Southbound Left, Through and Right	A A A A	A A B A
Marshall Road / Access B (Stop-Controlled) Westbound Left and Right Southbound Left	A A	A A

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

Existing Traffic Analysis Results

Under existing conditions, operational analysis shows that the signalized intersections of McCaslin Boulevard with U.S. Highway 36 eastbound and westbound ramps have overall operations at LOS C during the morning and the afternoon peak traffic hours.

It is important to note that both on-ramps have a yield-controlled left-turn movement onto McCaslin Boulevard. For purposes of this analysis, said movements were analyzed under stop-control with projected LOS C and D turn movement operations during either peak traffic hour.

Operational analysis shows that the signalized intersection of McCaslin Boulevard and Marshall Road has overall operations at LOS A during the morning peak traffic hour and LOS B during the afternoon peak traffic hour.

The roundabout-controlled intersection of McCaslin Boulevard with Main Street has turning movement operations at LOS A during the morning and the afternoon peak traffic hours.

The unsignalized intersection of Marshall Road with Access A has turn movement operations at LOS A during the morning peak traffic hour and LOS B or better during the afternoon peak traffic hour.

The unsignalized intersection of Marshall Road with Access B has turn movement operations at LOS A during the morning and the afternoon 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.

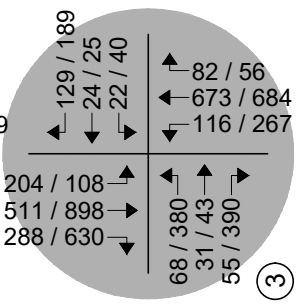
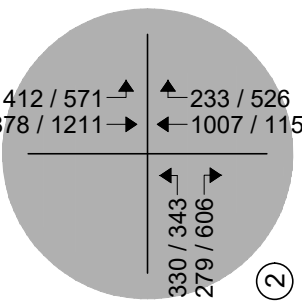
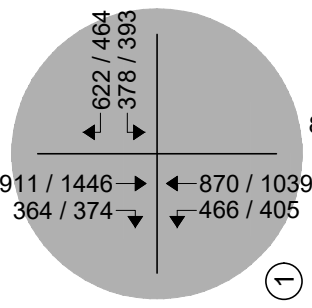
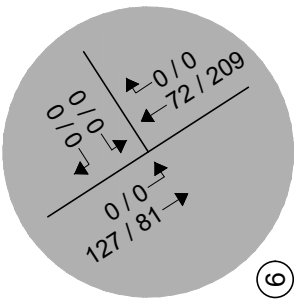
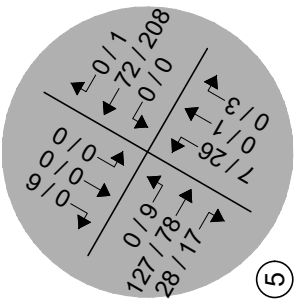
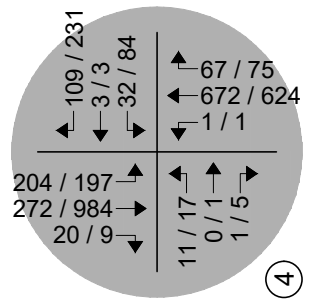
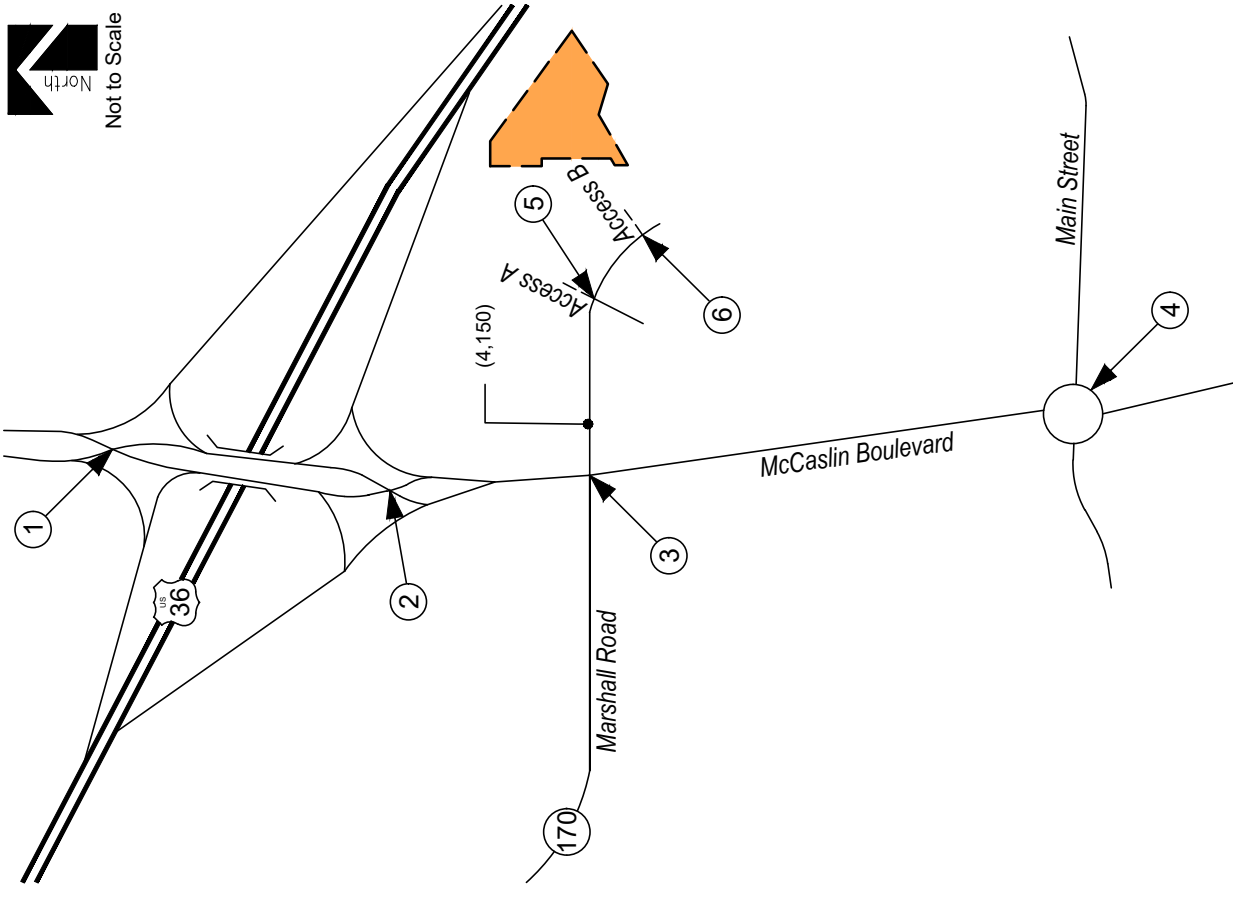
To account for projected increases in background traffic for Years 2025 and 2043, a compounded annual growth rate was determined using historical traffic data provided by CDOT's Online Transportation Information System (OTIS) along the adjacent segment of Marshall Road (State Highway 170) which anticipates a 20-year growth rate between one and two percent. Therefore, in order to provide for a conservative analysis, a growth rate of approximately two percent was applied to existing traffic volumes.

To account for projected traffic from adjacent developments not yet built, trip generations from the Coal Creek Innovation Park Traffic Impact Analysis traffic study were added to background traffic volumes.

Pursuant to the area roadway improvements discussed in Section I, Year 2025 and Year 2043 background traffic conditions assume no roadway improvements to accommodate regional transportation demands. Year 2043 assumes existing signal timing parameters for the intersections of McCaslin Boulevard with U.S. Highway 36 eastbound off ramps, U.S. Highway 36 westbound off ramps, and Marshall Road with optimized intersection splits in effort to better long-term intersection performance.

Projected background traffic volumes and intersection geometry for Year 2025 are shown on Figure 4 and Figure 4a, respectively.

Projected background traffic volumes and intersection geometry for Year 2043 are shown on Figure 5 and Figure 5a, respectively.



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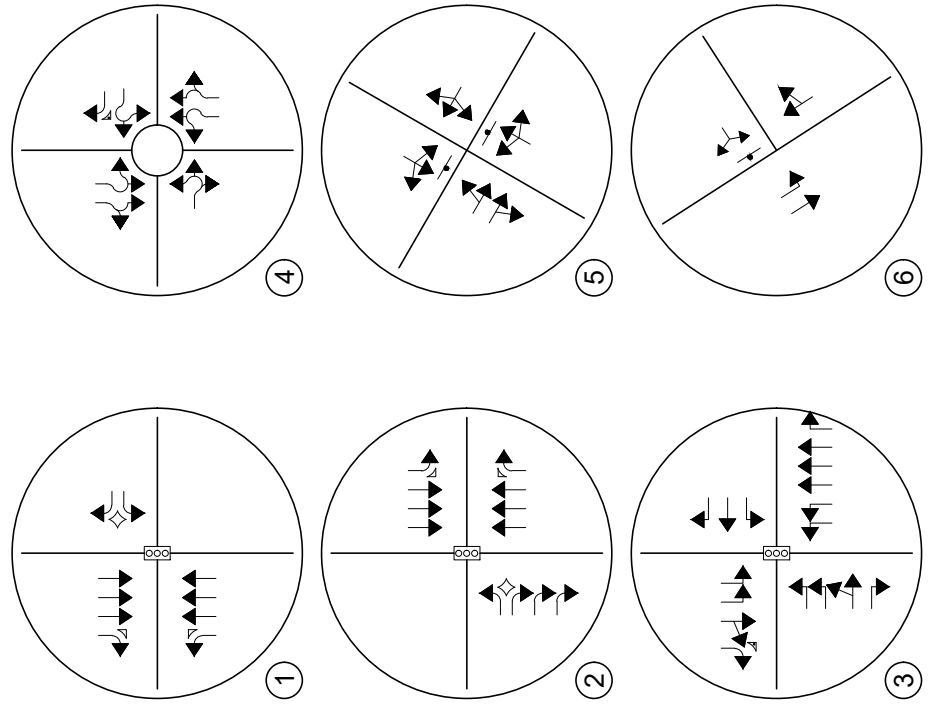
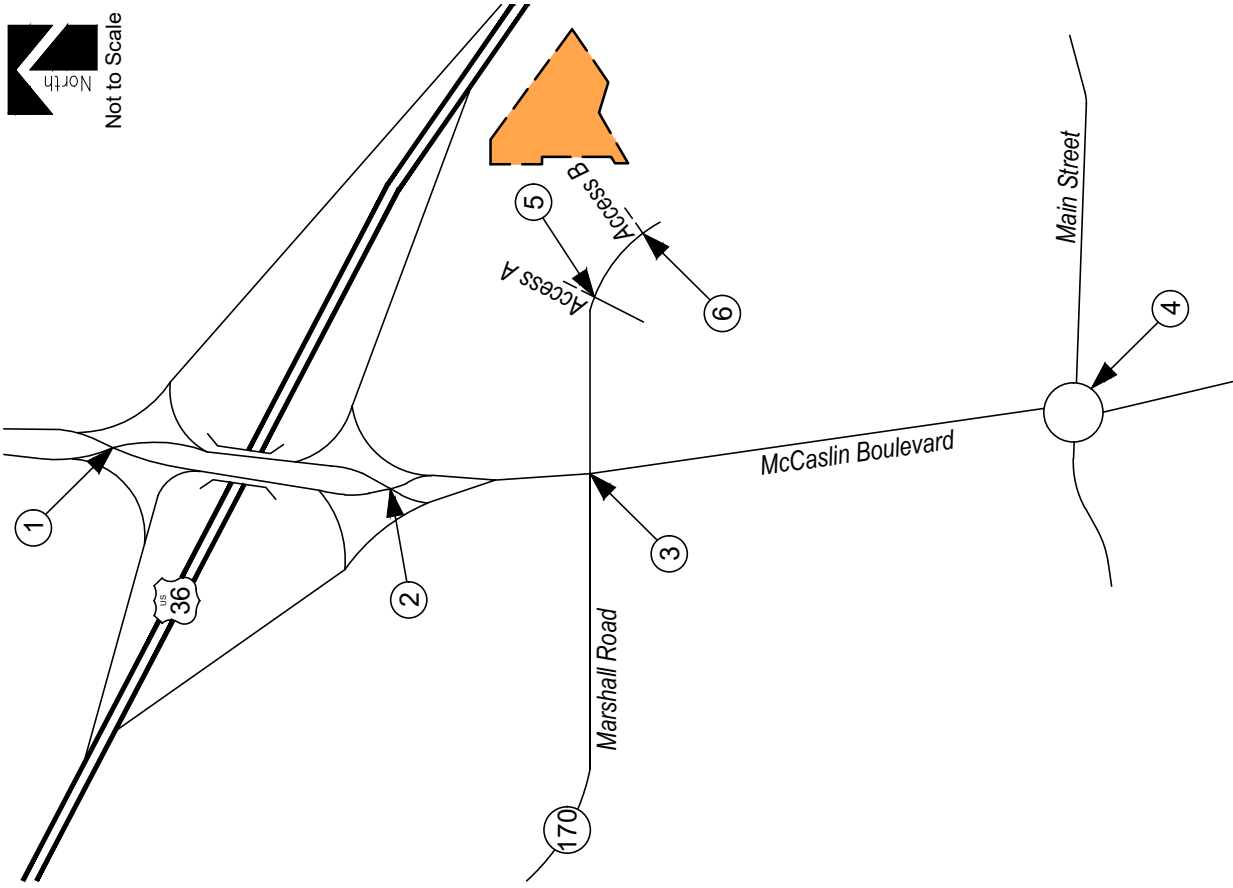
- Study Intersection
- Volumes
- Development Site

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Figure 4
BACKGROUND TRAFFIC - YEAR 2025
Volumes
AM / PM Peak Hour
(ADT) : Average Daily Traffic

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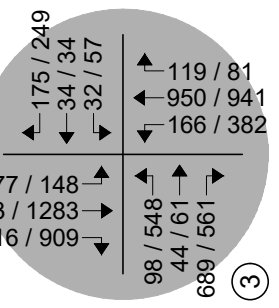
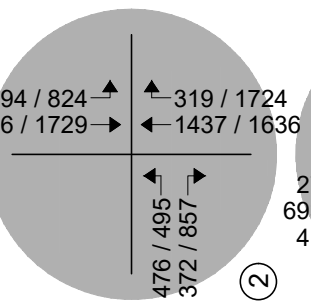
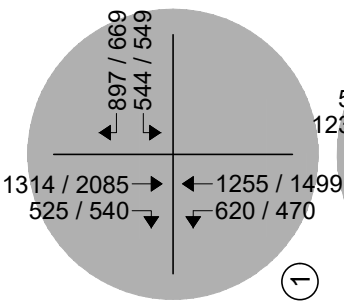
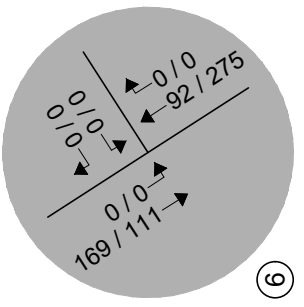
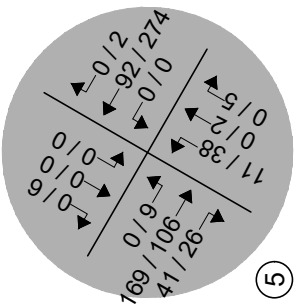
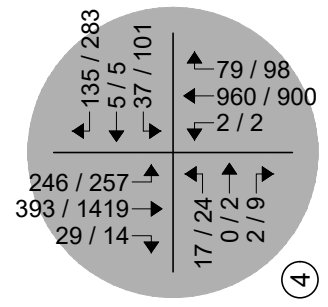
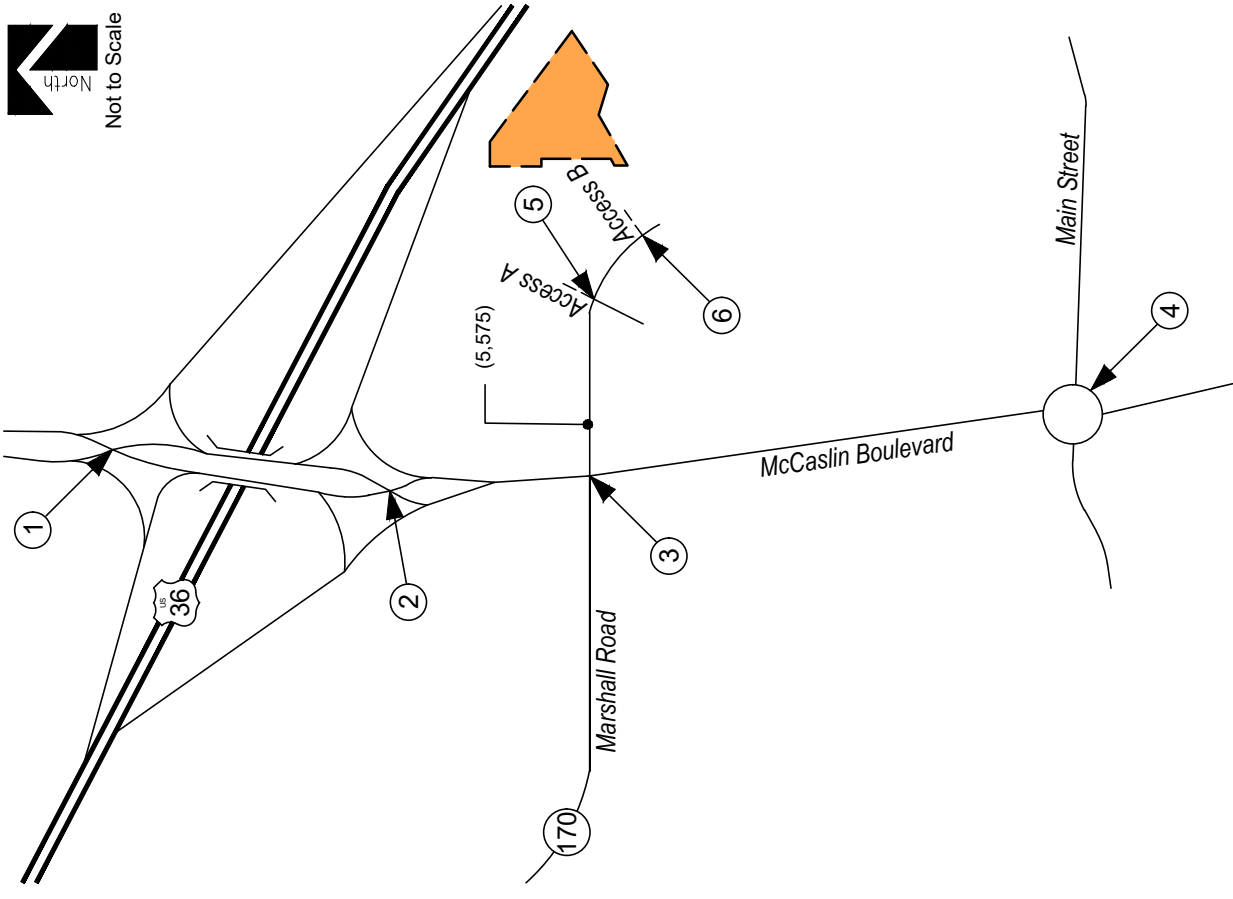
-  Study Intersection
-  Lane Geometry
-  Development Site

Figure 4a
BACKGROUND TRAFFIC - YEAR 2025
 Intersection Geometry
 AM / PM Peak Hour
 (ADT) : Average Daily Traffic

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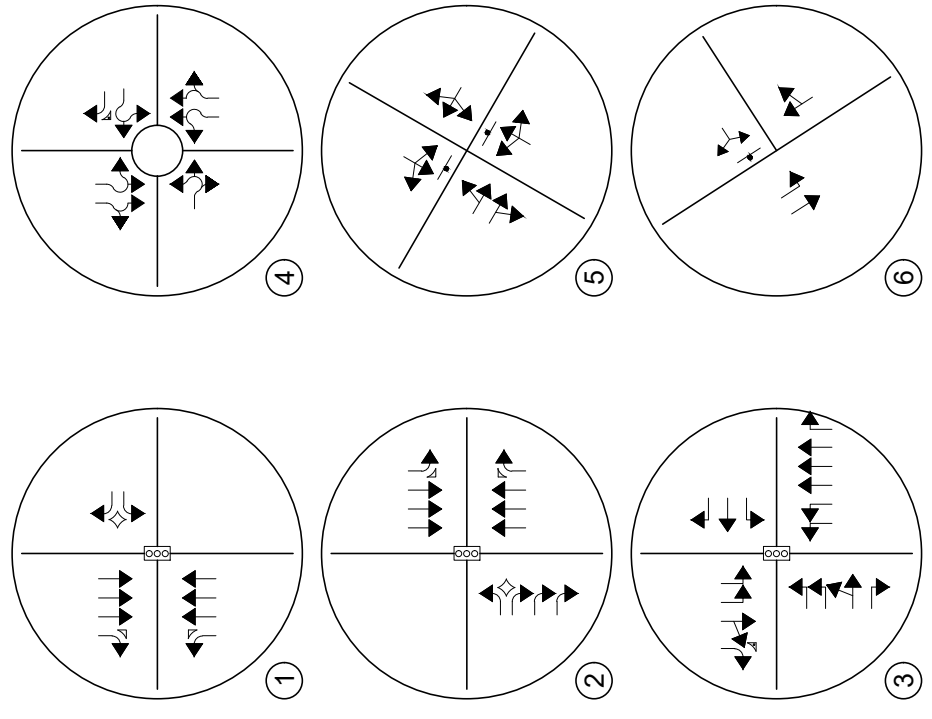
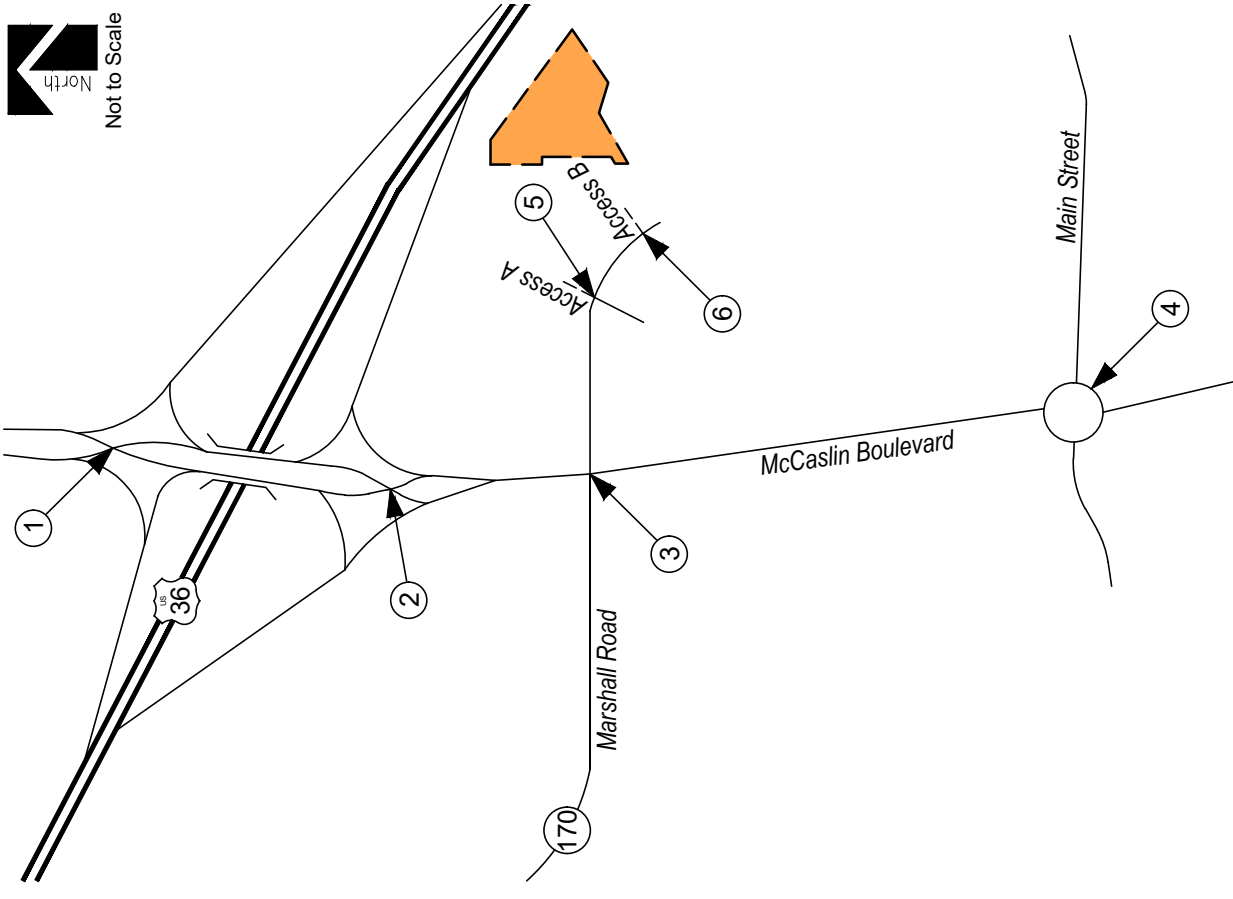
- Study Intersection
- Volumes
- Development Site

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Figure 5
BACKGROUND TRAFFIC - YEAR 2043
Volumes
AM / PM Peak Hour
(ADT) : Average Daily Traffic

November 2023
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LEGEND




-  Study Intersection
-  Lane Geometry
-  Development Site

Figure 5a
BACKGROUND TRAFFIC - YEAR 2043
 Intersection Geometry
 AM / PM Peak Hour
 (ADT) : Average Daily Traffic

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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 2025 are listed in Table 2. Year 2043 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.

Table 2 – Intersection Capacity Analysis Summary – Background Traffic – Year 2025

INTERSECTION LANE GROUPS	LEVEL OF SERVICE	
	AM PEAK HOUR	PM PEAK HOUR
McCaslin Boulevard / U.S. 36 Eastbound Ramp (Signalized)	C (24.1)	C (22.8)
McCaslin Boulevard / U.S. 36 Eastbound Ramp (Stop-Controlled) Eastbound Left	C	C
McCaslin Boulevard / U.S. 36 Westbound Ramp (Signalized)	C (30.2)	C (28.7)
McCaslin Boulevard / U.S. 36 Westbound Ramp (Stop-Controlled) Westbound Left	C	F
McCaslin Boulevard / Marshall Road (Signalized)	B (11.1)	B (18.0)
McCaslin Boulevard / Main Street (Roundabout) Eastbound Left, Through and Right Westbound Left and Through Northbound Left and Through Northbound Through and Right Southbound Left and Through Southbound Through and Right	A A A A A A	A A A A A A
Marshall Road / Access A (Stop-Controlled) Eastbound Left and Through Westbound Left, Through and Right Northbound Left, Through and Right Southbound Left, Through and Right	A A B A	A A B A
Marshall Road / Access B (Stop-Controlled) Westbound Left and Right Southbound Left	A A	A A

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

Background Traffic Analysis Results – Year 2025

Year 2025 background traffic analysis indicates that the signalized intersections of McCaslin Boulevard with U.S. Highway 36 eastbound and westbound ramps have overall operations at LOS C during the morning and the afternoon peak traffic hours.

The stop-controlled intersections of McCaslin Boulevard with U.S. Highway 36 eastbound and westbound ramps have turn movement operations at LOS C during the morning and afternoon peak traffic hours. Exceptions would include the westbound left turn movement which operates at LOS F during the PM peak traffic hour. The LOS F operation is attributed to the through traffic volume along McCaslin Boulevard and the stop-controlled nature of analysis technique applied. Considering how the westbound left turn movement operates with yield-controlled, turn movement operations are likely better than that analyzed throughout this study.

Operational analysis shows that the signalized intersection of McCaslin Boulevard and Marshall Road has overall operations at LOS B during the morning and the afternoon peak traffic hours.

The roundabout-controlled intersection of McCaslin Boulevard with Main Street has turning movement operations at LOS A during both the morning and the afternoon peak traffic hours.

The unsignalized intersection of Marshall Road with Access A has turn movement operations at LOS B or better during the morning and the afternoon peak traffic hours.

The unsignalized intersection of Marshall Road with Access B has turn movement operations at LOS A during the morning and the afternoon peak traffic hours.

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. It is, however, likely that turn movements will operate better than the results obtained with this HCM Two-Way Stop-Control (TWSC) level of service analysis would indicate, as the HCM analysis may not accurately account for the effect of vehicle platooning and gaps caused by upstream signals. Upstream signal controls along McCaslin Boulevard will tend to create additional gaps in the traffic stream for turning movements at McCaslin Boulevard and will most likely provide mitigation to the LOS F operation projected during the afternoon peak traffic hour.

Table 3 – Intersection Capacity Analysis Summary – Background Traffic – Year 2043

INTERSECTION LANE GROUPS	LEVEL OF SERVICE	
	AM PEAK HOUR	PM PEAK HOUR
McCaslin Boulevard / U.S. 36 Eastbound Ramp (Signalized)	C (24.1)	C (30.2)
McCaslin Boulevard / U.S. 36 Eastbound Ramp (Stop-Controlled) Eastbound Left	F	F
McCaslin Boulevard / U.S. 36 Westbound Ramp (Signalized)	C (21.6)	C (28.1)
McCaslin Boulevard / U.S. 36 Westbound Ramp (Stop-Controlled) Westbound Left	F	F
McCaslin Boulevard / Marshall Road (Signalized)	C (29.5)	C (29.0)
McCaslin Boulevard / Main Street (Roundabout) Eastbound Left, Through and Right Westbound Left and Through Northbound Left and Through Northbound Through and Right Southbound Left and Through Southbound Through and Right	A A B B A A	C A A A B C
Marshall Road / Access A (Stop-Controlled) Eastbound Left and Through Westbound Left, Through and Right Northbound Left, Through and Right Southbound Left, Through and Right	A A B A	B A A A
Marshall Road / Access B (Stop-Controlled) Westbound Left and Right Southbound Left	A A	A A

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

Background Traffic Analysis Results – Year 2043

By Year 2043 and without the proposed development, the study intersections of McCaslin Boulevard with U.S. Highway 36 eastbound and westbound ramps have overall operations at LOS C during the morning and the afternoon peak traffic hours.

The stop-controlled intersections of McCaslin Boulevard with U.S. Highway 36 eastbound and westbound ramps projects left turn operations at LOS F during the morning and afternoon peak traffic hours. The LOS F operations are attributed to the through traffic volume along McCaslin Boulevard and the stop-controlled nature of analysis technique applied. Considering how the westbound left turn movement operates with yield-controlled, turn movement operations are likely better than that analyzed throughout this study.

Operational analysis shows that the signalized intersection of McCaslin Boulevard and Marshall Road anticipates overall operations at LOS C during the morning and the afternoon peak traffic hours.

The roundabout-controlled intersection of McCaslin Boulevard with Main Street predicts turning movement operations at or better than LOS B during the morning peak traffic hour and LOS C or better during the afternoon peak traffic hour.

The unsignalized intersection of Marshall Road with Access A expects turn movement operations at LOS B or better during the morning and the afternoon peak traffic hours.

The unsignalized intersection of Marshall Road with Access B anticipates turn movement operations at LOS A during the morning and afternoon peak traffic hours.

It is again 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. It is, however, likely that turn movements will operate better than the results obtained with this HCM Two-Way Stop-Control (TWSC) level of service analysis would indicate, as the HCM analysis may not accurately account for the effect of vehicle platooning and gaps caused by upstream signals. Upstream signal controls along McCaslin Boulevard will tend to create additional gaps in the traffic stream for turning movements at U.S. Highway 36 eastbound and westbound ramps and will most likely provide mitigation to the LOS F operation projected during both peak traffic hours. It is also emphasized that, for purposes of this analysis, the HCM's TWSC technique was applied to the eastbound and westbound left turn movements for the off-ramps since HCM does not provide a yield-controlled technique.

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, 11th 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 code 311 (All Suites Hotel) was used for estimating trip generation because of its conservative rates and best fit to the proposed land use description.

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

Table 4 – Trip Generation Rates

ITE CODE	LAND USE	UNIT	TRIP GENERATION RATES						
			24 HOUR	AM PEAK HOUR			PM PEAK HOUR		
				ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
311	All Suites Hotel	RMS	4.40	0.18	0.16	0.34	0.18	0.18	0.36

Key: RMS = Rooms.

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.

Table 5 – Trip Generation Summary

ITE CODE	LAND USE	SIZE	TOTAL TRIPS GENERATED						
			24 HOUR	AM PEAK HOUR			PM PEAK HOUR		
				ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
311	All Suites Hotel	114 RMS	502	21	18	39	20	21	41
<i>Total:</i>			502	21	18	39	20	21	41

Key: RMS = Rooms.

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 502 daily vehicle trips with 39 of those occurring during the morning peak hour and 41 during the afternoon peak hour.

Adjustments to Trip Generation Rates

A development of this type is not likely to attract trips from within area land uses nor pass-by or diverted link trips from the adjacent roadway system, therefore no trip reduction was taken in this analysis.

Trip Distribution

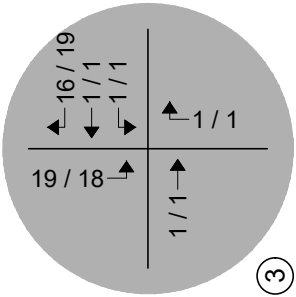
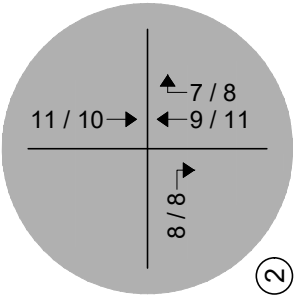
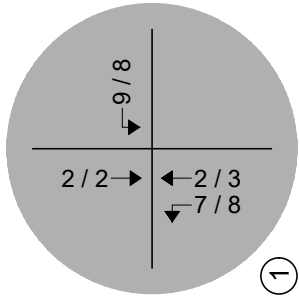
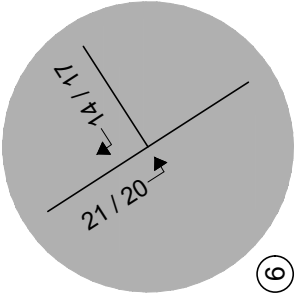
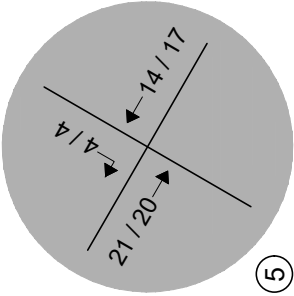
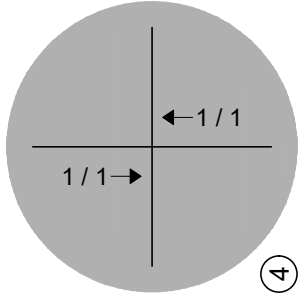
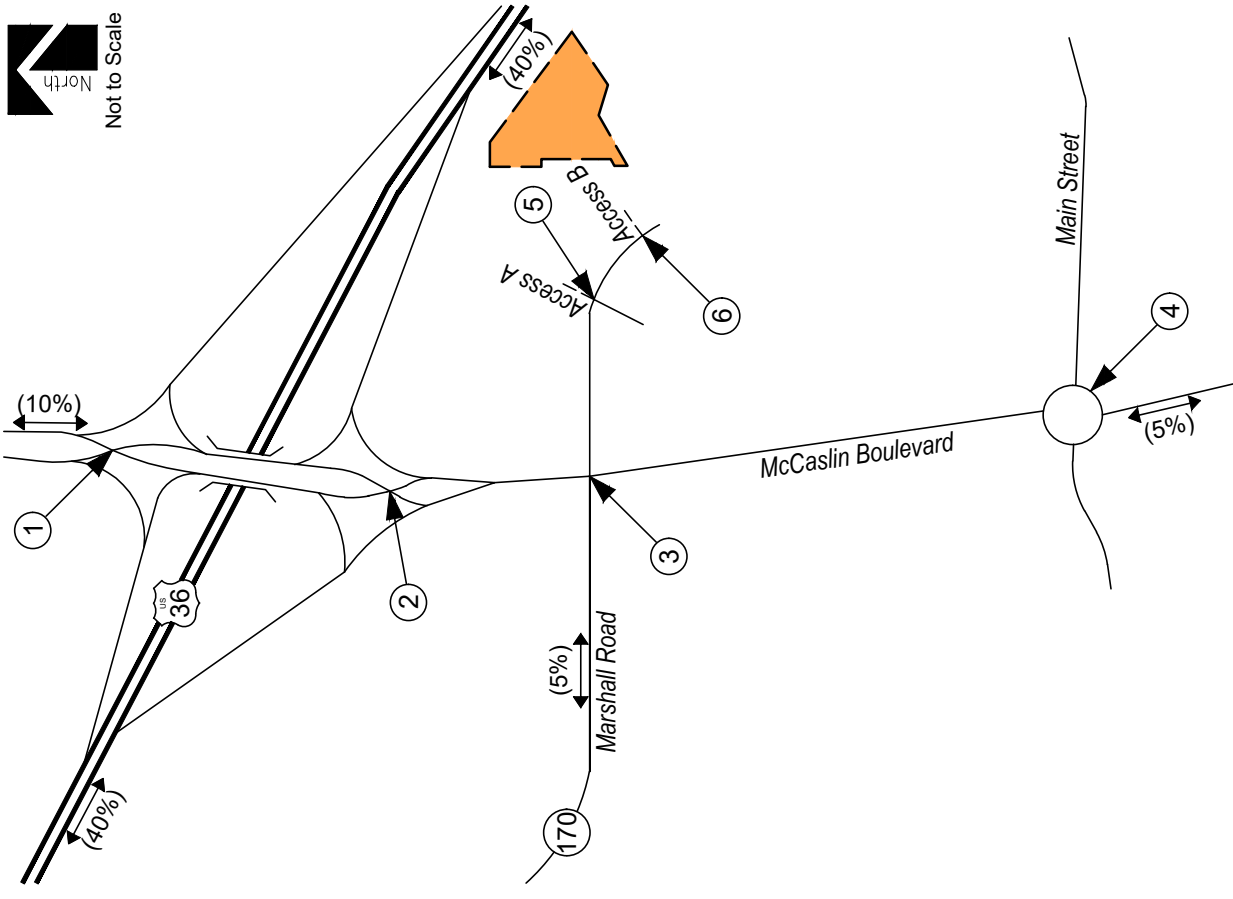
The overall directional distribution of site-generated traffic was determined based on the location of development site within the Town, proposed and existing area land uses, allowed turning movements, and available roadway network.

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

Trip Assignment

Trip 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.



LEGEND

- Study Intersection
- Volumes
- Development Site

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Figure 6
SITE DEVELOPMENT DISTRIBUTION
(%) : Overall
SITE-GENERATED TRIPS
AM / PM Peak Hour

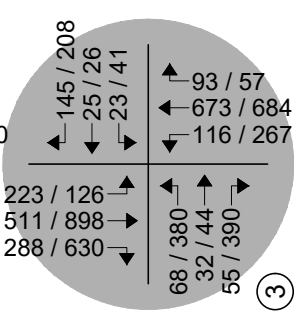
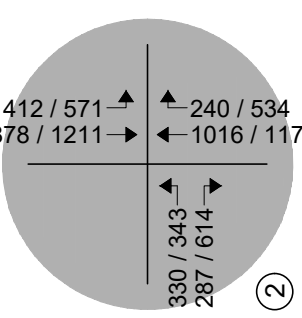
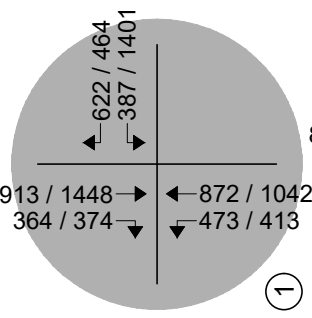
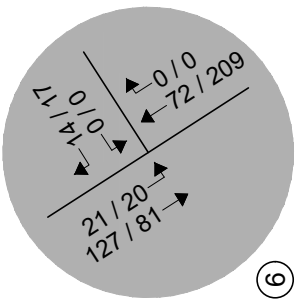
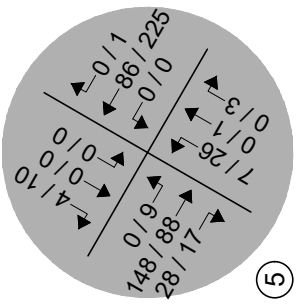
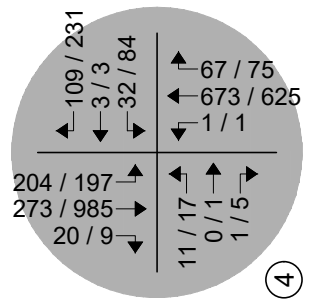
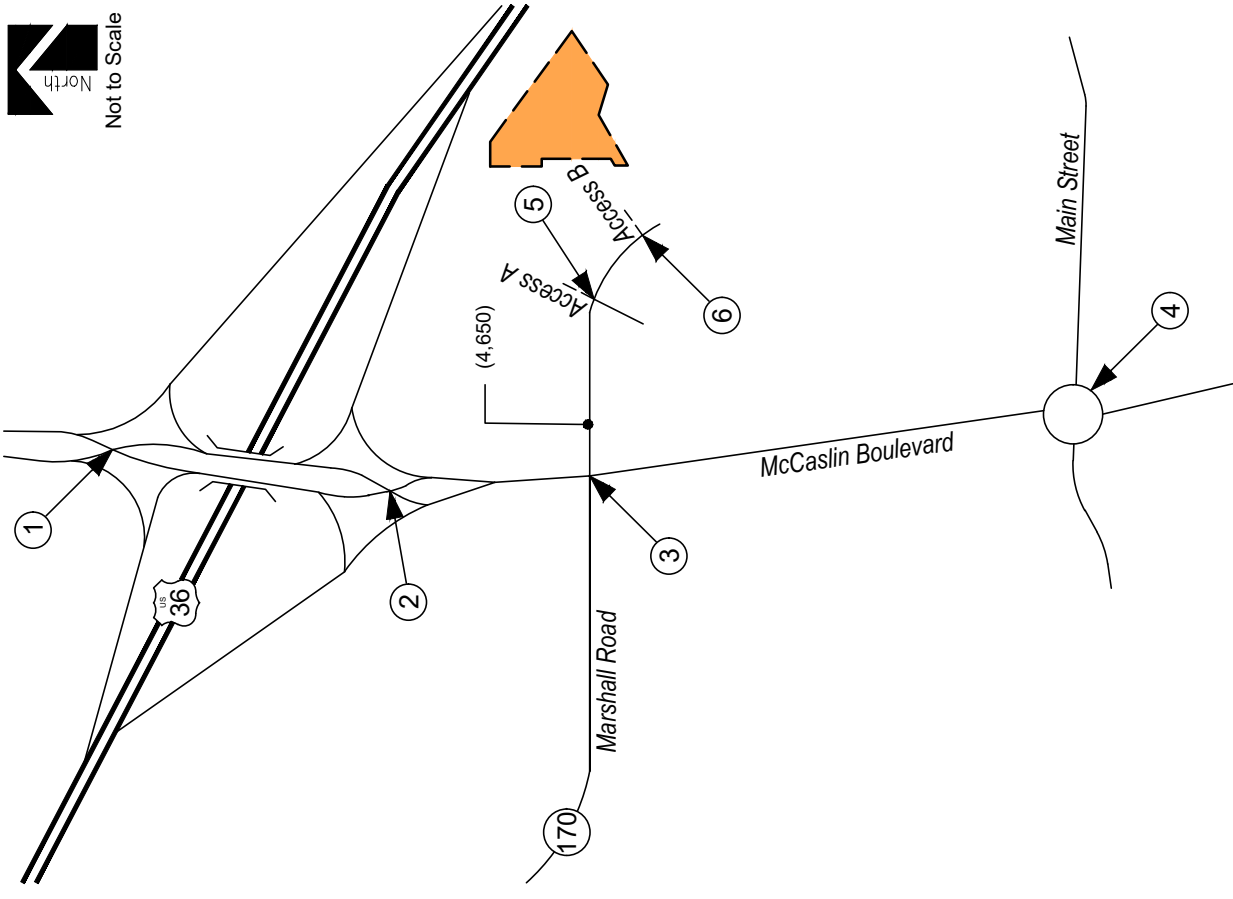
V. Future Traffic Conditions With Proposed Developments

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 2025 and 2043 with consideration of site-generated traffic. For analysis purposes, it was assumed that development construction would be completed by end of Year 2025.

Pursuant to area roadway improvement discussions provided in Section III, Year 2025 and Year 2043 total traffic conditions assume no 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.

Projected Year 2025 total traffic volumes and intersection geometry are shown in Figure 7 and Figure 7a, respectively.

Figure 8 and Figure 8a shows projected total traffic volumes and intersection geometry for Year 2043, respectively.



LEGEND

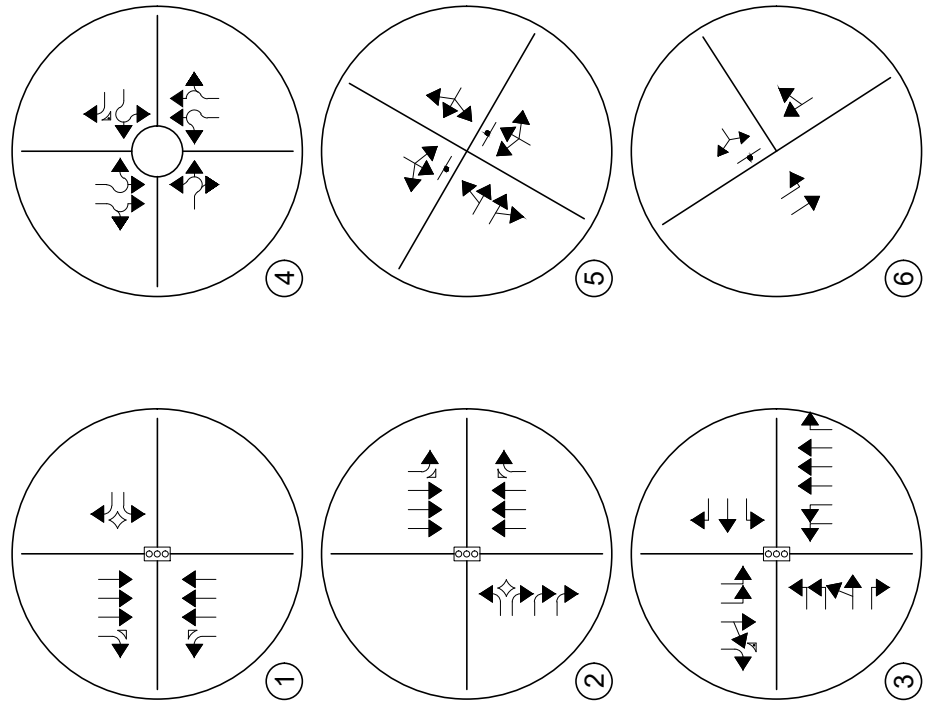
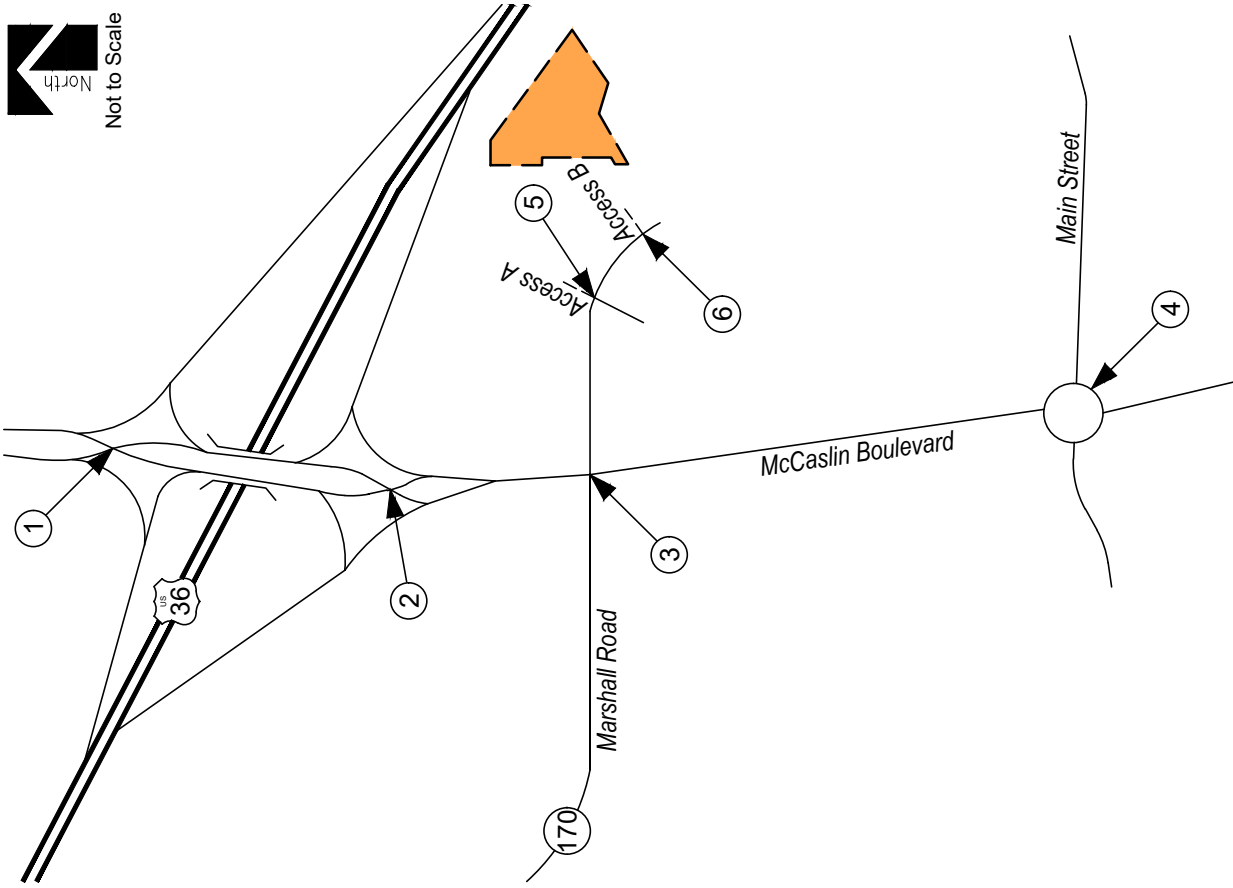
- Study Intersection
- Volumes
- Development Site

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Figure 7
TOTAL TRAFFIC - YEAR 2025
Volumes
AM / PM Peak Hour
(ADT) : Average Daily Traffic

November 2023
Page 25



LEGEND




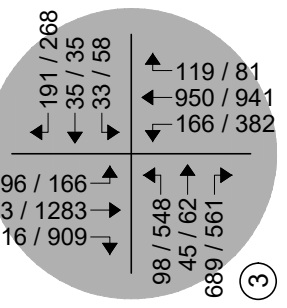
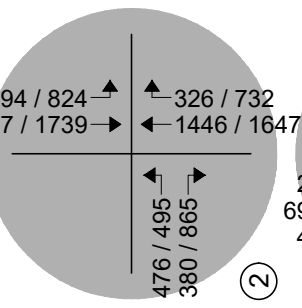
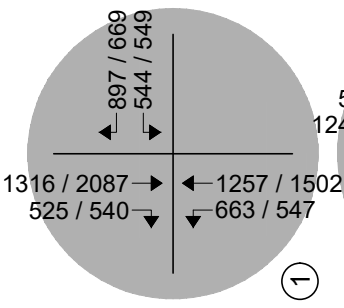
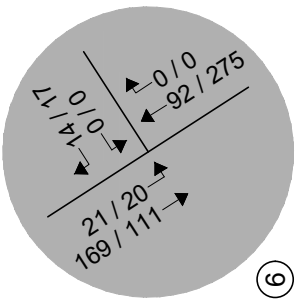
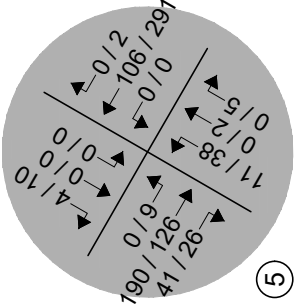
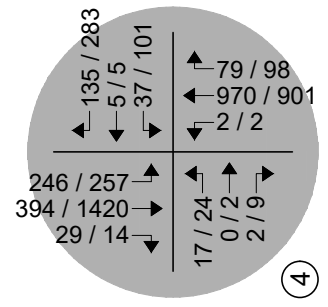
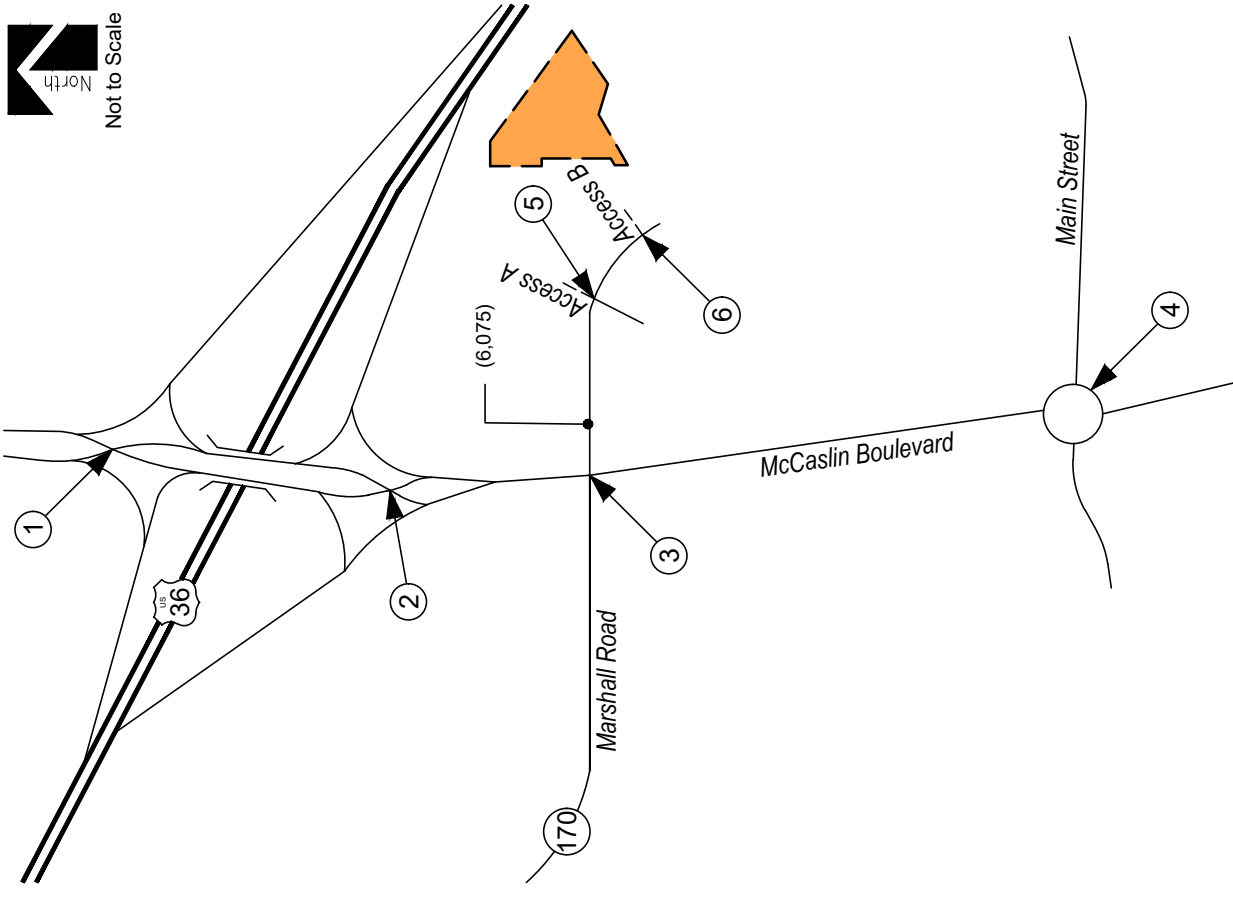
-  Study Intersection
-  Lane Geometry
-  Development Site

Figure 7a
TOTAL TRAFFIC - YEAR 2025
 Intersection Geometry
 AM / PM Peak Hour
 (ADT) : Average Daily Traffic

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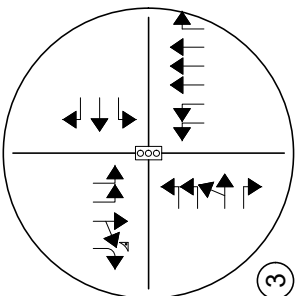
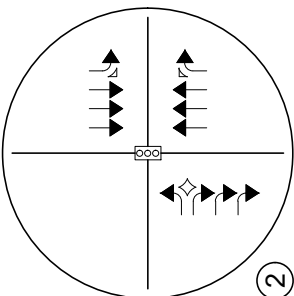
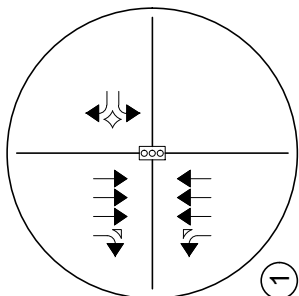
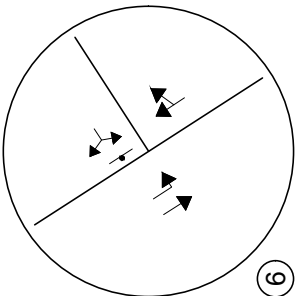
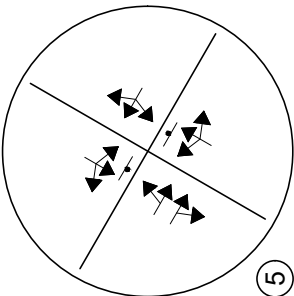
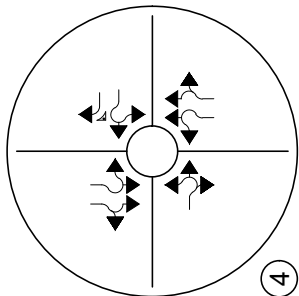
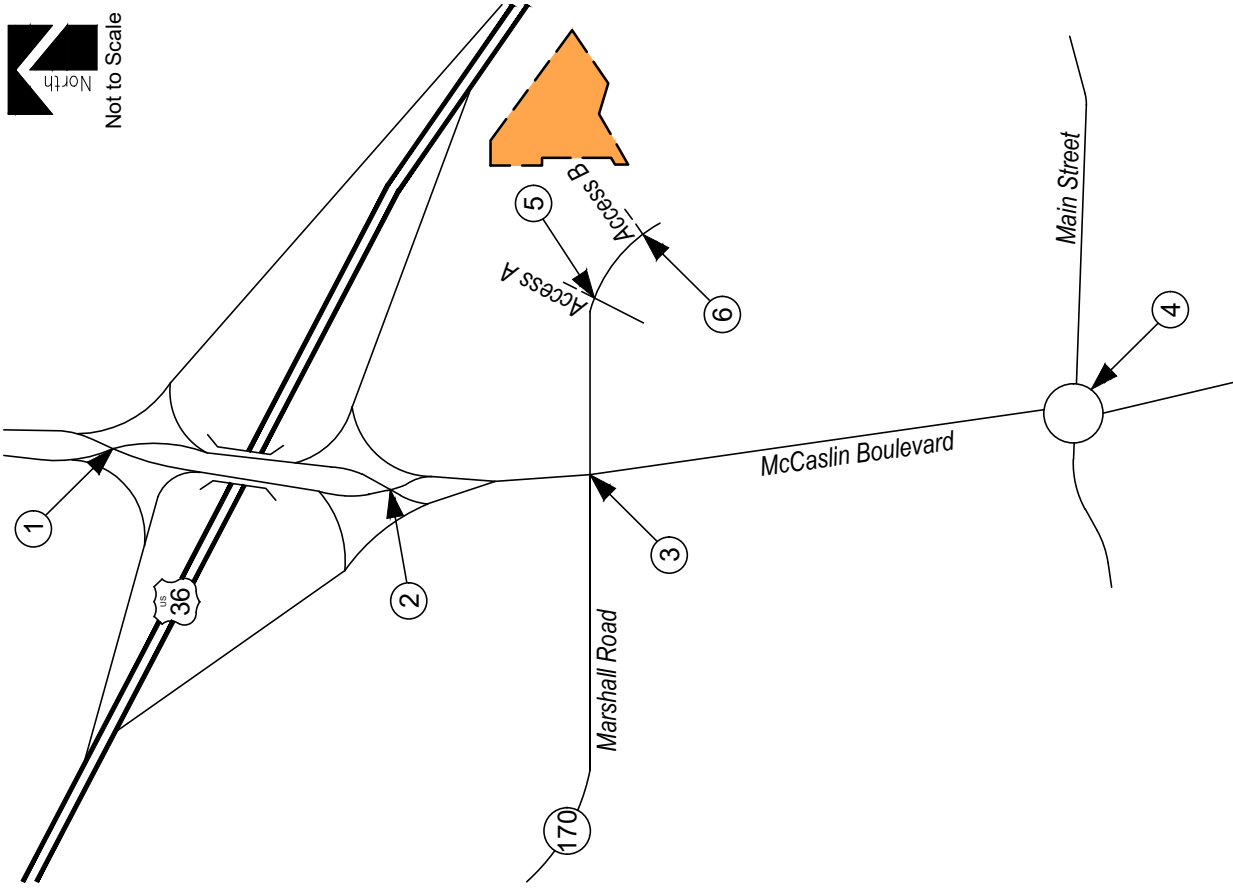
LEGEND

- Study Intersection
- Volumes
- Development Site

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Figure 8
TOTAL TRAFFIC - YEAR 2043
Volumes
AM / PM Peak Hour
(ADT) : Average Daily Traffic



LEGEND




-  Study Intersection
-  Lane Geometry
-  Development Site

Figure 8a
TOTAL TRAFFIC - YEAR 2043
 Intersection Geometry
 AM / PM Peak Hour
 (ADT) : Average Daily Traffic

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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 2025 and 2043 are summarized in Table 6 and Table 7, respectively.

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

Table 6 – Intersection Capacity Analysis Summary – Total Traffic – Year 2025

INTERSECTION LANE GROUPS	LEVEL OF SERVICE	
	AM PEAK HOUR	PM PEAK HOUR
McCasin Boulevard / U.S. 36 Eastbound Ramp (Signalized)	C (24.2)	C (22.8)
McCasin Boulevard / U.S. 36 Eastbound Ramp (Stop-Controlled) Eastbound Left	C	D
McCasin Boulevard / U.S. 36 Westbound Ramp (Signalized)	C (30.3)	C (28.7)
McCasin Boulevard / U.S. 36 Westbound Ramp (Stop-Controlled) Westbound Left	C	F
McCasin Boulevard / Marshall Road (Signalized)	B (11.3)	B (18.1)
McCasin Boulevard / Main Street (Roundabout) Eastbound Left, Through and Right Westbound Left and Through Northbound Left and Through Northbound Through and Right Southbound Left and Through Southbound Through and Right	A A A A A A	B A A A A A
Marshall Road / Access A (Stop-Controlled) Eastbound Left and Through Westbound Left, Through and Right Northbound Left, Through and Right Southbound Left, Through and Right	A A B A	B A A A
Marshall Road / Access B (Stop-Controlled) Westbound Left and Right Southbound Left	A A	A A

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

Table 7 – Intersection Capacity Analysis Summary – Total Traffic – Year 2043

INTERSECTION LANE GROUPS	LEVEL OF SERVICE	
	AM PEAK HOUR	PM PEAK HOUR
McCaslin Boulevard / U.S. 36 Eastbound Ramp (Signalized)	C (21.7)	C (28.2)
McCaslin Boulevard / U.S. 36 Eastbound Ramp (Stop-Controlled) Eastbound Left	F	F
McCaslin Boulevard / U.S. 36 Westbound Ramp (Signalized)	C (24.2)	C (30.4)
McCaslin Boulevard / U.S. 36 Westbound Ramp (Stop-Controlled) Westbound Left	F	F
McCaslin Boulevard / Marshall Road (Signalized)	C (30.9)	C (29.8)
McCaslin Boulevard / Main Street (Roundabout) Eastbound Left, Through and Right Westbound Left and Through Northbound Left and Through Northbound Through and Right Southbound Left and Through Southbound Through and Right	A A B B A A	C A B A B C
Marshall Road / Access A (Stop-Controlled) Eastbound Left and Through Westbound Left, Through and Right Northbound Left, Through and Right Southbound Left, Through and Right	A A B A	B A A A
Marshall Road / Access B (Stop-Controlled) Westbound Left and Right Southbound Left	A A	B A

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

Total Traffic Analysis Results Upon Development Build-Out

Table 7 illustrates how, by Year 2043 and upon development build-out, the signalized intersections of McCaslin Boulevard with U.S. Highway 36 eastbound and westbound ramps have overall operations at LOS C during the morning and the afternoon peak traffic hours.

The stop-controlled intersections of McCaslin Boulevard with U.S. Highway 36 eastbound and westbound ramps are projected to have turning movement operations at LOS F for the morning and afternoon peak traffic hours. The LOS F operations continue to be attributed to the through traffic volume along McCaslin Boulevard and the stop-controlled nature of the analysis technique applied. Considering how the westbound left turn movement operates with yield-control, turn movement operations are likely better than that analyzed throughout this study.

The signalized intersection of McCaslin Boulevard with Marshall Road is projected to have morning peak traffic hour operations at LOS C during the morning and afternoon peak traffic hours.

The roundabout-controlled intersection of McCaslin Boulevard with Main Street is projected to have turning movement operations at LOS B or better for the morning peak traffic hour and LOS C or better for the afternoon peak traffic hour.

The stop-controlled intersection of Marshall Road with Access A is projected to have turning movement operations at LOS B or better for the morning and afternoon peak traffic hours.

The stop-controlled intersection of Marshall Road with Access B is projected to have turning movement operations at LOS A during the morning peak traffic hour and LOS B or better for the afternoon peak traffic hour.

As with background traffic conditions, 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. It is, however, likely that turn movements will operate better than the results obtained with this HCM Two-Way Stop-Control (TWSC) level of service analysis would indicate, as the HCM analysis may not accurately account for the effect of vehicle platooning and gaps caused by upstream signals. Upstream signal controls along McCaslin Boulevard will tend to create additional gaps in the traffic stream for turning movements at U.S. Highway 36 eastbound and westbound ramps and will most likely provide mitigation to the LOS F operation projected during both peak traffic hours. It is again emphasized that, for purposes of this analysis, the HCM's TWSC technique was applied to the eastbound and westbound left turn movements for the off-ramps since HCM does not provide a yield-controlled technique.

These intersection operations are similar to background conditions.

VII. Conclusion

This traffic impact study addressed the capacity, geometric, and control requirements associated with the development entitled KT Development. This proposed lodging development consists of a 114-suite hotel. The proposed development is understood to entail the new construction of an accommodating 114 rooms. The development is located near the east corner of McCaslin Boulevard in Superior, Colorado.

The study area examined in this analysis encompassed McCaslin Boulevard with U.S. Highway 36, Marshall Road, and Main Street and the intersections of Marshall Road with Access A and Access B.

Analysis was conducted for critical AM Peak Hour and PM Peak Hour traffic operations for existing traffic conditions, Year 2025 and Year 2043 background traffic conditions, and Year 2025 and Year 2043 total traffic conditions.

Under existing conditions, operational analysis shows that the signalized intersections within the study area have overall operations at LOS C or better during the morning and the afternoon peak traffic hours. The roundabout-controlled intersection of McCaslin Boulevard with Main Street has turning movement operations at LOS A during the morning and the afternoon peak traffic hours. The stop-controlled intersections within the study area have turn movement operations at or better than LOS D during both the morning and afternoon peak traffic hours.

Year 2025 background traffic analysis indicates that the signalized intersections within the study area continue to operate at LOS C or better during the morning and the afternoon peak traffic hours. The roundabout-controlled intersection of McCaslin Boulevard with Main Street continues to project turning movement operations at LOS A during both the morning and the afternoon peak traffic hours. The stop-controlled intersections within the study area expect turning movement operations at or better than LOS D during either peak traffic hour. Exceptions include the westbound left turn movement of McCaslin Boulevard and U.S. Highway 36 westbound off ramp which operates at LOS F during the PM peak traffic hour and the stop-controlled nature of analysis techniques applied. Considering how the westbound left turn movement operates with yield-control, turn movement operations are likely better than expected.

By Year 2043 and without the proposed development, the signalized intersections anticipate LOS operations at LOS C during either peak traffic hour. The roundabout-controlled intersection of McCaslin Boulevard with Main Street predicts turning movement operations at or better than LOS C during the morning and afternoon peak traffic hours. The stop-controlled intersection within the study area project turning movement operations at or better than LOS C. Exceptions would include the left turn movements onto McCaslin Boulevard from U.S. Highway 36 eastbound and westbound ramps. The LOS F operations are attributed to the through traffic volume along McCaslin Boulevard and the stop-controlled nature of analysis technique applied. Considering how the westbound left turn movement operates with yield-control, turn movement operations are likely better than that analyzed throughout this traffic study.

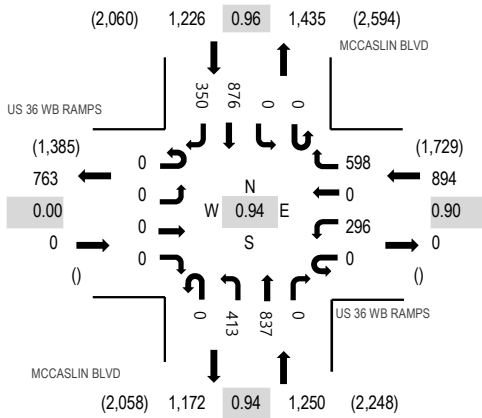
It is again noted that it is not uncommon for unsignalized movements to or from an arterial roadway, in urban areas, to operate with noticeable delays during peak traffic hours. It is, however, likely that turn movements will operate better than the results obtained with this HCM Two-Way Stop-Control (TWSC) level of service analysis would indicate, as the HCM analysis may not accurately account for the effect of vehicle platooning and gaps caused by upstream signals. The upstream signal controls along McCaslin Boulevard will tend to create additional gaps in the traffic stream for turning movements at U.S. Highway 36 eastbound and westbound ramps and will most likely provide mitigation to the LOS F operation projected during both peak traffic hours. It is also emphasized that, for purposes of this analysis, the HCM's TWSC technique was applied to the eastbound and westbound left turn movement for the off-ramps since HCM does not provide a yield-controlled technique.

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 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 2043 background traffic conditions. Proposed site accesses have long-term operations at LOS B or better during peak traffic periods and upon build-out.

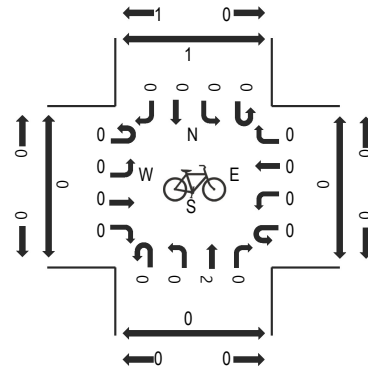
APPENDIX A

Traffic Count Data Signal Timing Information

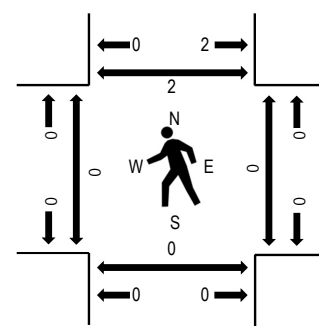
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	US 36 WB RAMPS Eastbound				US 36 WB RAMPS Westbound				MCCASLIN BLVD Northbound				MCCASLIN BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	0	0	0	102	0	121	0	60	112	0	0	0	93	46	534	2,736	0	0	0	0
7:15 AM	0	0	0	0	0	78	0	125	0	84	129	0	0	0	132	57	605	3,026	0	0	0	0
7:30 AM	0	0	0	0	0	67	0	121	0	129	189	0	0	0	110	82	698	3,273	0	0	0	1
7:45 AM	0	0	0	0	0	73	0	177	0	114	217	0	0	0	231	87	899	3,370	0	0	0	0
8:00 AM	0	0	0	0	0	69	0	162	0	97	194	0	0	0	207	95	824	3,301	0	0	0	0
8:15 AM	0	0	0	0	0	83	0	147	0	108	195	0	0	0	243	76	852		0	0	0	0
8:30 AM	0	0	0	0	0	71	0	112	0	94	231	0	0	0	195	92	795		0	0	0	2
8:45 AM	0	0	0	0	0	73	0	148	0	81	214	0	0	0	231	83	830		0	0	0	1
Count Total	0	0	0	0	0	616	0	1,113	0	767	1,481	0	0	0	1,442	618	6,037		0	0	0	4
Peak Hour	0	0	0	0	0	296	0	598	0	413	837	0	0	0	876	350	3,370		0	0	0	2

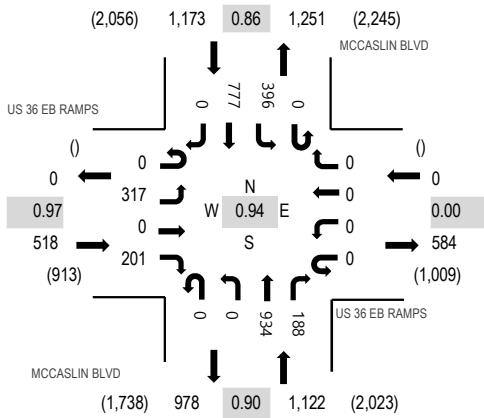
Location: 2 MCCASLIN BLVD & US 36 EB RAMPS AM

Date: Tuesday, October 17, 2023

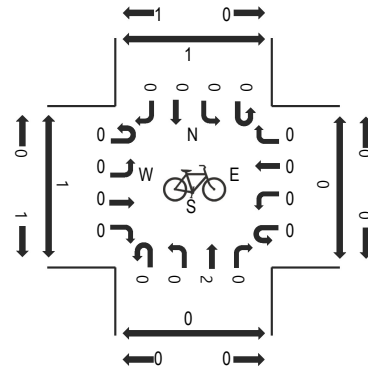
Peak Hour: 07:45 AM - 08:45 AM

Peak 15-Minutes: 08:15 AM - 08:30 AM

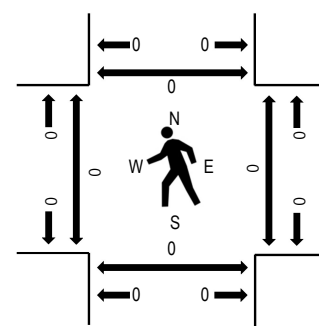
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	US 36 EB RAMPS Eastbound				US 36 EB RAMPS Westbound				MCCASLIN BLVD Northbound				MCCASLIN BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
	7:00 AM	0	47	0	26	0	0	0	0	0	0	124	35	0	52	140			0	424	2,196	0
7:15 AM	0	57	0	36	0	0	0	0	0	0	156	33	0	65	147	0	494	2,429	0	0	0	0
7:30 AM	0	71	0	36	0	0	0	0	0	0	248	43	0	54	116	0	568	2,681	0	0	0	0
7:45 AM	0	93	0	36	0	0	0	0	0	0	237	37	0	101	206	0	710	2,813	0	0	0	0
8:00 AM	0	79	0	52	0	0	0	0	0	0	210	49	0	83	184	0	657	2,796	0	0	0	0
8:15 AM	0	73	0	51	0	0	0	0	0	0	232	47	0	123	220	0	746		0	0	0	0
8:30 AM	0	72	0	62	0	0	0	0	0	0	255	55	0	89	167	0	700		0	0	0	0
8:45 AM	0	78	0	44	0	0	0	0	0	0	213	49	0	94	215	0	693		0	0	0	0
Count Total	0	570	0	343	0	0	0	0	0	0	1,675	348	0	661	1,395	0	4,992		0	0	0	0
Peak Hour	0	317	0	201	0	0	0	0	0	0	934	188	0	396	777	0	2,813		0	0	0	0

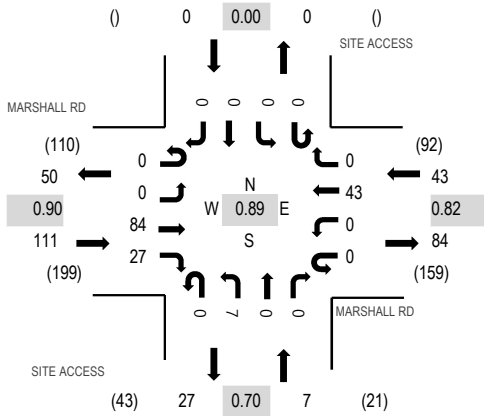
Location: 3 SITE ACCESS & MARSHALL RD AM

Date: Tuesday, October 17, 2023

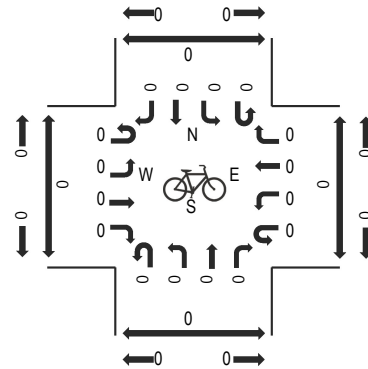
Peak Hour: 07:00 AM - 08:00 AM

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

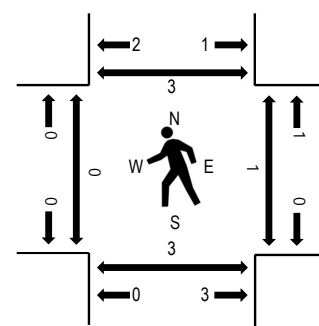
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	MARSHALL RD Eastbound				MARSHALL RD Westbound				SITE ACCESS Northbound				SITE ACCESS Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	23	4	0	0	12	0	0	0	0	0	0	0	0	0	39	161	0	0	1	0
7:15 AM	0	0	23	8	0	0	13	0	0	1	0	0	0	0	0	0	45	161	0	0	0	1
7:30 AM	0	0	16	8	0	0	9	0	0	4	0	0	0	0	0	0	37	156	0	1	1	2
7:45 AM	0	0	22	7	0	0	9	0	0	2	0	0	0	0	0	0	40	151	0	0	1	0
8:00 AM	0	0	23	2	0	0	12	0	0	2	0	0	0	0	0	0	39	151	0	0	0	0
8:15 AM	0	0	18	5	0	0	15	0	0	2	0	0	0	0	0	0	40		0	0	0	0
8:30 AM	1	0	12	5	0	0	9	0	0	5	0	0	0	0	0	0	32		0	1	0	1
8:45 AM	0	0	20	2	0	2	11	0	0	3	0	2	0	0	0	0	40		0	0	0	0
Count Total	1	0	157	41	0	2	90	0	0	19	0	2	0	0	0	0	312		0	2	3	4
Peak Hour	0	0	84	27	0	0	43	0	0	7	0	0	0	0	0	0	161		0	1	3	3

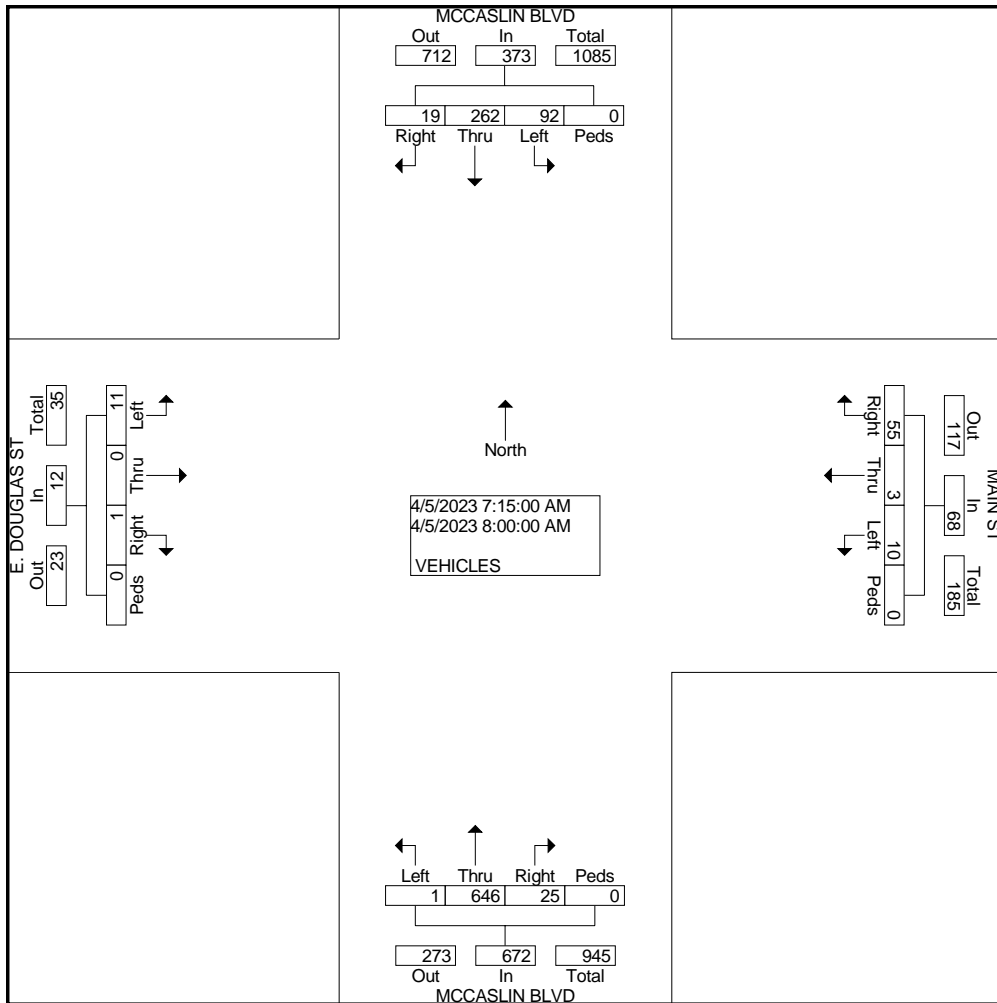
COUNTER MEASURES INC.

1889 YORK STREET
DENVER, COLORADO
303-333-7409

N/S STREET: MCCASLIN BLVD
E/W STREET: MAIN ST
CITY: SUPERIOR
COUNTY: BOULDER

File Name : MCCASMAIN
Site Code : 00000005
Start Date : 4/5/2023
Page No : 2

Start Time	MCCASLIN BLVD Southbound					MAIN ST Westbound					MCCASLIN BLVD Northbound					E. DOUGLAS ST Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 07:15 AM to 08:00 AM - Peak 1 of 1																					
Intersect on 07:15 AM																					
Volume	92	262	19	0	373	10	3	55	0	68	1	646	25	0	672	11	0	1	0	12	1125
Percent	24.7	70.2	5.1	0.0		14.7	4.4	80.9	0.0		0.1	96.1	3.7	0.0		91.7	0.0	8.3	0.0		
08:00 Volume	23	81	8	0	112	3	1	20	0	24	1	168	5	0	174	3	0	0	0	3	313
Peak Factor																					
High Int. Volume	08:00 AM					08:00 AM					07:45 AM					07:45 AM					
Peak Factor	0.83					0.70					0.89					0.60					0



COUNTER MEASURES INC.

1889 YORK STREET
DENVER, COLORADO
303-333-7409

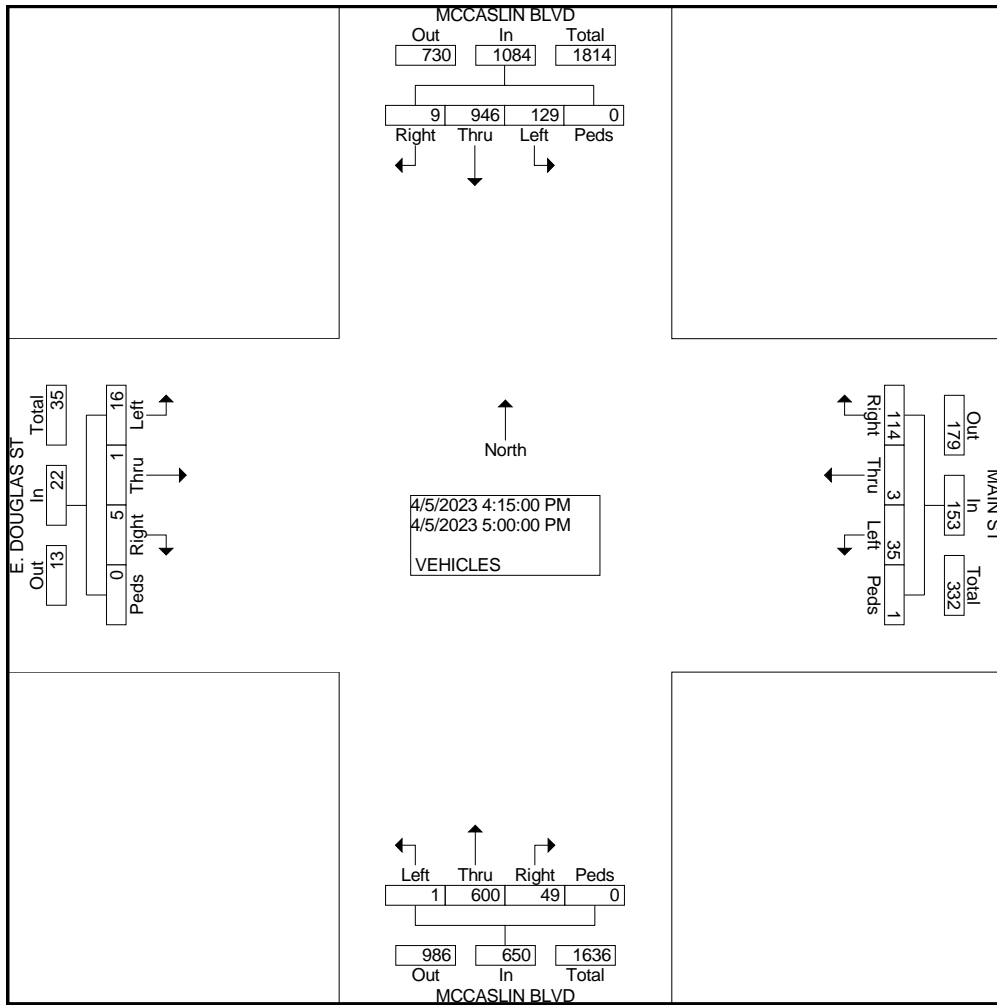
N/S STREET: MCCASLIN BLVD
E/W STREET: MAIN ST
CITY: SUPERIOR
COUNTY: BOULDER

File Name : MCCASMAIN
Site Code : 00000005
Start Date : 4/5/2023
Page No : 3

Start Time	MCCASLIN BLVD Southbound					MAIN ST Westbound					MCCASLIN BLVD Northbound					E. DOUGLAS ST Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	

Peak Hour From 04:15 PM to 05:00 PM - Peak 1 of 1

Intersection	04:15 PM																				
Volume	129	946	9	0	1084	35	3	114	1	153	1	600	49	0	650	16	1	5	0	22	1909
Percent	11.9	87.3	0.8	0.0		22.9	2.0	74.5	0.7		0.2	92.3	7.5	0.0		72.7	4.5	22.7	0.0		
05:00 Volume	32	241	4	0	277	14	2	41	0	57	0	157	8	0	165	9	0	2	0	11	510
Peak Factor	0.936																				
High Int.	04:45 PM					05:00 PM					04:30 PM					05:00 PM					
Volume	48	230	1	0	279	14	2	41	0	57	0	158	7	0	165	9	0	2	0	11	
Peak Factor	0.97					0.67					0.98					0.50					
	1					1					5					0					



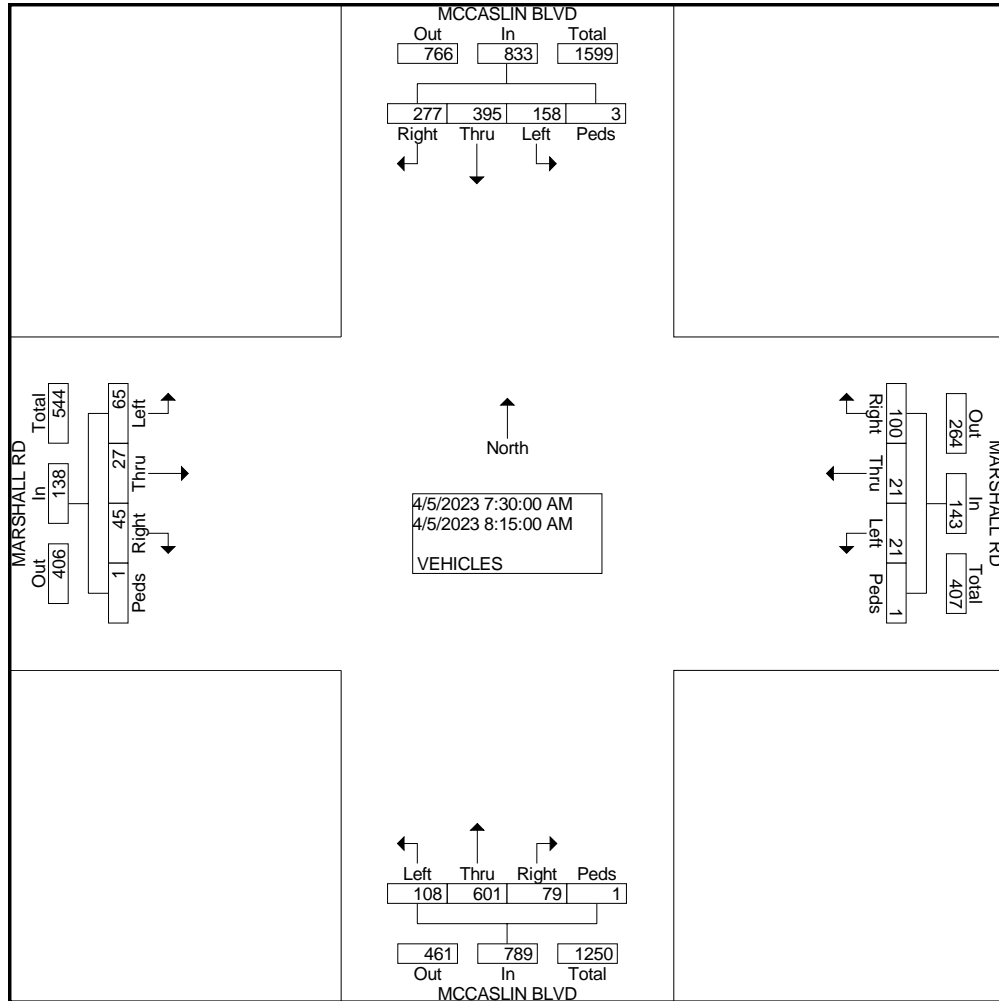
COUNTER MEASURES INC.

1889 YORK STREET
DENVER, COLORADO
303-333-7409

N/S STREET: MCCASLIN BLVD
E/W STREET: MARSHALL RD
CITY: SUPERIOR
COUNTY: BOULDER

File Name : MCCASMARSHALL
Site Code : 00000013
Start Date : 4/5/2023
Page No : 2

Start Time	MCCASLIN BLVD Southbound					MARSHALL RD Westbound					MCCASLIN BLVD Northbound					MARSHALL RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Intersection	07:30 AM																				
Volume	158	395	277	3	833	21	21	100	1	143	108	601	79	1	789	65	27	45	1	138	1903
Percent	19.0	47.4	33.3	0.4		14.7	14.7	69.9	0.7		13.7	76.2	10.0	0.1		47.1	19.6	32.6	0.7		
07:45 Peak Factor																					
High Int. Volume	59	108	84	0	251	10	5	23	0	38	22	160	17	0	199	19	2	5	0	26	514
Peak Factor																					
High Int. Volume	07:45 AM					08:15 AM					08:15 AM					08:15 AM					
Peak Factor	0.83					0.68					0.90					0.80					2



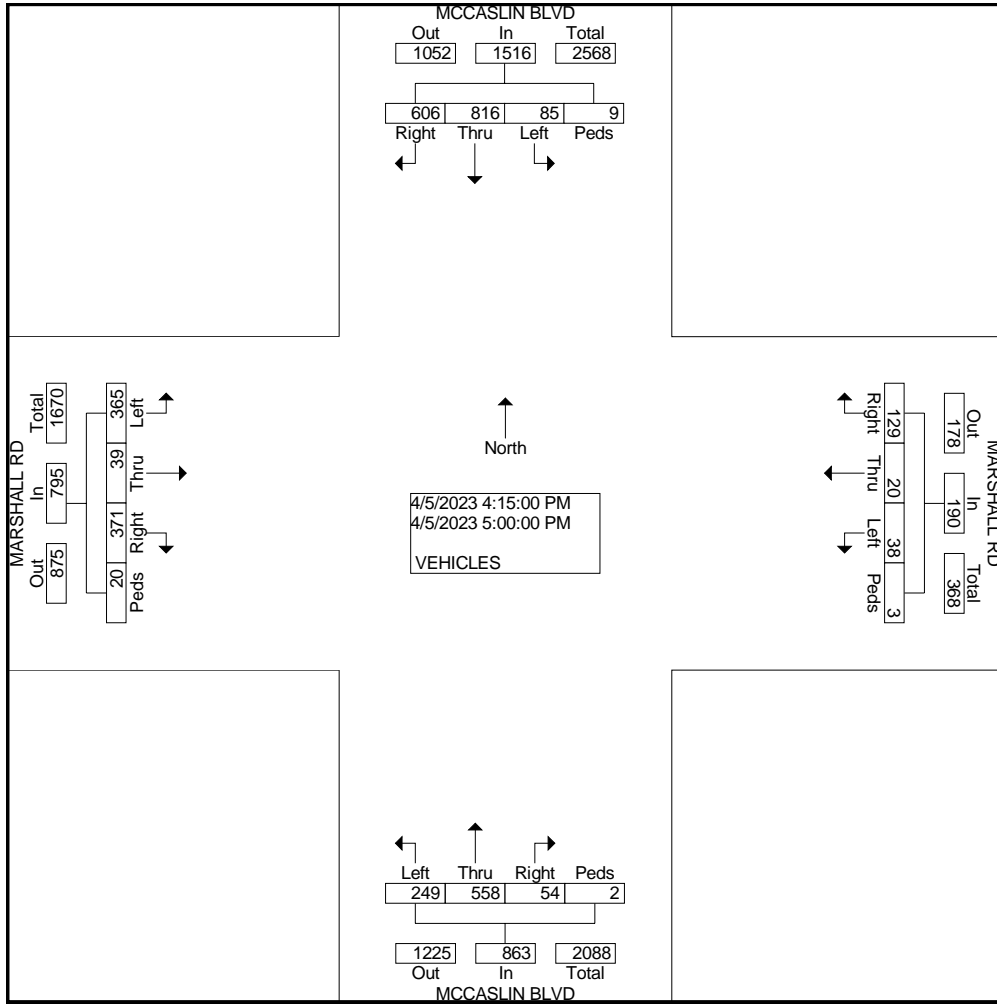
COUNTER MEASURES INC.

1889 YORK STREET
DENVER, COLORADO
303-333-7409

N/S STREET: MCCASLIN BLVD
E/W STREET: MARSHALL RD
CITY: SUPERIOR
COUNTY: BOULDER

File Name : MCCASMARSHALL
Site Code : 00000013
Start Date : 4/5/2023
Page No : 3

Start Time	MCCASLIN BLVD Southbound					MARSHALL RD Westbound					MCCASLIN BLVD Northbound					MARSHALL RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersect on	04:15 PM																				
Volume	85	816	606	9	1516	38	20	129	3	190	249	558	54	2	863	365	39	371	20	795	3364
Percent	5.6	53.8	40.0	0.6		20.0	10.5	67.9	1.6		28.9	64.7	6.3	0.2		45.9	4.9	46.7	2.5		
04:30 Volume	27	202	170	0	399	7	4	28	0	39	68	164	15	0	247	135	10	107	10	262	947
Peak Factor																					
High Int.	04:30 PM					05:00 PM					04:30 PM					04:30 PM					0.888
Volume	27	202	170	0	399	9	4	46	0	59	68	164	15	0	247	135	10	107	10	262	
Peak Factor	0.95					0.80					0.87					0.75					9



COUNTER MEASURES INC.
 1889 YORK STREET
 DENVER, COLORADO 80206
 303-333-7409

Location: MARSHALL RD E-O MCCASLIN BLVD
 City: SUPERIOR
 County: BOULDER
 Direction: EAST/WEST

Site Code: 231819
 Station ID: 231819

Start Time	18-Apr-23 Tue	EAST	WEST	Total
12:00 AM		*	*	*
01:00		*	*	*
02:00		*	*	*
03:00		*	*	*
04:00		*	*	*
05:00		*	*	*
06:00		*	*	*
07:00		*	*	*
08:00		*	*	*
09:00		168	61	229
10:00		111	42	153
11:00		87	31	118
12:00 PM		67	26	93
01:00		48	28	76
02:00		37	31	68
03:00		49	52	101
04:00		131	87	218
05:00		226	191	417
06:00		238	217	455
07:00		119	87	206
08:00		71	41	112
09:00		41	31	72
10:00		23	19	42
11:00		12	11	23
Total		1428	955	2383
Percent		59.9%	40.1%	
AM Peak	-	09:00	09:00	-
Vol.	-	168	61	-
PM Peak	-	18:00	18:00	-
Vol.	-	238	217	-

09:00	-	-	-	09:00
229	-	-	-	229
18:00	-	-	-	18:00
455	-	-	-	455

COUNTER MEASURES INC.
 1889 YORK STREET
 DENVER, COLORADO 80206
 303-333-7409

Location: MARSHALL RD E-O MCCASLIN BLVD
 City: SUPERIOR
 County: BOULDER
 Direction: EAST/WEST

Site Code: 231819
 Station ID: 231819

Start Time	19-Apr-23 Wed	EAST	WEST	Total
12:00 AM		11	6	17
01:00		6	4	10
02:00		4	3	7
03:00		9	5	14
04:00		22	13	35
05:00		31	21	52
06:00		59	36	95
07:00		81	59	140
08:00		234	123	357
09:00		157	67	224
10:00		*	*	*
11:00		*	*	*
12:00 PM		*	*	*
01:00		*	*	*
02:00		*	*	*
03:00		*	*	*
04:00		*	*	*
05:00		*	*	*
06:00		*	*	*
07:00		*	*	*
08:00		*	*	*
09:00		*	*	*
10:00		*	*	*
11:00		*	*	*
Total		614	337	951
Percent		64.6%	35.4%	
AM Peak	-	08:00	08:00	-
Vol.	-	234	123	-
PM Peak	-	-	-	-
Vol.	-	-	-	-
Grand Total		2042	1292	3334
Percent		61.2%	38.8%	
ADT		ADT 1,890	ADT 1,890	

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003 - McCaslin Blvd @ US-36 @ N Ramp - Cobalt @ 172.16.8.112 - Econolite Type - Cobalt

Configuration Controller Sequence

Phase Ring Sequence.....(Note: Sequences identical to the prior one are not printed)

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
	B	B	B	B	B	B	B	B	B							
Sequence 1																
Ring 1	| 1	2	| 3	4	| 9	10	| 13	14	| .	.	.	.	.	.	.	.
Ring 2	| 5	6	| 7	8	| 11	12	| 15	16	| .	.	.	.	.	.	.	.
Sequence 2																
Ring 1	| 2	1	| 3	4	| 10	9	| 13	14	| .	.	.	.	.	.	.	.
Ring 2	| 5	6	| 7	8	| 11	12	| 15	16	| .	.	.	.	.	.	.	.
Sequence 3																
Ring 1	| 1	2	| 4	3	| 9	10	| 14	13	| .	.	.	.	.	.	.	.
Ring 2	| 5	6	| 7	8	| 11	12	| 15	16	| .	.	.	.	.	.	.	.
Sequence 4																
Ring 1	| 2	1	| 4	3	| 10	9	| 14	13	| .	.	.	.	.	.	.	.
Ring 2	| 5	6	| 7	8	| 11	12	| 15	16	| .	.	.	.	.	.	.	.
Sequence 5																
Ring 1	| 1	2	| 3	4	| 9	10	| 13	14	| .	.	.	.	.	.	.	.
Ring 2	| 6	5	| 7	8	| 12	11	| 15	16	| .	.	.	.	.	.	.	.
Sequence 6																
Ring 1	| 2	1	| 3	4	| 10	9	| 13	14	| .	.	.	.	.	.	.	.
Ring 2	| 6	5	| 7	8	| 12	11	| 15	16	| .	.	.	.	.	.	.	.
Sequence 7																
Ring 1	| 1	2	| 4	3	| 9	10	| 14	13	| .	.	.	.	.	.	.	.
Ring 2	| 6	5	| 7	8	| 12	11	| 15	16	| .	.	.	.	.	.	.	.
Sequence 8																
Ring 1	| 2	1	| 4	3	| 10	9	| 14	13	| .	.	.	.	.	.	.	.
Ring 2	| 6	5	| 7	8	| 12	11	| 15	16	| .	.	.	.	.	.	.	.
Sequence 9																
Ring 1	| 1	2	| 3	4	| 9	10	| 13	14	| .	.	.	.	.	.	.	.
Ring 2	| 5	6	| 8	7	| 11	12	| 16	15	| .	.	.	.	.	.	.	.
Sequence 10																
Ring 1	| 2	1	| 3	4	| 10	9	| 13	14	| .	.	.	.	.	.	.	.
Ring 2	| 5	6	| 8	7	| 11	12	| 16	15	| .	.	.	.	.	.	.	.
Sequence 11																
Ring 1	| 1	2	| 4	3	| 9	10	| 14	13	| .	.	.	.	.	.	.	.
Ring 2	| 5	6	| 8	7	| 11	12	| 16	15	| .	.	.	.	.	.	.	.
Sequence 12																
Ring 1	| 2	1	| 4	3	| 10	9	| 14	13	| .	.	.	.	.	.	.	.
Ring 2	| 5	6	| 8	7	| 11	12	| 16	15	| .	.	.	.	.	.	.	.
Sequence 13																
Ring 1	| 1	2	| 3	4	| 9	10	| 13	14	| .	.	.	.	.	.	.	.
Ring 2	| 6	5	| 8	7	| 12	11	| 16	15	| .	.	.	.	.	.	.	.
Sequence 14																
Ring 1	| 2	1	| 3	4	| 10	9	| 13	14	| .	.	.	.	.	.	.	.
Ring 2	| 6	5	| 8	7	| 12	11	| 16	15	| .	.	.	.	.	.	.	.
Sequence 15																
Ring 1	| 1	2	| 4	3	| 9	10	| 14	13	| .	.	.	.	.	.	.	.
Ring 2	| 6	5	| 8	7	| 12	11	| 16	15	| .	.	.	.	.	.	.	.
Sequence 16																
Ring 1	| 2	1	| 4	3	| 10	9	| 14	13	| .	.	.	.	.	.	.	.
Ring 2	| 6	5	| 8	7	| 12	11	| 16	15	| .	.	.	.	.	.	.	.

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
-------	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----

Hardware Alternate Sequence Enable: No

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Solutions that Move the World™

003 - McCaslin Blvd @ US-36 @ N Ramp - Cobalt @ 172.16.8.112 - Econolite Type - Cobalt

Configuration Port 1 (SDLC)

Port 1 SDLC (MM) 1-4-1

BIU	1	2	3	4	5	6	7	8
Term & Facility								
Detector Rack								

Enable TS2/MMU Type Cabinet: No
 Enable MMU Extended Status: No
 Enable SDLC Stop Time: No
 Enable 3 Critical RFE's Lockup: Yes

MMU Program (MM) 1-4-2

Channel Can Serve With Channel	
Channel 1	Channel 2

Color Check Enable (MM) 1-4-3

Enable Color Check: Yes

MMU/LS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Green																
Yellow																
Red																

Secondary Stations/Tests (MM) 1-4-4

ID	1	2	3	4	5	6	7	8	MMU
Term & Facility									

ID	1	2	3	4	5	6	7	8	Diag
Detector Rack									

Enable SDLC Diagnostic Test: No

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003 - McCaslin Blvd @ US-36 @ N Ramp - Cobalt @ 172.16.8.112 - Econolite Type - Cobalt

Configuration Communications 1 (SDLC)**Ethernet Port Configuration (MM) 1-5-1**

DHCP Enable: No
 Controller IP: 172.16.8.112
 Subnet Mask: 255.255.252.0
 Default Gateway IP: 172.16.11.254
 Server IP: 172.16.50.1

NTCIP (MM) 1-5-5

NTCIP Backup Time (Sec): 0
 NTCIP UDP Port: 2101
 Ethernet Priority: 1
 Port 2 Priority (Port C50S for 2070): 4
 Port 3A Priority (Port C21S for 2070): 3
 Port 3B Priority (Port C22S for 2070): 2

Port Configuration (MM) 1-5-2 to 1-5-4

Port	2 (C50S)	3A (C21S)	3B (C22S)
Comm Module	None	Auto	Auto
Protocol	NTCIP	NTCIP	NTCIP
Enable	No	No	No
Data Rate (BPS)	9600	9600	9600
Data, Parity, Stop	8 N 1	8 N 1	8 N 1
Address	0	0	0
Telemetry Response Delay	0.0	0.0	0.0
Duplex - Half or Full	Half	Full	Full
Flow Control	No	Yes	Yes
Group Address	0	0	0
Single Flag Enable	Yes	Yes	Yes
RTS to CTS Delay	n/a	n/a	0.0
RTS Turn Off Delay	n/a	n/a	0.0
Dropout Time	10	10	10
Early RTS	n/a	n/a	No
Telemetry Mode	n/a	n/a	FSK
ATCS Railroad	0	n/a	n/a
ATCS Railroad Line	0	n/a	n/a
ATCS Group	0	n/a	n/a
Wayside Device	0	n/a	n/a
ATC Device	0	n/a	n/a
Wayside Subnode	0	n/a	n/a
ATC Subnode	0	n/a	n/a

ECPIP (MM) 1-5-6

Controller Address: 0
 Expanded System Detector Address: 0

System Detector Assignment

System Detector	Local Detector

Wireless Configuration (MM) 1-5-7

Wireless Channel Number: 1
 Wireless Access Code: 327423274

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003 - McCaslin Blvd @ US-36 @ N Ramp - Cobalt @ 172.16.8.112 - Econolite Type - Cobalt

Configuration Logging / Display**Event Logging (MM) 1-6-1**

Critical RFE's (MMU/TF)	Yes	3 Critical Errors Within 24 Hours	Yes
MMU Flash Faults	Yes	Local Flash Fault	Yes
Non-Critical RFE's (Det/Test)	Yes	Detector Errors	Yes
Coordination Errors	Yes	Controller Download	Yes
Preemption Events	Yes	TSP Events	Yes
Power On/Off	Yes	Low Battery	Yes
Access	Yes	Data Change	Yes
Online / Offline	Yes		

Alarm Event	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable Logging	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Display Options (MM) 1-7-2

Key Click Enable:	No
Switch to Graphics Mode:	No
LED Mode:	Auto
Display Mode:	Basic
Trans Mode Pop-Up Disable:	No

Sign On (MM) 8-5

Sign On Message Line 1: Solutions that Move the World
 Sign On Message Line 2:

Software Modules (MM) 8-7

Application Version: 32.66.10
 OS (Boot) Version: 06.07.00

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003 - McCaslin Blvd @ US-36 @ N Ramp - Cobalt @ 172.16.8.112 - Econolite Type - Cobalt

Logic Processor Page 1

Logic Statement Control (MM) 1-8-1

Logic #	Statement Control
---------	-------------------

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Solutions that Move the World™

003 - McCaslin Blvd @ US-36 @ N Ramp - Cobalt @ 172.16.8.112 - Econolite Type - Cobalt

Logic Processor Page 2

Logic Statements (MM) 1-8-2

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Solutions that Move the World™

003 - McCaslin Blvd @ US-36 @ N Ramp - Cobalt @ 172.16.8.112 - Econolite Type - Cobalt

Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Min Green	0	10	0	0	0	0	0	10	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	20	0	0	0	0	0	29	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	16	0	0	0	0	0	16	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	0.0	8.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	0	45	0	0	0	0	0	70	0	0	0	0	0	0	0	0
Max2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	0.0	3.7	0.0	0.0	0.0	0.0	0.0	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	0.0	5.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 2 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Min Green	0	10	0	0	0	0	0	10	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	20	0	0	0	0	0	29	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	16	0	0	0	0	0	16	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	0.0	8.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	0	45	0	0	0	0	0	50	0	0	0	0	0	0	0	0
Max2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	0.0	3.7	0.0	0.0	0.0	0.0	0.0	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	0.0	5.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 3 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Min Green	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Max2	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 4 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Min Green	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Max2	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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Controller Overlaps

Vehicle Overlaps (MM) 2-2

Overlap	Type	Lag Green	Yellow	Red	Adv. Green
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Phases

Overlap	Phase	Included	Protect	Ped Protect	Not Overlap	Modifier	Lag X Phases	Lag 2 Phases	Flash Green
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PPLT FYA

Overlap	Protected Phase (Left Turn)	Permissive Phase (Opposing Thru)	Flashing Arrow Output	Flashing Arrow Output CH	Delay Start of FYA	Delay Start of Clearance	Action Plan SF Bit Disable	Ped Protected Enable
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Guaranteed Minimum Time Data (MM) 2-4

Phase	Min Green	Walk	Ped Clear	Yellow	Red Clear	Overlap Green
A01	5	0	7	3.0	0.0	5
B02	5	0	7	3.0	0.0	5
C03	5	0	7	3.0	0.0	5
D04	5	0	7	3.0	0.0	5
E05	5	0	7	3.0	0.0	5
F06	5	0	7	3.0	0.0	5
G07	5	0	7	3.0	0.0	5
H08	5	0	7	3.0	0.0	5
I09	5	0	7	3.0	0.0	5
J10	5	0	7	3.0	0.0	5
K11	5	0	7	3.0	0.0	5
L12	5	0	7	3.0	0.0	5
M13	5	0	7	3.0	0.0	5
N14	5	0	7	3.0	0.0	5
O15	5	0	7	3.0	0.0	5
P16	5	0	7	3.0	0.0	5

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Controller Pedestrian Overlaps
Vehicle / Pedestrian Overlaps (MM) 2-3

Included	Pedestrian Overlaps
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Controller Start / Flash Data (MM) 2-5

Start Up

Phase	Phase Setting
1	.
2	R
3	.
4	.
5	.
6	.
7	.
8	.
9	.
10	.
11	.
12	.
13	.
14	.
15	.
16	.

Overlap
A
B
C
D

Flash Thru Mon: No
 Flash Time: 0
 All Red: 6
 Power Start Seq: 1
 MUTCD Enabled: No
 Y->G: n/a

Automatic Flash

Entry
2

Exit
2

Overlap Exit
A
B
C
D

Flash Thru Mon: No
 Exit Flash: W
 Minimum Flash: 8
 Minimum Recall: No
 Cycle Through Phase: No

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Controller Options

Controller Options (MM) 2-6-1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Grn Ph																
Guar Passage																
Non-Act I		X				X										
Non-Act II				X				X								
Dual Entry																
Cond Service																
Cond Reservice																
Ped Re-Service																
Rest In Walk																
Flashing Walk																
Ped Clr-Yel																
Ped Clr-Red																
IGRN + Veh Ext																

Ped Clear Protect: Off

Unit Red Revert: 2.0

MUTCD 3 Seconds Don't Walk: No

Pre-Timed Mode (MM) 2-7

Enable Pre-Timed Mode: No

Free Input Disables Pre-Timed: No

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Pre-Timed																

Phase Recall Options (MM) 2-8

Plan # 1

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall		X						X								
Ped Recall		X						X								
Max Recall		X						X								
Soft Recall																
No Rest																
AI Calc																

Plan # 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Vehicle Recall																
Ped Recall		X						X								
Max Recall		X						X								
Soft Recall																
No Rest																
AI Calc																

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**Coordination Options
Options (MM) 3-1**

Manual Pattern	Auto	ECPI Coord	Yes
System Source	TBC	System Format	STD
Splits In	Seconds	Offsets In	Seconds
Transition	Smooth	Max Select	MAXINH
Dwell / Add Time	0		
Delay Coord Wk-LZ	No	Force Off	Float
Offset Reference	Yellow	Use Ped Time	No
Ped Recall	No	Ped Reservice	No
Local Zero Override	No	FO Added Ini Green	No
Re-sync Count	0	Multisync	No

Auto Perm Minimum Green (Seconds) (MM) 3-4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Split Demand (MM) 3-5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Demand 1																
Demand 2																

Demand	1	2
Detector	0	0
Call Time (Sec)	0	0
Cycle Count	0	0

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Coordination Pattern Data
Coordinator Pattern Data (MM) 3-2

Coordinator Pattern # 1

Split Pattern	1	TS2 (Pat-Off)	0-1	Splits In	Seconds
Cycle	120	Std (COS)	9	Offsets In	Seconds
Offset Value	48s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reserve	No	Action Plan	1		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 1)	0	50	0	0	0	0	0	70	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	50s	70s	0s	0s

Misc. Data				
Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat
				0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X														
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

Coordinator Pattern # 2

Split Pattern	2	TS2 (Pat-Off)	0-2	Splits In	Seconds
Cycle	100	Std (COS)	17	Offsets In	Seconds
Offset Value	65s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	2		
Actuated Walk Rest	No	Sequence	1		
Phase Reserve	No	Action Plan	2		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 2)	0	45	0	0	0	0	0	55	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	45s	55s	0s	0s

Misc. Data				
Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat
				0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X														
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

Coordinator Pattern # 3

Split Pattern	3	TS2 (Pat-Off)	0-3	Splits In	Seconds
Cycle	120	Std (COS)	25	Offsets In	Seconds
Offset Value	55s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reserve	No	Action Plan	3		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 3)	0	52	0	0	0	0	0	68	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	52s	68s	0s	0s

Misc. Data				
Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat
				0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X														
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

Coordinator Pattern # 4

Split Pattern	4	TS2 (Pat-Off)	1-1	Splits In	Seconds
Cycle	80	Std (COS)	33	Offsets In	Seconds
Offset Value	0s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reserve	No	Action Plan	4		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 4)	0	38	0	0	0	0	0	42	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	38s	42s	0s	0s

Misc. Data				
Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat
				0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase								X								
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

Coordinator Pattern # 5

Split Pattern	5	TS2 (Pat-Off)	1-2	Splits In	Seconds
Cycle	120	Std (COS)	41	Offsets In	Seconds
Offset Value	48s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reserve	No	Action Plan	5		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 5)	0	58	0	0	0	0	0	62	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	58s	62s	0s	0s

Misc. Data				
Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat
				0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X														
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

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Coordination Split Pattern
Split Pattern Data (MM) 3-3

Split Pattern # 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	0	50	0	0	0	0	0	70	0	0	0	0	0	0	0	0
Coord Phase		X														
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	50s	70s	0s	0s

Split Pattern # 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	0	45	0	0	0	0	0	55	0	0	0	0	0	0	0	0
Coord Phase		X														
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	45s	55s	0s	0s

Split Pattern # 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	0	52	0	0	0	0	0	68	0	0	0	0	0	0	0	0
Coord Phase		X														
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	52s	68s	0s	0s

Split Pattern # 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	0	38	0	0	0	0	0	42	0	0	0	0	0	0	0	0
Coord Phase								X								
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	38s	42s	0s	0s

Split Pattern # 5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	0	58	0	0	0	0	0	62	0	0	0	0	0	0	0	0
Coord Phase		X														
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	58s	62s	0s	0s

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Preempt Plan

Preempt Plan (MM) 4-1

No Enabled Preempts

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**Preempt Preempt Filtering
Enable Preempt Filtering & TSP/SCP (MM) 4-2**

Input	Solid	Pulsing
1	...BYPASSED...	...BYPASSED...
2	...BYPASSED...	...BYPASSED...
3	PREEMPTION 3	PREEMPTION 7
4	PREEMPTION 4	PREEMPTION 8
5	PREEMPTION 5	PREEMPTION 9
6	PREEMPTION 6	PREEMPTION 10
7	...BYPASSED...	...BYPASSED...
8	...BYPASSED...	...BYPASSED...
9	...BYPASSED...	...BYPASSED...
10	...BYPASSED...	...BYPASSED...

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Preempt TSP/SCP Plan and Split

TSP / SCP Plan (MM) 4-3

TSP/SCP Plan	Enable Option	Signal Type	Det Lock	Delay Time	Max Presence	PMT Enables Reservice	No Delay in TSP	Action SF Inhibit	Reservice Cycles	Bus Heading
1	No	Solid	No	0	0	No	False	0	0	NB
2	No	Solid	No	0	0	No	False	0	0	SB
3	No	Solid	No	0	0	No	False	0	0	EB
4	No	Solid	No	0	0	No	False	0	0	WB
5	No	Solid	No	0	0	No	False	0	0	.
6	No	Solid	No	0	0	No	False	0	0	.

Mode: TSP
 Free Default Pattern: 120
 Headway Allowance: 0

TSP/SCP Plan	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1
2
3
4
5
6

TSP / SCP Split Pattern (MM) 4-4

TSP/SCP Split Pattern	Max Type	Phase															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4	Max Reduction	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255

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Time Base Clock/Calendar
Clock/Calendar Data (MM) 5-1
Manual Action Plan: 0
SYNC Reference Time: 00:00
SYNC Reference: Reference Time
Day Light Savings: No
Time Reset Input Set Time: 3:30:00
Standard Time From GMT: 0

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**Time Base Action Plan
Action Plan (MM) 5-2**

Action Plan - 1 - "1"

Pattern	1	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
LP 1-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 16-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 31-45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 46-60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 61-75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 76-90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 91-100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Action Plan - 2 - "2"

Pattern	2	Override Sys	No
Timing Plan	2	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)																
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Aux Func (1-3)			
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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 16-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 31-45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 46-60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 61-75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 76-90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 91-100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Action Plan - 3 - "3"

Pattern	3	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)															
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Aux Func (1-3)			
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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 16-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 31-45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 46-60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 61-75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 76-90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 91-100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Action Plan - 4 - "4"

Pattern	4	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)																
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Aux Func (1-3)			
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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 16-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 31-45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 46-60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 61-75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 76-90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 91-100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Action Plan - 5 - "5"

Pattern	5	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)																
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Aux Func (1-3)			
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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 16-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 31-45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 46-60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 61-75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 76-90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 91-100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Time Base Day Plan/Schedule
Day Plan (MM) 5-3**Day Plan #1 - "1"**

Event	Action Plan	Start Time
1	1	06:30
2	2	09:00
3	3	15:30
4	2	19:00

Day Plan #2 - "2"

Event	Action Plan	Start Time
1	2	06:30
2	5	10:00
3	2	18:00

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X	X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 2

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

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Time Base Exceptions
Exception Day Program (MM) 5-5

Excep Day	Float/Fixed	Mon/Mon	DOW/DOM	WOM/Year	Day Plan
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Detectors

Detectors - Pg 1

Veh Det Phase Assignment (MM) 6-1

Vehicle Detector Plan Number - 1

Veh Detector	Called Phase	Type

Vehicle Detector Plan Number - 2

Veh Detector	Called Phase	Type

Vehicle Detector Plan Number - 3

Veh Detector	Called Phase	Type

Vehicle Detector Plan Number - 4

Veh Detector	Called Phase	Type

Vehicle Detector Setup (MM) 6-2

Veh Detector	Type	TS2 Detector	Description
1	S-STANDARD	Yes	
2	S-STANDARD	Yes	
3	S-STANDARD	Yes	
4	S-STANDARD	Yes	
5	S-STANDARD	Yes	
6	S-STANDARD	Yes	
7	S-STANDARD	Yes	
8	S-STANDARD	Yes	
9	S-STANDARD	Yes	
10	S-STANDARD	Yes	
11	S-STANDARD	Yes	
12	S-STANDARD	Yes	
13	S-STANDARD	Yes	
14	S-STANDARD	Yes	
15	S-STANDARD	Yes	
16	S-STANDARD	Yes	
17	S-STANDARD	Yes	
18	S-STANDARD	Yes	
19	S-STANDARD	Yes	
20	S-STANDARD	Yes	
21	S-STANDARD	Yes	
22	S-STANDARD	Yes	
23	S-STANDARD	Yes	
24	S-STANDARD	Yes	
25	S-STANDARD	Yes	
26	S-STANDARD	Yes	
27	S-STANDARD	Yes	
28	S-STANDARD	Yes	
29	S-STANDARD	Yes	
30	S-STANDARD	Yes	
31	S-STANDARD	Yes	
32	S-STANDARD	Yes	
33	S-STANDARD	Yes	
34	S-STANDARD	Yes	
35	S-STANDARD	Yes	
36	S-STANDARD	Yes	
37	S-STANDARD	Yes	
38	S-STANDARD	Yes	
39	S-STANDARD	Yes	
40	S-STANDARD	Yes	
41	S-STANDARD	Yes	
42	S-STANDARD	Yes	
43	S-STANDARD	Yes	
44	S-STANDARD	Yes	
45	S-STANDARD	Yes	
46	S-STANDARD	Yes	
47	S-STANDARD	Yes	
48	S-STANDARD	Yes	
49	S-STANDARD	Yes	
50	S-STANDARD	Yes	
51	S-STANDARD	Yes	
52	S-STANDARD	Yes	
53	S-STANDARD	Yes	
54	S-STANDARD	Yes	
55	S-STANDARD	Yes	
56	S-STANDARD	Yes	
57	S-STANDARD	Yes	
58	S-STANDARD	Yes	
59	S-STANDARD	Yes	
60	S-STANDARD	Yes	
61	S-STANDARD	Yes	
62	S-STANDARD	Yes	

63	S-STANDARD	Yes	
64	S-STANDARD	Yes	

Vehicle Detector Plan Number - 1

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 2

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

17	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 3

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 4

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discn. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Ped Detector Phase Assignment (MM) 6-3

Mode: NTCIP

Called Phase	Detector
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16

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003 - McCaslin Blvd @ US-36 @ N Ramp - Cobalt @ 172.16.8.112 - Econolite Type - Cobalt

Detectors

Detectors - Pg 2

Log - Speed Detector Setup (MM) 6-4

NTCIP Log Period: 60 ECPI Log Period: 0 Length Unit: Inches

Speed Detector	Local Detector	One/Two Detector	Vehicle Length	Trap length	Enable Log
1	0	1	0	0	No
2	0	1	0	0	No
3	0	1	0	0	No
4	0	1	0	0	No
5	0	1	0	0	No
6	0	1	0	0	No
7	0	1	0	0	No
8	0	1	0	0	No
9	0	1	0	0	No
10	0	1	0	0	No
11	0	1	0	0	No
12	0	1	0	0	No
13	0	1	0	0	No
14	0	1	0	0	No
15	0	1	0	0	No
16	0	1	0	0	No

Vehicle Detector Diagnostics (MM) 6-5

Veh Diagnostic Plan Number - 1

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 2

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 3

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 4

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Pedestrian Detector Diagnostics (MM) 6-6

Ped Diagnostic Plan Number - 1

Det	Counts	Act	Pres	Multiplier
2	0	0	2	1
4	0	0	2	1
6	0	0	2	1
8	0	0	2	1

Ped Diagnostic Plan Number - 2

Det	Counts	Act	Pres	Multiplier

Ped Diagnostic Plan Number - 3

Det	Counts	Act	Pres	Multiplier

Ped Diagnostic Plan Number - 4

Det	Counts	Act	Pres	Multiplier

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Configuration Controller Sequence

Phase Ring Sequence.....(Note: Sequences identical to the prior one are not printed)

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
--	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

	B		B		B		B		B							
Sequence 1																
Ring 1	| 1	2	| 3	4	| 9	10	| 13	14	| .	.	.	.	.	.	.	.
Ring 2	| 5	6	| 7	8	| 11	12	| 15	16	| .	.	.	.	.	.	.	.

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
-------	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----

Hardware Alternate Sequence Enable: No

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Configuration Port 1 (SDLC)

Port 1 SDLC (MM) 1-4-1

BIU	1	2	3	4	5	6	7	8
Term & Facility								
Detector Rack								

Enable TS2/MMU Type Cabinet: No
 Enable MMU Extended Status: No
 Enable SDLC Stop Time: No
 Enable 3 Critical RFE's Lockup: Yes

MMU Program (MM) 1-4-2

Channel Can Serve With Channel	
Channel 1	Channel 2

Color Check Enable (MM) 1-4-3

Enable Color Check: Yes

MMU/LS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Green																
Yellow																
Red																

Secondary Stations/Tests (MM) 1-4-4

ID	1	2	3	4	5	6	7	8	MMU
Term & Facility									

ID	1	2	3	4	5	6	7	8	Diag
Detector Rack									

Enable SDLC Diagnostic Test: No

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Configuration Communications 1 (SDLC)**Ethernet Port Configuration (MM) 1-5-1**

DHCP Enable: No
 Controller IP: 172.16.8.111
 Subnet Mask: 255.255.252.0
 Default Gateway IP: 172.16.11.254
 Server IP: 172.16.50.1

NTCIP (MM) 1-5-5

NTCIP Backup Time (Sec): 0
 NTCIP UDP Port: 2101
 Ethernet Priority: 1
 Port 2 Priority (Port C50S for 2070): 4
 Port 3A Priority (Port C21S for 2070): 3
 Port 3B Priority (Port C22S for 2070): 2

Port Configuration (MM) 1-5-2 to 1-5-4

Port	2 (C50S)	3A (C21S)	3B (C22S)
Comm Module	None	Auto	Auto
Protocol	NTCIP	NTCIP	NTCIP
Enable	Yes	No	No
Data Rate (BPS)	9600	9600	9600
Data, Parity, Stop	8 N 1	8 N 1	8 N 1
Address	1	0	0
Telemetry Response Delay	0.0	0.0	0.0
Duplex - Half or Full	Half	Full	Full
Flow Control	No	Yes	Yes
Group Address	0	0	0
Single Flag Enable	Yes	Yes	Yes
RTS to CTS Delay	n/a	n/a	0.0
RTS Turn Off Delay	n/a	n/a	0.0
Dropout Time	10	10	10
Early RTS	n/a	n/a	No
Telemetry Mode	n/a	n/a	FSK
ATCS Railroad	0	n/a	n/a
ATCS Railroad Line	0	n/a	n/a
ATCS Group	0	n/a	n/a
Wayside Device	0	n/a	n/a
ATC Device	0	n/a	n/a
Wayside Subnode	0	n/a	n/a
ATC Subnode	0	n/a	n/a

ECPIP (MM) 1-5-6

Controller Address: 0
 Expanded System Detector Address: 0

System Detector Assignment

System Detector	Local Detector

Wireless Configuration (MM) 1-5-7

Wireless Channel Number: 1
 Wireless Access Code: 327423274

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Configuration Logging / Display

Event Logging (MM) 1-6-1

Critical RFE's (MMU/TF)	Yes	3 Critical Errors Within 24 Hours	Yes
MMU Flash Faults	Yes	Local Flash Fault	Yes
Non-Critical RFE's (Det/Test)	Yes	Detector Errors	Yes
Coordination Errors	Yes	Controller Download	Yes
Preemption Events	Yes	TSP Events	Yes
Power On/Off	Yes	Low Battery	Yes
Access	Yes	Data Change	Yes
Online / Offline	Yes		

Alarm Event	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable Logging	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Display Options (MM) 1-7-2

Key Click Enable:	No
Switch to Graphics Mode:	Yes
LED Mode:	Auto
Display Mode:	Basic
Trans Mode Pop-Up Disable:	No

Sign On (MM) 8-5

Sign On Message Line 1: Solutions that Move the World
 Sign On Message Line 2:

Software Modules (MM) 8-7

Application Version: 32.66.10
 OS (Boot) Version: 06.07.00

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Logic Processor Page 1

Logic Statement Control (MM) 1-8-1

Logic #	Statement Control
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Logic Processor Page 2

Logic Statements (MM) 1-8-2

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Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Min Green	0	10	0	10	0	0	0	0	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	32	0	26	0	0	0	0	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	17	0	15	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	0.0	8.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	0	65	0	55	0	0	0	0	0	0	0	0	0	0	0	0
Max2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	0.0	3.5	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	0.0	5.8	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	0.0	5.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	10	0	10	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	8.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 2 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Min Green	0	10	0	10	0	0	0	0	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	27	0	21	0	0	0	0	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	17	0	15	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	0.0	8.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	0	50	0	50	0	0	0	0	0	0	0	0	0	0	0	0
Max2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	0.0	3.5	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	0.0	5.8	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	0.0	5.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	10	0	10	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	8.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 3 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Min Green	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Max2	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 4 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Min Green	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Max2	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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Controller Overlaps

Vehicle Overlaps (MM) 2-2

Overlap	Type	Lag Green	Yellow	Red	Adv. Green
---------	------	-----------	--------	-----	------------

Phases

Overlap	Phase	Included	Protect	Ped Protect	Not Overlap	Modifier	Lag X Phases	Lag 2 Phases	Flash Green
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PPLT FYA

Overlap	Protected Phase (Left Turn)	Permissive Phase (Opposing Thru)	Flashing Arrow Output	Flashing Arrow Output CH	Delay Start of FYA	Delay Start of Clearance	Action Plan SF Bit Disable	Ped Protected Enable
---------	-----------------------------	----------------------------------	-----------------------	--------------------------	--------------------	--------------------------	----------------------------	----------------------

Guaranteed Minimum Time Data (MM) 2-4

Phase	Min Green	Walk	Ped Clear	Yellow	Red Clear	Overlap Green
A01	5	0	7	3.0	0.0	5
B02	5	0	7	3.0	0.0	5
C03	5	0	7	3.0	0.0	5
D04	5	0	7	3.0	0.0	5
E05	5	0	7	3.0	0.0	5
F06	5	0	7	3.0	0.0	5
G07	5	0	7	3.0	0.0	5
H08	5	0	7	3.0	0.0	5
I09	5	0	7	3.0	0.0	5
J10	5	0	7	3.0	0.0	5
K11	5	0	7	3.0	0.0	5
L12	5	0	7	3.0	0.0	5
M13	5	0	7	3.0	0.0	5
N14	5	0	7	3.0	0.0	5
O15	5	0	7	3.0	0.0	5
P16	5	0	7	3.0	0.0	5

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Controller Pedestrian Overlaps
Vehicle / Pedestrian Overlaps (MM) 2-3

Included	Pedestrian Overlaps
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Controller Start / Flash Data (MM) 2-5

Start Up

Phase	Phase Setting
1	.
2	Y
3	.
4	.
5	.
6	.
7	.
8	.
9	.
10	.
11	.
12	.
13	.
14	.
15	.
16	.

Overlap
A
B
C
D

Flash Thru Mon: No
 Flash Time: 0
 All Red: 6
 Power Start Seq: 1
 MUTCD Enabled: No
 Y->G: n/a

Automatic Flash

Entry
2

Exit
2

Overlap Exit
A
B
C
D

Flash Thru Mon: No
 Exit Flash: W
 Minimum Flash: 8
 Minimum Recall: No
 Cycle Through Phase: No

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Controller Options

Controller Options (MM) 2-6-1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Grn Ph																
Guar Passage																
Non-Act I		X				X										
Non-Act II				X				X								
Dual Entry																
Cond Service																
Cond Reservice																
Ped Re-Service																
Rest In Walk																
Flashing Walk																
Ped Clr-Yel																
Ped Clr-Red																
IGRN + Veh Ext																

Ped Clear Protect: Off

Unit Red Revert: 2.0

MUTCD 3 Seconds Don't Walk: No

Pre-Timed Mode (MM) 2-7

Enable Pre-Timed Mode: No

Free Input Disables Pre-Timed: No

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Pre-Timed																

Phase Recall Options (MM) 2-8

Plan # 1

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall		X		X												
Ped Recall																
Max Recall		X		X												
Soft Recall																
No Rest																
AI Calc																

Plan # 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall		X		X												
Ped Recall																
Max Recall		X		X												
Soft Recall																
No Rest																
AI Calc																

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**Coordination Options
Options (MM) 3-1**

Manual Pattern	Auto	ECPI Coord	Yes
System Source	TBC	System Format	STD
Splits In	Seconds	Offsets In	Seconds
Transition	Smooth	Max Select	MAXINH
Dwell / Add Time	0		
Delay Coord Wk-LZ	No	Force Off	Float
Offset Reference	Yellow	Use Ped Time	No
Ped Recall	No	Ped Reservice	No
Local Zero Override	No	FO Added Ini Green	No
Re-sync Count	0	Multisync	No

Auto Perm Minimum Green (Seconds) (MM) 3-4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Split Demand (MM) 3-5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Demand 1																
Demand 2																

Demand	1	2
Detector	0	0
Call Time (Sec)	0	0
Cycle Count	0	0

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Coordination Pattern Data
Coordinator Pattern Data (MM) 3-2

Coordinator Pattern # 1

Split Pattern	1	TS2 (Pat-Off)	0-1	Splits In	Seconds
Cycle	120	Std (COS)	9	Offsets In	Seconds
Offset Value	46s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reserve	No	Action Plan	1		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 1)	0	60	0	60	0	0	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	120s	0s	0s	0s

Misc. Data				
Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat
				0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X														
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

Coordinator Pattern # 2

Split Pattern	2	TS2 (Pat-Off)	0-2	Splits In	Seconds
Cycle	100	Std (COS)	17	Offsets In	Seconds
Offset Value	58s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	2		
Actuated Walk Rest	No	Sequence	1		
Phase Reserve	No	Action Plan	2		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 2)	0	55	0	45	0	0	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	100s	0s	0s	0s

Misc. Data				
Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat
				0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X														
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

Coordinator Pattern # 3

Split Pattern	3	TS2 (Pat-Off)	0-3	Splits In	Seconds
Cycle	120	Std (COS)	25	Offsets In	Seconds
Offset Value	43s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reserve	No	Action Plan	3		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 3)	0	60	0	60	0	0	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	120s	0s	0s	0s

Misc. Data				
Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat
				0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X														
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

Coordinator Pattern # 4

Split Pattern	4	TS2 (Pat-Off)	1-1	Splits In	Seconds
Cycle	80	Std (COS)	33	Offsets In	Seconds
Offset Value	0s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reserve	No	Action Plan	4		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 4)	0	42	0	38	0	0	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	80s	0s	0s	0s

Misc. Data				
Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat
				0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase				X												
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

Coordinator Pattern # 5

Split Pattern	5	TS2 (Pat-Off)	1-2	Splits In	Seconds
Cycle	120	Std (COS)	41	Offsets In	Seconds
Offset Value	46s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reserve	No	Action Plan	5		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 5)	0	62	0	58	0	0	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	120s	0s	0s	0s

Misc. Data				
Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat
				0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X														
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

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Coordination Split Pattern
Split Pattern Data (MM) 3-3

Split Pattern # 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	0	60	0	60	0	0	0	0	0	0	0	0	0	0	0	0
Coord Phase		X														
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	120s	0s	0s	0s

Split Pattern # 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	0	55	0	45	0	0	0	0	0	0	0	0	0	0	0	0
Coord Phase		X														
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	100s	0s	0s	0s

Split Pattern # 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	0	60	0	60	0	0	0	0	0	0	0	0	0	0	0	0
Coord Phase		X														
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	120s	0s	0s	0s

Split Pattern # 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	0	42	0	38	0	0	0	0	0	0	0	0	0	0	0	0
Coord Phase				X												
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	80s	0s	0s	0s

Split Pattern # 5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	0	62	0	58	0	0	0	0	0	0	0	0	0	0	0	0
Coord Phase		X														
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	120s	0s	0s	0s

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Preempt Plan

Preempt Plan (MM) 4-1

Preempt Plan 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trk Clr Overlap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enable Trailing																
Dwell Veh	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dwell Ped																
Dwell Overlap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cycling Veh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cycling Ped																
Cycling Overlap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exit Phases		X														
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	Yes	Interlock Enable	No
Det Lock	Yes	Delay	0	Inhibit	0
Override Flash	Yes	Duration	10	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Grn	Exit Options	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	7	5	4.0	1.0
	Min Grn	Ext Grn	Max Grn	Yellow	Red
Track Clear	0	0	0	4.0	1.0
	Min Dwell	Pmt Ext	Max Time	Yellow	Red
Dwell / Cycle-Exit	0	0.0	120	3.5	1.0

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	Off
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Preempt Plan 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trk Clr Overlap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enable Trailing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dwell Veh	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-
Dwell Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dwell Overlap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cycling Veh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cycling Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cycling Overlap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exit Phases	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-
Exit Calls	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Special Function	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Enable	Yes	Preempt Override	Yes	Interlock Enable	No
Det Lock	Yes	Delay	0	Inhibit	0
Override Flash	Yes	Duration	10	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Grn	Exit Options	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	7	10	4.0	1.0
	Min Grn	Ext Grn	Max Grn	Yellow	Red
Track Clear	0	0	0	4.0	1.0
	Min Dwell	Pmt Ext	Max Time	Yellow	Red
Dwell / Cycle-Exit	0	0.0	120	3.5	1.0

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	Off
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Preempt Plan 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trk Clr Overlap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enable Trailing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dwell Veh	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dwell Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dwell Overlap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cycling Veh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cycling Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cycling Overlap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exit Phases	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exit Calls	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Special Function	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Enable	Yes	Preempt Override	Yes	Interlock Enable	No
Det Lock	Yes	Delay	0	Inhibit	0
Override Flash	Yes	Duration	0	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Grn	Exit Options	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	7	10	4.0	1.0
	Min Grn	Ext Grn	Max Grn	Yellow	Red
Track Clear	0	0	0	4.0	1.0
	Min Dwell	Pmt Ext	Max Time	Yellow	Red
Dwell / Cycle-Exit	0	0.0	120	3.5	1.0

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	Off
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Preempt Plan 5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trk Clr Overlap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enable Trailing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dwell Veh	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-
Dwell Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dwell Overlap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cycling Veh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cycling Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cycling Overlap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exit Phases	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-
Exit Calls	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Special Function	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Enable	Yes	Preempt Override	Yes	Interlock Enable	No
Det Lock	Yes	Delay	0	Inhibit	0
Override Flash	Yes	Duration	10	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Grn	Exit Options	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	7	10	4.0	1.0
	Min Grn	Ext Grn	Max Grn	Yellow	Red
Track Clear	0	0	0	4.0	1.0
	Min Dwell	Pmt Ext	Max Time	Yellow	Red
Dwell / Cycle-Exit	0	0.0	120	3.5	1.0

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	Off
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Preempt Plan 6

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trk Clr Overlap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enable Trailing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dwell Veh	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dwell Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dwell Overlap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cycling Veh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cycling Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cycling Overlap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exit Phases	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exit Calls	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Special Function	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Enable	Yes	Preempt Override	Yes	Interlock Enable	No
Det Lock	Yes	Delay	0	Inhibit	0
Override Flash	Yes	Duration	10	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsrsv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Grn	Exit Options	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	7	10	4.0	1.0
	Min Grn	Ext Grn	Max Grn	Yellow	Red
Track Clear	0	0	0	4.0	1.0
	Min Dwell	Pmt Ext	Max Time	Yellow	Red
Dwell / Cycle-Exit	0	0.0	120	3.5	1.0

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	Off
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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002 - McCaslin Blvd @ US-36 @ S Ramp - Cobalt @ 172.16.8.111 - Econolite Type - Cobalt

**Preempt Preempt Filtering
Enable Preempt Filtering & TSP/SCP (MM) 4-2**

Input	Solid	Pulsing
1	...BYPASSED...	...BYPASSED...
2	...BYPASSED...	...BYPASSED...
3	PREEMPTION 3	PREEMPTION 7
4	PREEMPTION 4	PREEMPTION 8
5	PREEMPTION 5	PREEMPTION 9
6	PREEMPTION 6	PREEMPTION 10
7	...BYPASSED...	...BYPASSED...
8	...BYPASSED...	...BYPASSED...
9	...BYPASSED...	...BYPASSED...
10	...BYPASSED...	...BYPASSED...

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002 - McCaslin Blvd @ US-36 @ S Ramp - Cobalt @ 172.16.8.111 - Econolite Type - Cobalt

Preempt TSP/SCP Plan and Split

TSP / SCP Plan (MM) 4-3

TSP/SCP Plan	Enable Option	Signal Type	Det Lock	Delay Time	Max Presence	PMT Enables Reservice	No Delay in TSP	Action SF Inhibit	Reservice Cycles	Bus Heading
1	No	Solid	No	0	0	No	False	0	0	NB
2	No	Solid	No	0	0	No	False	0	0	SB
3	No	Solid	No	0	0	No	False	0	0	EB
4	No	Solid	No	0	0	No	False	0	0	WB
5	No	Solid	No	0	0	No	False	0	0	.
6	No	Solid	No	0	0	No	False	0	0	.

Mode: TSP
 Free Default Pattern: 120
 Headway Allowance: 0

TSP/SCP Plan	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1
2
3
4
5
6

TSP / SCP Split Pattern (MM) 4-4

TSP/SCP Split Pattern	Max Type	Phase															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4	Max Reduction	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255

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Time Base Clock/Calendar
Clock/Calendar Data (MM) 5-1
Manual Action Plan: 0
SYNC Reference Time: 00:00
SYNC Reference: Reference Time
Day Light Savings: No
Time Reset Input Set Time: 3:30:00
Standard Time From GMT: 0

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**Time Base Action Plan
Action Plan (MM) 5-2**

Action Plan - 1 - "1"

Pattern	1	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
LP 1-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 16-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 31-45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 46-60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 61-75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 76-90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 91-100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Action Plan - 2 - "2"

Pattern	2	Override Sys	No
Timing Plan	2	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)																
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Aux Func (1-3)			
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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 16-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 31-45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 46-60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 61-75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 76-90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 91-100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Action Plan - 3 - "3"

Pattern	3	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)																
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Aux Func (1-3)			
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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 16-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 31-45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 46-60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 61-75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 76-90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 91-100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Action Plan - 4 - "4"

Pattern	4	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)																
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Aux Func (1-3)			
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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 16-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 31-45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 46-60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 61-75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 76-90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 91-100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Action Plan - 5 - "5"

Pattern	5	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)																
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Aux Func (1-3)			
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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 16-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 31-45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 46-60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 61-75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 76-90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 91-100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Time Base Day Plan/Schedule
Day Plan (MM) 5-3

Day Plan #1 - "1"

Event	Action Plan	Start Time
1	1	06:30
2	2	09:00
3	3	15:30
4	2	19:00

Day Plan #2 - "2"

Event	Action Plan	Start Time
1	2	06:30
2	5	10:00
3	2	18:00

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X	X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 2

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Louisville/Superior



Solutions that Move the World™

002 - McCaslin Blvd @ US-36 @ S Ramp - Cobalt @ 172.16.8.111 - Econolite Type - Cobalt

Time Base Exceptions
Exception Day Program (MM) 5-5

Excep Day	Float/Fixed	Mon/Mon	DOW/DOM	WOM/Year	Day Plan
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Solutions that Move the World™

002 - McCaslin Blvd @ US-36 @ S Ramp - Cobalt @ 172.16.8.111 - Econolite Type - Cobalt

Detectors

Detectors - Pg 1

Veh Det Phase Assignment (MM) 6-1

Vehicle Detector Plan Number - 1

Veh Detector	Called Phase	Type
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Vehicle Detector Plan Number - 2

Veh Detector	Called Phase	Type
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Vehicle Detector Plan Number - 3

Veh Detector	Called Phase	Type
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Vehicle Detector Plan Number - 4

Veh Detector	Called Phase	Type
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Vehicle Detector Setup (MM) 6-2

Veh Detector	Type	TS2 Detector	Description
1	S-STANDARD	Yes	
2	S-STANDARD	Yes	
3	S-STANDARD	Yes	
4	S-STANDARD	Yes	
5	S-STANDARD	Yes	
6	S-STANDARD	Yes	
7	S-STANDARD	Yes	
8	S-STANDARD	Yes	
9	S-STANDARD	Yes	
10	S-STANDARD	Yes	
11	S-STANDARD	Yes	
12	S-STANDARD	Yes	
13	S-STANDARD	Yes	
14	S-STANDARD	Yes	
15	S-STANDARD	Yes	
16	S-STANDARD	Yes	
17	S-STANDARD	Yes	
18	S-STANDARD	Yes	
19	S-STANDARD	Yes	
20	S-STANDARD	Yes	
21	S-STANDARD	Yes	
22	S-STANDARD	Yes	
23	S-STANDARD	Yes	
24	S-STANDARD	Yes	
25	S-STANDARD	Yes	
26	S-STANDARD	Yes	
27	S-STANDARD	Yes	
28	S-STANDARD	Yes	
29	S-STANDARD	Yes	
30	S-STANDARD	Yes	
31	S-STANDARD	Yes	
32	S-STANDARD	Yes	
33	S-STANDARD	Yes	
34	S-STANDARD	Yes	
35	S-STANDARD	Yes	
36	S-STANDARD	Yes	
37	S-STANDARD	Yes	
38	S-STANDARD	Yes	
39	S-STANDARD	Yes	
40	S-STANDARD	Yes	
41	S-STANDARD	Yes	
42	S-STANDARD	Yes	
43	S-STANDARD	Yes	
44	S-STANDARD	Yes	
45	S-STANDARD	Yes	
46	S-STANDARD	Yes	
47	S-STANDARD	Yes	
48	S-STANDARD	Yes	
49	S-STANDARD	Yes	
50	S-STANDARD	Yes	
51	S-STANDARD	Yes	
52	S-STANDARD	Yes	
53	S-STANDARD	Yes	
54	S-STANDARD	Yes	
55	S-STANDARD	Yes	
56	S-STANDARD	Yes	
57	S-STANDARD	Yes	
58	S-STANDARD	Yes	
59	S-STANDARD	Yes	
60	S-STANDARD	Yes	
61	S-STANDARD	Yes	
62	S-STANDARD	Yes	

63	S-STANDARD	Yes	
64	S-STANDARD	Yes	

Vehicle Detector Plan Number - 1

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 2

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

17	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 3

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 4

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discn. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Ped Detector Phase Assignment (MM) 6-3

Mode: NTCIP

Called Phase	Detector
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16

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Solutions that Move the World™

002 - McCaslin Blvd @ US-36 @ S Ramp - Cobalt @ 172.16.8.111 - Econolite Type - Cobalt

Detectors

Detectors - Pg 2

Log - Speed Detector Setup (MM) 6-4

NTCIP Log Period: 60 ECPI Log Period: 0 Length Unit: Inches

Speed Detector	Local Detector	One/Two Detector	Vehicle Length	Trap length	Enable Log
1	0	1	0	0	No
2	0	1	0	0	No
3	0	1	0	0	No
4	0	1	0	0	No
5	0	1	0	0	No
6	0	1	0	0	No
7	0	1	0	0	No
8	0	1	0	0	No
9	0	1	0	0	No
10	0	1	0	0	No
11	0	1	0	0	No
12	0	1	0	0	No
13	0	1	0	0	No
14	0	1	0	0	No
15	0	1	0	0	No
16	0	1	0	0	No

Vehicle Detector Diagnostics (MM) 6-5

Veh Diagnostic Plan Number - 1

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 2

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 3

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 4

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Pedestrian Detector Diagnostics (MM) 6-6

Ped Diagnostic Plan Number - 1

Det	Counts	Act	Pres	Multiplier
2	0	0	2	1
4	0	0	2	1
6	0	0	2	1
8	0	0	2	1

Ped Diagnostic Plan Number - 2

Det	Counts	Act	Pres	Multiplier

Ped Diagnostic Plan Number - 3

Det	Counts	Act	Pres	Multiplier

Ped Diagnostic Plan Number - 4

Det	Counts	Act	Pres	Multiplier

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Solutions that Move the World™

001 - McCaslin Blvd @ Marshall Rd - Cobalt @ 172.16.8.110 - Econolite Type - Cobalt

Configuration Controller Sequence

Phase Ring Sequence.....(Note: Sequences identical to the prior one are not printed)

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
	B	B	B	B	B	B	B	B	B							
Sequence 1																
Ring 1	| 2	1	| 8	4	| 9	10	| 13	14	| .	.	.	.	.	.	.	.
Ring 2	| 6	5	| 3	7	| 11	12	| 15	16	| .	.	.	.	.	.	.	.
Sequence 2																
Ring 1	| 1	2	| 8	4	| 9	10	| 13	14	| .	.	.	.	.	.	.	.
Ring 2	| 5	6	| 3	7	| 11	12	| 15	16	| .	.	.	.	.	.	.	.
Sequence 3																
Ring 1	| 1	2	| 4	8	| 9	10	| 13	14	| .	.	.	.	.	.	.	.
Ring 2	| 5	6	| 3	7	| 11	12	| 15	16	| .	.	.	.	.	.	.	.
Sequence 4																
Ring 1	| 2	1	| 8	4	| 9	10	| 13	14	| .	.	.	.	.	.	.	.
Ring 2	| 5	6	| 3	7	| 11	12	| 15	16	| .	.	.	.	.	.	.	.
Sequence 5																
Ring 1	| 2	1	| 8	4	| 9	10	| 13	14	| .	.	.	.	.	.	.	.
Ring 2	| 6	5	| 3	7	| 11	12	| 15	16	| .	.	.	.	.	.	.	.

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
-------	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----

Hardware Alternate Sequence Enable: No

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001 - McCaslin Blvd @ Marshall Rd - Cobalt @ 172.16.8.110 - Econolite Type - Cobalt

Configuration Port 1 (SDLC)

Port 1 SDLC (MM) 1-4-1

BIU	1	2	3	4	5	6	7	8
Term & Facility								
Detector Rack			X					

Enable TS2/MMU Type Cabinet: No
 Enable MMU Extended Status: No
 Enable SDLC Stop Time: No
 Enable 3 Critical RFE's Lockup: Yes

MMU Program (MM) 1-4-2

Channel Can Serve With Channel	
Channel 1	Channel 2

Color Check Enable (MM) 1-4-3

Enable Color Check: Yes

MMU/LS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Green																
Yellow																
Red																

Secondary Stations/Tests (MM) 1-4-4

ID	1	2	3	4	5	6	7	8	MMU
Term & Facility									

ID	1	2	3	4	5	6	7	8	Diag
Detector Rack									

Enable SDLC Diagnostic Test: No

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Solutions that Move the World™

001 - McCaslin Blvd @ Marshall Rd - Cobalt @ 172.16.8.110 - Econolite Type - Cobalt

Configuration Communications 1 (SDLC)**Ethernet Port Configuration (MM) 1-5-1**

DHCP Enable: No
 Controller IP: 172.16.8.110
 Subnet Mask: 255.255.252.0
 Default Gateway IP: 172.16.11.254
 Server IP: 172.16.50.1

NTCIP (MM) 1-5-5

NTCIP Backup Time (Sec): 0
 NTCIP UDP Port: 2101
 Ethernet Priority: 1
 Port 2 Priority (Port C50S for 2070): 4
 Port 3A Priority (Port C21S for 2070): 3
 Port 3B Priority (Port C22S for 2070): 2

Port Configuration (MM) 1-5-2 to 1-5-4

Port	2 (C50S)	3A (C21S)	3B (C22S)
Comm Module	None	Auto	Auto
Protocol	NTCIP	NTCIP	NTCIP
Enable	No	No	No
Data Rate (BPS)	9600	9600	9600
Data, Parity, Stop	8 N 1	8 N 1	8 N 1
Address	1	0	0
Telemetry Response Delay	0.0	0.0	0.0
Duplex - Half or Full	Half	Full	Full
Flow Control	No	Yes	Yes
Group Address	0	0	0
Single Flag Enable	Yes	Yes	Yes
RTS to CTS Delay	n/a	n/a	0.0
RTS Turn Off Delay	n/a	n/a	0.0
Dropout Time	10	10	10
Early RTS	n/a	n/a	No
Telemetry Mode	n/a	n/a	FSK
ATCS Railroad	0	n/a	n/a
ATCS Railroad Line	0	n/a	n/a
ATCS Group	0	n/a	n/a
Wayside Device	0	n/a	n/a
ATC Device	0	n/a	n/a
Wayside Subnode	0	n/a	n/a
ATC Subnode	0	n/a	n/a

ECPIP (MM) 1-5-6

Controller Address: 1
 Expanded System Detector Address: 0

System Detector Assignment

System Detector	Local Detector

Wireless Configuration (MM) 1-5-7

Wireless Channel Number: 1
 Wireless Access Code: 327423274

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001 - McCaslin Blvd @ Marshall Rd - Cobalt @ 172.16.8.110 - Econolite Type - Cobalt

Configuration Logging / Display

Event Logging (MM) 1-6-1

Critical RFE's (MMU/TF)	Yes	3 Critical Errors Within 24 Hours	Yes
MMU Flash Faults	Yes	Local Flash Fault	Yes
Non-Critical RFE's (Det/Test)	Yes	Detector Errors	Yes
Coordination Errors	Yes	Controller Download	Yes
Preemption Events	Yes	TSP Events	Yes
Power On/Off	Yes	Low Battery	Yes
Access	Yes	Data Change	Yes
Online / Offline	Yes		

Alarm Event	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable Logging	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Display Options (MM) 1-7-2

Key Click Enable:	Yes
Switch to Graphics Mode:	No
LED Mode:	Auto
Display Mode:	Advanced
Trans Mode Pop-Up Disable:	No

Sign On (MM) 8-5

Sign On Message Line 1: Solutions that Move the World
 Sign On Message Line 2:

Software Modules (MM) 8-7

Application Version: 32.65.30
 OS (Boot) Version: 06.07.00

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001 - McCaslin Blvd @ Marshall Rd - Cobalt @ 172.16.8.110 - Econolite Type - Cobalt

Logic Processor Page 1

Logic Statement Control (MM) 1-8-1

Logic #	Statement Control
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001 - McCaslin Blvd @ Marshall Rd - Cobalt @ 172.16.8.110 - Econolite Type - Cobalt

Logic Processor Page 2

Logic Statements (MM) 1-8-2

Logic #: 1 - ""

If:					
	Peer	T/F	Assignment	#	State
IF	--	F	PED ON PH PED CLR	8	IS On

Then:		
Assignment	#	State
LP SET LOGIC FLAG	1	On

Logic #: 2 - ""

If:					
	Peer	T/F	Assignment	#	State
IF	--	F	LP LOGIC FLAG	1	IS On

Then:		
Assignment	#	State
CRD SET FREE		On

Logic #: 3 - ""

If:					
	Peer	T/F	Assignment	#	State
IF	--	F	VEH GREEN ON PH	2	IS On
OR	--	F	VEH GREEN ON PH	6	IS On

Then:		
Assignment	#	State
LP SET LOGIC FLAG	1	Off

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001 - McCaslin Blvd @ Marshall Rd - Cobalt @ 172.16.8.110 - Econolite Type - Cobalt

Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Min Green	3	10	0	5	3	10	0	5	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	4	0	4	0	4	0	4	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	18	0	27	0	18	0	27	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	2.0	3.0	0.0	3.0	2.0	3.0	0.0	2.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	75	75	0	19	75	75	0	11	35	35	35	35	35	35	35	35
Max2	75	75	0	22	75	75	0	11	40	40	40	40	40	40	40	40
Max3	75	75	0	29	75	75	0	14	0	0	0	0	0	0	0	0
DYM Max	0	0	0	35	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	4.0	3.0	3.0	3.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	1.0	2.0	0.0	2.0	1.0	2.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 2 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Min Green	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Max2	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 3 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Min Green	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Max2	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 4 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Min Green	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Max2	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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Controller Overlaps
Vehicle Overlaps (MM) 2-2

Overlap	Type	Lag Green	Yellow	Red	Adv. Green
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Phases

Overlap	Phase	Included	Protect	Ped Protect	Not Overlap	Modifier	Lag X Phases	Lag 2 Phases	Flash Green
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PPLT FYA

Overlap	Protected Phase (Left Turn)	Permissive Phase (Opposing Thru)	Flashing Arrow Output	Flashing Arrow Output CH	Delay Start of FYA	Delay Start of Clearance	Action Plan SF Bit Disable	Ped Protected Enable
A	1	2	Yellow Ped	9	0.0	0.0	1	No
C	5	6	Yellow Ped	11	0.0	0.0	5	No

Guaranteed Minimum Time Data (MM) 2-4

Phase	Min Green	Walk	Ped Clear	Yellow	Red Clear	Overlap Green
A01	5	0	7	3.0	0.0	5
B02	5	0	7	3.0	0.0	5
C03	5	0	7	3.0	0.0	5
D04	5	0	7	3.0	0.0	5
E05	5	0	7	3.0	0.0	5
F06	5	0	7	3.0	0.0	5
G07	5	0	7	3.0	0.0	5
H08	5	0	7	3.0	0.0	5
I09	5	0	7	3.0	0.0	5
J10	5	0	7	3.0	0.0	5
K11	5	0	7	3.0	0.0	5
L12	5	0	7	3.0	0.0	5
M13	5	0	7	3.0	0.0	5
N14	5	0	7	3.0	0.0	5
O15	5	0	7	3.0	0.0	5
P16	5	0	7	3.0	0.0	5

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Controller Pedestrian Overlaps
Vehicle / Pedestrian Overlaps (MM) 2-3

Included	Pedestrian Overlaps
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Controller Start / Flash Data (MM) 2-5

Start Up

Phase	Phase Setting
1	.
2	Y
3	.
4	.
5	.
6	Y
7	.
8	.
9	.
10	.
11	.
12	.
13	.
14	.
15	.
16	.

Overlap
A
B
C
D

Flash Thru Mon: No
 Flash Time: 0
 All Red: 6
 Power Start Seq: 1
 MUTCD Enabled: No
 Y->G: n/a

Automatic Flash

Entry
2
6

Exit
2
6

Overlap Exit
A
B
C
D

Flash Thru Mon: No
 Exit Flash: W
 Minimum Flash: 8
 Mimimum Recall: No
 Cycle Through Phase: No

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Controller Options

Controller Options (MM) 2-6-1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Grn Ph																
Guar Passage																
Non-Act I		X				X										
Non-Act II																
Dual Entry		X				X										
Cond Service																
Cond Reserve																
Ped Re-Service																
Rest In Walk		X				X										
Flashing Walk																
Ped Clr-Yel																
Ped Clr-Red																
IGRN + Veh Ext																

Ped Clear Protect: Off

Unit Red Revert: 2.0

MUTCD 3 Seconds Don't Walk: No

Pre-Timed Mode (MM) 2-7

Enable Pre-Timed Mode: No

Free Input Disables Pre-Timed: No

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Pre-Timed																

Phase Recall Options (MM) 2-8

Plan # 1

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall																
Ped Recall		X				X										
Max Recall	X	X				X										
Soft Recall																
No Rest																
AI Calc																

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**Coordination Options
Options (MM) 3-1**

Manual Pattern	Auto	ECPI Coord	Yes
System Source	TBC	System Format	STD
Splits In	Seconds	Offsets In	Seconds
Transition	Smooth	Max Select	MAXINH
Dwell / Add Time	0		
Delay Coord Wk-LZ	No	Force Off	Float
Offset Reference	Yellow	Use Ped Time	No
Ped Recall	No	Ped Reservice	No
Local Zero Override	No	FO Added Ini Green	No
Re-sync Count	0	Multisync	No

Auto Perm Minimum Green (Seconds) (MM) 3-4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Split Demand (MM) 3-5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Demand 1																
Demand 2																

Demand	1	2
Detector	0	0
Call Time (Sec)	0	0
Cycle Count	0	0

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Coordination Pattern Data
Coordinator Pattern Data (MM) 3-2

Coordinator Pattern # 1

Split Pattern	1	TS2 (Pat-Off)	0-1	Splits In	Seconds
Cycle	120	Std (COS)	9	Offsets In	Seconds
Offset Value	64s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	4		
Phase Reserve	No	Action Plan	1		
Max Select	MAX 1	Force Off	Float		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 1)	15	48	0	27	20	43	0	30	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	120s	63s	0s	0s

Misc. Data				
Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat
				0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall		X				X										
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

Coordinator Pattern # 2

Split Pattern	2	TS2 (Pat-Off)	0-2	Splits In	Seconds
Cycle	100	Std (COS)	10	Offsets In	Seconds
Offset Value	74s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	4		
Phase Reserve	No	Action Plan	2		
Max Select	MAX 2	Force Off	Float		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 2)	15	37	0	30	15	37	0	18	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	100s	52s	0s	0s

Misc. Data				
Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat
				0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall		X				X										
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

Coordinator Pattern # 3

Split Pattern	3	TS2 (Pat-Off)	0-3	Splits In	Seconds
Cycle	120	Std (COS)	11	Offsets In	Seconds
Offset Value	70s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	4		
Phase Reserve	No	Action Plan	3		
Max Select	MAX 3	Force Off	Float		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 3)	15	49	0	28	15	49	0	28	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	120s	64s	0s	0s

Misc. Data				
Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat
				0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall		X				X										
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

Coordinator Pattern # 4

Split Pattern	4	TS2 (Pat-Off)	1-1	Splits In	Seconds
Cycle	100	Std (COS)	12	Offsets In	Seconds
Offset Value	24s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	2		
Phase Reserve	No	Action Plan	4		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 4)	10	34	0	37	10	34	0	19	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	100s	44s	0s	0s

Misc. Data				
Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat
				0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall		X				X										
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

Coordinator Pattern # 5

Split Pattern	5	TS2 (Pat-Off)	1-2	Splits In	Seconds
Cycle	100	Std (COS)	13	Offsets In	Seconds
Offset Value	15s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reserve	No	Action Plan	5		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 5)	15	45	0	25	15	45	0	15	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	100s	60s	0s	0s

Misc. Data				
Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat
				0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall		X				X										
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

Coordinator Pattern # 6

Split Pattern	6	TS2 (Pat-Off)	1-3	Splits In	Seconds
Cycle	80	Std (COS)	14	Offsets In	Seconds
Offset Value	24s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	3		
Phase Reserve	No	Action Plan	5		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 6)	0	34	0	30	0	34	0	16	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	80s	34s	0s	0s

Misc. Data				
Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat
				0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall		X				X										
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

Coordinator Pattern # 7

Split Pattern	7	TS2 (Pat-Off)	2-1	Splits In	Seconds
Cycle	120	Std (COS)	0	Offsets In	Seconds
Offset Value	24s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	4		
Phase Reserve	No	Action Plan	7		
Max Select	MAX 3	Force Off	Float		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 7)	18	31	0	40	18	31	0	31	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	120s	49s	0s	0s

Misc. Data				
Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat
				0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall		X				X										
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Function Outputs																

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Coordination Split Pattern
Split Pattern Data (MM) 3-3

Split Pattern # 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	15	48	0	27	20	43	0	30	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall		X				X										
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	120s	63s	0s	0s

Split Pattern # 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	15	37	0	30	15	37	0	18	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall		X				X										
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	100s	52s	0s	0s

Split Pattern # 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	15	49	0	28	15	49	0	28	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall		X				X										
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	120s	64s	0s	0s

Split Pattern # 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	10	34	0	37	10	34	0	19	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall		X				X										
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	100s	44s	0s	0s

Split Pattern # 5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	15	45	0	25	15	45	0	15	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall		X				X										
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	100s	60s	0s	0s

Split Pattern # 6

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	0	34	0	30	0	34	0	16	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall		X				X										
Pedestrian Recall																
Recall to Max. Time																

Omit Phase										X	X	X	X	X	X	X	X	X
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Ring	1	2	3	4
Split Sum	80s	34s	0s	0s

Split Pattern # 7

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	18	31	0	40	18	31	0	31	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall		X				X										
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	120s	49s	0s	0s

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Preempt Plan

Preempt Plan (MM) 4-1

No Enabled Preempts

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**Preempt Preempt Filtering
Enable Preempt Filtering & TSP/SCP (MM) 4-2**

Input	Solid	Pulsing
1	...BYPASSED...	...BYPASSED...
2	...BYPASSED...	...BYPASSED...
3	PREEMPTION 3	PREEMPTION 7
4	PREEMPTION 4	PREEMPTION 8
5	PREEMPTION 5	PREEMPTION 9
6	PREEMPTION 6	PREEMPTION 10
7	...BYPASSED...	...BYPASSED...
8	...BYPASSED...	...BYPASSED...
9	...BYPASSED...	...BYPASSED...
10	...BYPASSED...	...BYPASSED...

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Preempt TSP/SCP Plan and Split

TSP / SCP Plan (MM) 4-3

TSP/SCP Plan	Enable Option	Signal Type	Det Lock	Delay Time	Max Presence	PMT Enables Reservice	No Delay in TSP	Action SF Inhibit	Reservice Cycles	Bus Heading
1	No	Solid	No	0	0	No	False	0	0	NB
2	No	Solid	No	0	0	No	False	0	0	SB
3	No	Solid	No	0	0	No	False	0	0	EB
4	No	Solid	No	0	0	No	False	0	0	WB
5	No	Solid	No	0	0	No	False	0	0	.
6	No	Solid	No	0	0	No	False	0	0	.

Mode: TSP
 Free Default Pattern: 120
 Headway Allowance: 100

TSP/SCP Plan	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1
2
3
4
5
6

TSP / SCP Split Pattern (MM) 4-4

TSP/SCP Split Pattern	Max Type	Phase															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4	Max Reduction	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255

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Time Base Clock/Calendar
Clock/Calendar Data (MM) 5-1
Manual Action Plan: 0
SYNC Reference Time: 00:00
SYNC Reference: Reference Time
Day Light Savings: No
Time Reset Input Set Time: 3:30:00
Standard Time From GMT: 0

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**Time Base Action Plan
Action Plan (MM) 5-2**

Action Plan - 1 - "1"

Pattern	1	Override Sys	Yes
Timing Plan	1	Sequence	4
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)	X				X											
Aux Func (1-3)																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
LP 1-15	E	E	E	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Action Plan - 2 - "2"

Pattern	2	Override Sys	Yes
Timing Plan	1	Sequence	4
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)	X				X											
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Aux Func (1-3)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	E	E	E
LP 16-30
LP 31-45
LP 46-60
LP 61-75
LP 76-90
LP 91-100

Action Plan - 3 - "3"

Pattern	3	Override Sys	Yes
Timing Plan	1	Sequence	4
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)	X				X											
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Aux Func (1-3)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	E	E	E
LP 16-30
LP 31-45
LP 46-60
LP 61-75
LP 76-90
LP 91-100

Action Plan - 4 - "4"

Pattern	4	Override Sys	Yes
Timing Plan	1	Sequence	2
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)									
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Aux Func (1-3)			
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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 16-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 31-45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 46-60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 61-75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 76-90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 91-100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Action Plan - 5 - "5"

Pattern	5	Override Sys	Yes
Timing Plan	1	Sequence	1
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								
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Aux Func (1-3)			
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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 16-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 31-45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 46-60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 61-75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 76-90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 91-100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Action Plan - 6 - "6"

Pattern	6	Override Sys	Yes
Timing Plan	1	Sequence	3
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit	X				X											

Spec Func (1-8)									
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Aux Func (1-3)			
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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 16-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 31-45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 46-60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 61-75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 76-90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 91-100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Action Plan - 7 - "7"

Pattern	7	Override Sys	Yes
Timing Plan	1	Sequence	4
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	1
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)	X				X				
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Aux Func (1-3)			
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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	E	E	E	-	-	-	-	-	-	-	-	-	-	-	-
LP 16-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 31-45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 46-60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 61-75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 76-90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LP 91-100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Time Base Day Plan/Schedule
Day Plan (MM) 5-3

Day Plan #1 - "1"

Event	Action Plan	Start Time
1	1	06:30
2	2	09:00
3	3	15:30
4	2	19:00
5	6	22:00

Day Plan #2 - "2"

Event	Action Plan	Start Time
1	2	06:30
2	7	10:00
3	2	18:00
4	6	22:00

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X	X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 2

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

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Time Base Exceptions
Exception Day Program (MM) 5-5

Excep Day	Float/Fixed	Mon/Mon	DOW/DOM	WOM/Year	Day Plan
1	FIXED	11	22	2018	2
2	FIXED	11	23	2018	2
3	FIXED	12	21	2018	2
4	FIXED	12	24	2018	2
5	FIXED	12	28	2018	2
6	FIXED	12	31	2018	2

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Detectors

Detectors - Pg 1

Veh Det Phase Assignment (MM) 6-1

Vehicle Detector Plan Number - 1

Veh Detector	Called Phase	Type
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Vehicle Detector Plan Number - 2

Veh Detector	Called Phase	Type
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Vehicle Detector Plan Number - 3

Veh Detector	Called Phase	Type
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Vehicle Detector Plan Number - 4

Veh Detector	Called Phase	Type
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Vehicle Detector Setup (MM) 6-2

Veh Detector	Type	TS2 Detector	Description
1	S-STANDARD	Yes	
2	S-STANDARD	Yes	
3	S-STANDARD	Yes	
4	S-STANDARD	Yes	
5	S-STANDARD	Yes	
6	S-STANDARD	Yes	
7	S-STANDARD	Yes	
8	S-STANDARD	Yes	
9	S-STANDARD	Yes	
10	S-STANDARD	Yes	
11	S-STANDARD	Yes	
12	S-STANDARD	Yes	
13	S-STANDARD	Yes	
14	S-STANDARD	Yes	
15	S-STANDARD	Yes	
16	S-STANDARD	Yes	
17	S-STANDARD	Yes	
18	S-STANDARD	Yes	
19	S-STANDARD	Yes	
20	S-STANDARD	Yes	
21	S-STANDARD	Yes	
22	S-STANDARD	Yes	
23	S-STANDARD	Yes	
24	S-STANDARD	Yes	
25	S-STANDARD	Yes	
26	S-STANDARD	Yes	
27	S-STANDARD	Yes	
28	S-STANDARD	Yes	
29	S-STANDARD	Yes	
30	S-STANDARD	Yes	
31	S-STANDARD	Yes	
32	S-STANDARD	Yes	
33	S-STANDARD	Yes	
34	S-STANDARD	Yes	
35	S-STANDARD	Yes	
36	S-STANDARD	Yes	
37	S-STANDARD	Yes	
38	S-STANDARD	Yes	
39	S-STANDARD	Yes	
40	S-STANDARD	Yes	
41	S-STANDARD	Yes	
42	S-STANDARD	Yes	
43	S-STANDARD	Yes	
44	S-STANDARD	Yes	
45	S-STANDARD	Yes	
46	S-STANDARD	Yes	
47	S-STANDARD	Yes	
48	S-STANDARD	Yes	
49	S-STANDARD	Yes	
50	S-STANDARD	Yes	
51	S-STANDARD	Yes	
52	S-STANDARD	Yes	
53	S-STANDARD	Yes	
54	S-STANDARD	Yes	
55	S-STANDARD	Yes	
56	S-STANDARD	Yes	
57	S-STANDARD	Yes	
58	S-STANDARD	Yes	
59	S-STANDARD	Yes	
60	S-STANDARD	Yes	
61	S-STANDARD	Yes	
62	S-STANDARD	Yes	

63	S-STANDARD	Yes	
64	S-STANDARD	Yes	

Vehicle Detector Plan Number - 1

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 2

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

17	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 3

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 4

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Ped Detector Phase Assignment (MM) 6-3

Mode: NTCIP

Called Phase	Detector
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16

Louisville/Superior



Solutions that Move the World™

001 - McCaslin Blvd @ Marshall Rd - Cobalt @ 172.16.8.110 - Econolite Type - Cobalt

Detectors

Detectors - Pg 2

Log - Speed Detector Setup (MM) 6-4

NTCIP Log Period: 60 ECPI Log Period: 0 Length Unit: Inches

Speed Detector	Local Detector	One/Two Detector	Vehicle Length	Trap length	Enable Log
1	0	1	0	0	No
2	0	1	0	0	No
3	0	1	0	0	No
4	0	1	0	0	No
5	0	1	0	0	No
6	0	1	0	0	No
7	0	1	0	0	No
8	0	1	0	0	No
9	0	1	0	0	No
10	0	1	0	0	No
11	0	1	0	0	No
12	0	1	0	0	No
13	0	1	0	0	No
14	0	1	0	0	No
15	0	1	0	0	No
16	0	1	0	0	No

Vehicle Detector Diagnostics (MM) 6-5

Veh Diagnostic Plan Number - 1

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 2

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 3

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 4

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Pedestrian Detector Diagnostics (MM) 6-6

Ped Diagnostic Plan Number - 1

Det	Counts	Act	Pres	Multiplier
4	0	0	15	1
8	0	0	15	1

Ped Diagnostic Plan Number - 2

Det	Counts	Act	Pres	Multiplier

Ped Diagnostic Plan Number - 3

Det	Counts	Act	Pres	Multiplier

Ped Diagnostic Plan Number - 4

Det	Counts	Act	Pres	Multiplier

APPENDIX B

Level of Service Definitions

The following information is referenced from the Highway Capacity Manual: A Guide for Multimodal Mobility Analysis, 6th Edition, Transportation Research Board, 2016: Chapter 19 – Signalized Intersections.

Motorized Vehicle Level of Service (LOS) for Signalized Intersections

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.

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio ^a	
	$v/c \leq 1.0$	$v/c > 1.0$
≤ 10	A	F
> 10 – 20	B	F
> 20 – 35	C	F
> 35 – 55	D	F
> 55 – 80	E	F
> 80	F	F

Note: ^a For approach-based and intersectionwide assessments, LOS is defined solely by control delay.

The following information is referenced from the Highway Capacity Manual: A Guide for Multimodal Mobility Analysis, 6th Edition, Transportation Research Board, 2016: Chapter 20 – Two-Way Stop-Controlled Intersections, Chapter 21 – All-Way Stop-Controlled Intersections, and Chapter 22 - Roundabouts.

Motorized Vehicle Level of Service (LOS) for Unsignalized & Roundabout Intersections

LOS is a quantitative stratification of performance measure(s) representing quality of service. Quality of service describes how well a transportation facility or service operates from a traveler’s perspective. LOS is measured on an A – F scale, with LOS A representing the best operating conditions from a traveler’s perspective.

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio ^a	
	$v/c \leq 1.0$	$v/c > 1.0$
0 – 10	A	F
> 10 – 15	B	F
> 15 – 25	C	F
> 25 – 35	D	F
> 35 – 50	E	F
> 50	F	F

Note: The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection as a whole.

^a For approaches and intersectionwide assessment, LOS is defined solely by control delay.

APPENDIX C

Capacity Worksheets

Timings
 1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Existing Traffic Volumes
 AM Peak Hour



Lane Group	SBT	NWR2	NET
Lane Configurations	↑↑↑	↑↑↑	↑↑↑
Traffic Volume (vph)	876	598	837
Future Volume (vph)	876	598	837
Satd. Flow (prot)	5085	3610	5085
Flt Permitted			
Satd. Flow (perm)	5085	3610	5085
Satd. Flow (RTOR)		229	
Lane Group Flow (vph)	952	650	910
Turn Type	NA	Prot	NA
Protected Phases	2	2	8
Permitted Phases		2	
Detector Phase	2	2	8
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	17.2	17.2	19.3
Total Split (s)	50.0	50.0	70.0
Total Split (%)	41.7%	41.7%	58.3%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	3.7	3.7	5.8
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	7.2	7.2	9.3
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	C-Max	None
Act Effct Green (s)	74.1	74.1	29.4
Actuated g/C Ratio	0.62	0.62	0.24
v/c Ratio	0.30	0.28	0.73
Control Delay	11.6	7.3	66.6
Queue Delay	0.0	0.0	0.0
Total Delay	11.6	7.3	66.6
LOS	B	A	E
Approach Delay	11.6		66.6
Approach LOS	B		E
Queue Length 50th (ft)	119	58	225
Queue Length 95th (ft)	167	96	216
Internal Link Dist (ft)	259		447
Turn Bay Length (ft)			
Base Capacity (vph)	3139	2316	2572
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.30	0.28	0.35

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 48 (40%), Referenced to phase 2:SBT, Start of Green
 Natural Cycle: 40
 Control Type: Actuated-Coordinated

Timings

1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Existing Traffic Volumes

AM Peak Hour

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 30.4

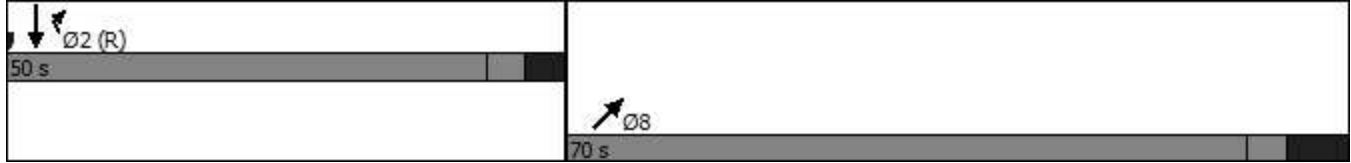
Intersection LOS: C

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp



HCM 6th TWSC
 2: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Existing Traffic Volumes
 AM Peak Hour

Intersection						
Int Delay, s/veh	4.2					
Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations				↑↑↑	↔	
Traffic Vol, veh/h	0	0	0	876	296	0
Future Vol, veh/h	0	0	0	876	296	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	952	322	0

Major/Minor	Major2	Minor1
Conflicting Flow All	-	- 381
Stage 1	-	- 0
Stage 2	-	- 381
Critical Hdwy	-	- 5.74
Critical Hdwy Stg 1	-	- -
Critical Hdwy Stg 2	-	- 6.04
Follow-up Hdwy	-	- 3.82
Pot Cap-1 Maneuver	0	- 624 0
Stage 1	0	- - 0
Stage 2	0	- 605 0
Platoon blocked, %		-
Mov Cap-1 Maneuver	-	- 624 -
Mov Cap-2 Maneuver	-	- 624 -
Stage 1	-	- - -
Stage 2	-	- 605 -

Approach	SB	SW
HCM Control Delay, s	0	16.7
HCM LOS		C

Minor Lane/Major Mvmt	SBT SWLn1
Capacity (veh/h)	- 624
HCM Lane V/C Ratio	- 0.516
HCM Control Delay (s)	- 16.7
HCM Lane LOS	- C
HCM 95th %tile Q(veh)	- 3

Timings
3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

Existing Traffic Volumes
AM Peak Hour



Lane Group	NBT	SER2	SWT
Lane Configurations	↑↑↑↑	↑↑↑↑	↑↑↑↑
Traffic Volume (vph)	934	201	777
Future Volume (vph)	934	201	777
Satd. Flow (prot)	5085	3610	5085
Flt Permitted			
Satd. Flow (perm)	5085	3610	5085
Satd. Flow (RTOR)		173	
Lane Group Flow (vph)	1015	218	845
Turn Type	NA	Prot	NA
Protected Phases	4	4	2
Permitted Phases		4	
Detector Phase	4	4	2
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	17.5	17.5	19.3
Total Split (s)	60.0	60.0	60.0
Total Split (%)	50.0%	50.0%	50.0%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	4.0	4.0	5.8
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	9.3
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	None	None	C-Max
Act Effct Green (s)	32.9	32.9	70.3
Actuated g/C Ratio	0.27	0.27	0.59
v/c Ratio	0.73	0.20	0.28
Control Delay	42.4	8.1	6.3
Queue Delay	0.0	0.0	0.0
Total Delay	42.4	8.1	6.3
LOS	D	A	A
Approach Delay	42.4		6.3
Approach LOS	D		A
Queue Length 50th (ft)	263	11	42
Queue Length 95th (ft)	286	33	56
Internal Link Dist (ft)	90		532
Turn Bay Length (ft)			
Base Capacity (vph)	2224	1676	2978
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.46	0.13	0.28

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 46 (38%), Referenced to phase 2:SWT, Start of Green
 Natural Cycle: 40
 Control Type: Actuated-Coordinated

Timings

3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

Existing Traffic Volumes

AM Peak Hour

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 24.1



Intersection LOS: C

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

 Ø2 (R)	 Ø4
60 s	60 s

HCM 6th TWSC
 4: U.S. 36 Eastbound Off Ramp & McCaslin Boulevard

Existing Traffic Volumes
 AM Peak Hour

Intersection						
Int Delay, s/veh	4.7					
Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations	↑↑↑				↘	
Traffic Vol, veh/h	0	934	0	0	317	0
Future Vol, veh/h	0	934	0	0	317	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1015	0	0	345	0

























Major/Minor	Major1		Minor2	
Conflicting Flow All	-	0	406	-
Stage 1	-	-	0	-
Stage 2	-	-	406	-
Critical Hdwy	-	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	-	-	3.82	-
Pot Cap-1 Maneuver	0	-	607	0
Stage 1	0	-	-	0
Stage 2	0	-	587	0
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	607	-
Mov Cap-2 Maneuver	-	-	607	-
Stage 1	-	-	-	-
Stage 2	-	-	587	-

Approach	NB	NE
HCM Control Delay, s	0	18.4
HCM LOS		C

Minor Lane/Major Mvmt	NELn1	NBT
Capacity (veh/h)	607	-
HCM Lane V/C Ratio	0.568	-
HCM Control Delay (s)	18.4	-
HCM Lane LOS	C	-
HCM 95th %tile Q(veh)	3.6	-

Timings
5: McCaslin Boulevard & Marshall Road

Existing Traffic Volumes
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	27	45	21	21	100	108	601	79	158	395	277
Future Volume (vph)	65	27	45	21	21	100	108	601	79	158	395	277
Satd. Flow (prot)	3221	1678	1583	1770	1863	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.950	0.990		0.950			0.493			0.380		
Satd. Flow (perm)	3221	1678	1583	1770	1863	1583	1782	5085	1583	708	5085	1583
Satd. Flow (RTOR)			145			136			127			301
Lane Group Flow (vph)	64	36	49	23	23	109	117	653	86	172	429	301
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Free
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4	6		6	2		Free
Detector Phase	8	8	8	4	4	4	1	6	6	5	2	
Switch Phase							Lead	Lag	Lag	Lead	Lag	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	3.0	10.0	10.0	3.0	10.0	
Minimum Split (s)	9.0	9.0	9.0	10.0	10.0	10.0	9.0	16.0	16.0	9.0	16.0	
Total Split (s)	30.0	30.0	30.0	27.0	27.0	27.0	15.0	43.0	43.0	20.0	48.0	
Total Split (%)	25.0%	25.0%	25.0%	22.5%	22.5%	22.5%	12.5%	35.8%	35.8%	16.7%	40.0%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	5.0	5.0	5.0	4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	
Act Effct Green (s)	8.1	8.1	8.1	7.1	7.1	7.1	87.5	79.1	79.1	91.8	81.2	120.0
Actuated g/C Ratio	0.07	0.07	0.07	0.06	0.06	0.06	0.73	0.66	0.66	0.76	0.68	1.00
v/c Ratio	0.29	0.32	0.20	0.22	0.21	0.49	0.08	0.19	0.08	0.28	0.12	0.19
Control Delay	55.9	59.9	1.9	58.1	57.5	12.4	4.1	9.1	0.7	5.1	7.7	0.3
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	55.9	59.9	1.9	58.1	57.5	12.4	4.1	9.1	0.7	5.1	7.7	0.3
LOS	E	E	A	E	E	B	A	A	A	A	A	A
Approach Delay		39.1			25.9			7.6			4.7	
Approach LOS		D			C			A			A	
Queue Length 50th (ft)	26	29	0	17	17	0	9	69	0	29	41	0
Queue Length 95th (ft)	50	67	0	44	44	35	20	106	8	58	64	0
Internal Link Dist (ft)		518			407			580			291	
Turn Bay Length (ft)			260	170		170	180		170	230		170
Base Capacity (vph)	697	363	456	324	341	401	1516	3351	1086	694	3441	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	0.09	0.10	0.11	0.07	0.07	0.27	0.08	0.19	0.08	0.25	0.12	0.19

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 64 (53%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
 Natural Cycle: 45
 Control Type: Actuated-Coordinated

Timings
 5: McCaslin Boulevard & Marshall Road

Existing Traffic Volumes
 AM Peak Hour

Maximum v/c Ratio: 0.49	
Intersection Signal Delay: 10.0	Intersection LOS: A
Intersection Capacity Utilization 40.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 5: McCaslin Boulevard & Marshall Road

 Ø1	 Ø2 (R)	 Ø4	 Ø8
15 s	48 s	27 s	30 s
 Ø5	 Ø6 (R)		
20 s	43 s		

HCM 6th Roundabout
6: McCaslin Boulevard & Main Street

Existing Traffic Volumes
AM Peak Hour

Intersection							
Intersection Delay, s/veh	4.8						
Intersection LOS	A						
Approach	EB	WB	NB			SB	
Entry Lanes	1	1	2			2	
Conflicting Circle Lanes	2	2	2			2	
Adj Approach Flow, veh/h	13	74	730			406	
Demand Flow Rate, veh/h	13	75	745			414	
Vehicles Circulating, veh/h	404	729	114			15	
Vehicles Exiting, veh/h	25	130	303			728	
Ped Vol Crossing Leg, #/h	0	0	0			0	
Ped Cap Adj	1.000	1.000	1.000			1.000	
Approach Delay, s/veh	3.7	0.9	5.7			3.9	
Approach LOS	A	A	A			A	
Lane	Left	Left	Bypass	Left	Right	Left	Right
Designated Moves	LTR	LT	R	LT	TR	LT	TR
Assumed Moves	LTR	LT	R	LT	TR	LT	TR
RT Channelized	Free						
Lane Util	1.000	1.000	0.470	0.530	0.471	0.529	
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.328	4.328	61	4.645	4.328	4.645	4.328
Entry Flow, veh/h	13	14	1938	350	395	195	219
Cap Entry Lane, veh/h	1007	764	0.980	1215	1289	1331	1402
Entry HV Adj Factor	1.000	0.996	60	0.980	0.979	0.979	0.983
Flow Entry, veh/h	13	14	1900	343	387	191	215
Cap Entry, veh/h	1007	761	0.032	1191	1262	1304	1379
V/C Ratio	0.013	0.018	0.0	0.288	0.306	0.146	0.156
Control Delay, s/veh	3.7	4.9	A	5.7	5.6	4.0	3.9
LOS	A	A	0	A	A	A	A
95th %tile Queue, veh	0	0		1	1	1	1

HCM 6th TWSC
7: Marshall Road & Access A

Existing Traffic Volumes
AM Peak Hour

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔			↔↔			↔↔			↔↔		
Traffic Vol, veh/h	0	84	27	0	43	0	7	0	0	0	0	0
Future Vol, veh/h	0	84	27	0	43	0	7	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	91	29	0	47	0	8	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	47	0	0	120	0	0	153	153	60	93	167	47
Stage 1	-	-	-	-	-	-	106	106	-	47	47	-
Stage 2	-	-	-	-	-	-	47	47	-	46	120	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.93	7.33	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	1560	-	-	1467	-	-	807	738	993	886	725	1022
Stage 1	-	-	-	-	-	-	889	807	-	966	855	-
Stage 2	-	-	-	-	-	-	966	855	-	962	796	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1560	-	-	1467	-	-	807	738	993	886	725	1022
Mov Cap-2 Maneuver	-	-	-	-	-	-	807	738	-	886	725	-
Stage 1	-	-	-	-	-	-	889	807	-	966	855	-
Stage 2	-	-	-	-	-	-	966	855	-	962	796	-

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

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	807	1560	-	-	1467	-	-	-
HCM Lane V/C Ratio	0.009	-	-	-	-	-	-	-
HCM Control Delay (s)	9.5	0	-	-	0	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	-

HCM 6th TWSC
8: Access B & Marshall Road

Existing Traffic Volumes
AM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↔		↔	↔
Traffic Vol, veh/h	0	0	43	0	0	84
Future Vol, veh/h	0	0	43	0	0	84
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	47	0	0	91

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	138	47	0	0	47
Stage 1	47	-	-	-	-
Stage 2	91	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	855	1022	-	-	1560
Stage 1	975	-	-	-	-
Stage 2	933	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	855	1022	-	-	1560
Mov Cap-2 Maneuver	855	-	-	-	-
Stage 1	975	-	-	-	-
Stage 2	933	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1560	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Timings
 1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Existing Traffic Volumes
 PM Peak Hour

	↓	↶	↷
Lane Group	SBT	NWR2	NET
Lane Configurations	↑↑↑	↶↶↶	↑↑↑
Traffic Volume (vph)	1390	446	999
Future Volume (vph)	1390	446	999
Satd. Flow (prot)	5085	3610	5085
Flt Permitted			
Satd. Flow (perm)	5085	3610	5085
Satd. Flow (RTOR)		141	
Lane Group Flow (vph)	1511	485	1086
Turn Type	NA	Prot	NA
Protected Phases	2	2	8
Permitted Phases		2	
Detector Phase	2	2	8
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	17.2	17.2	19.3
Total Split (s)	50.0	50.0	70.0
Total Split (%)	41.7%	41.7%	58.3%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	3.7	3.7	5.8
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	7.2	7.2	9.3
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	C-Max	None
Act Effct Green (s)	69.1	69.1	34.4
Actuated g/C Ratio	0.58	0.58	0.29
v/c Ratio	0.52	0.23	0.75
Control Delay	16.8	9.5	53.3
Queue Delay	0.0	0.0	0.0
Total Delay	16.8	9.5	53.3
LOS	B	A	D
Approach Delay	16.8		53.3
Approach LOS	B		D
Queue Length 50th (ft)	243	51	228
Queue Length 95th (ft)	330	87	207
Internal Link Dist (ft)	259		447
Turn Bay Length (ft)			
Base Capacity (vph)	2928	2139	2572
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.52	0.23	0.42
Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 48 (40%), Referenced to phase 2:SBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			

Timings

1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Existing Traffic Volumes

PM Peak Hour

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 28.5

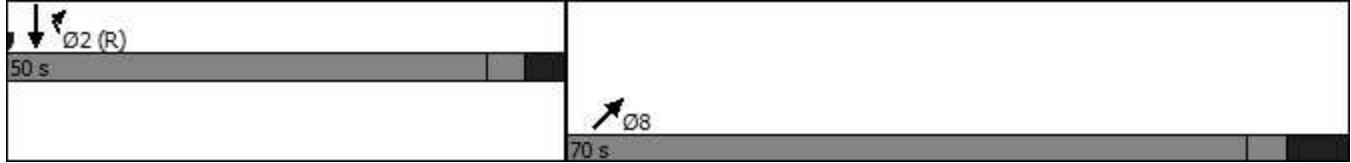
Intersection LOS: C

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp



HCM 6th TWSC
 2: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Existing Traffic Volumes
 PM Peak Hour

Intersection						
Int Delay, s/veh	6.3					
Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations				↑↑↑	↑	
Traffic Vol, veh/h	0	0	0	1390	339	0
Future Vol, veh/h	0	0	0	1390	339	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	1511	368	0

Major/Minor	Major2	Minor1
Conflicting Flow All	-	- 604
Stage 1	-	- 0
Stage 2	-	- 604
Critical Hdwy	-	- 5.74
Critical Hdwy Stg 1	-	- -
Critical Hdwy Stg 2	-	- 6.04
Follow-up Hdwy	-	- 3.82
Pot Cap-1 Maneuver	0	- 487
Stage 1	0	- - 0
Stage 2	0	- 463
Platoon blocked, %		-
Mov Cap-1 Maneuver	-	- 487
Mov Cap-2 Maneuver	-	- 487
Stage 1	-	- -
Stage 2	-	- 463

Approach	SB	SW
HCM Control Delay, s	0	31.9
HCM LOS		D

Minor Lane/Major Mvmt	SBT SWL n1
Capacity (veh/h)	- 487
HCM Lane V/C Ratio	- 0.757
HCM Control Delay (s)	- 31.9
HCM Lane LOS	- D
HCM 95th %tile Q(veh)	- 6.5

Timings
3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

Existing Traffic Volumes
PM Peak Hour



Lane Group	NBT	SER2	SWT
Lane Configurations	↑↑↑	↑↑↑	↑↑↑
Traffic Volume (vph)	1038	545	1126
Future Volume (vph)	1038	545	1126
Satd. Flow (prot)	5085	3610	5085
Flt Permitted			
Satd. Flow (perm)	5085	3610	5085
Satd. Flow (RTOR)		57	
Lane Group Flow (vph)	1128	592	1224
Turn Type	NA	Prot	NA
Protected Phases	4	4	2
Permitted Phases		4	
Detector Phase	4	4	2
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	17.5	17.5	19.3
Total Split (s)	60.0	60.0	60.0
Total Split (%)	50.0%	50.0%	50.0%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	4.0	4.0	5.8
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	9.3
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	None	None	C-Max
Act Effct Green (s)	38.5	38.5	64.7
Actuated g/C Ratio	0.32	0.32	0.54
v/c Ratio	0.69	0.49	0.45
Control Delay	37.5	30.3	7.2
Queue Delay	0.0	0.0	0.0
Total Delay	37.5	30.3	7.2
LOS	D	C	A
Approach Delay	37.5		7.2
Approach LOS	D		A
Queue Length 50th (ft)	279	146	60
Queue Length 95th (ft)	293	170	75
Internal Link Dist (ft)	90		532
Turn Bay Length (ft)			
Base Capacity (vph)	2224	1611	2741
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.51	0.37	0.45

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 46 (38%), Referenced to phase 2:SWT, Start of Green
 Natural Cycle: 45
 Control Type: Actuated-Coordinated

Timings

3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

Existing Traffic Volumes

PM Peak Hour

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 23.5

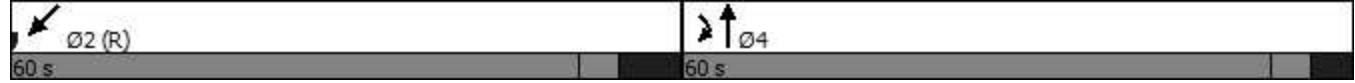
Intersection LOS: C

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp



HCM 6th TWSC
 4: U.S. 36 Eastbound Off Ramp & McCaslin Boulevard

Existing Traffic Volumes
 PM Peak Hour

Intersection						
Int Delay, s/veh	5					
Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations	↑↑↑				↘	
Traffic Vol, veh/h	0	1038	0	0	330	0
Future Vol, veh/h	0	1038	0	0	330	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1128	0	0	359	0































Major/Minor	Major1		Minor2	
Conflicting Flow All	-	0	451	-
Stage 1	-	-	0	-
Stage 2	-	-	451	-
Critical Hdwy	-	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	-	-	3.82	-
Pot Cap-1 Maneuver	0	-	578	0
Stage 1	0	-	-	0
Stage 2	0	-	556	0
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	578	-
Mov Cap-2 Maneuver	-	-	578	-
Stage 1	-	-	-	-
Stage 2	-	-	556	-

Approach	NB	NE
HCM Control Delay, s	0	20.9
HCM LOS		C

Minor Lane/Major Mvmt	NELn1	NBT
Capacity (veh/h)	578	-
HCM Lane V/C Ratio	0.621	-
HCM Control Delay (s)	20.9	-
HCM Lane LOS	C	-
HCM 95th %tile Q(veh)	4.2	-

Timings
5: McCaslin Boulevard & Marshall Road

Existing Traffic Volumes
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 						 	  			  	
Traffic Volume (vph)	365	39	371	38	20	129	249	558	154	85	816	606
Future Volume (vph)	365	39	371	38	20	129	249	558	154	85	816	606
Satd. Flow (prot)	3221	1636	1583	1770	1863	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.950	0.965		0.950			0.275			0.409		
Satd. Flow (perm)	3221	1636	1583	1770	1863	1583	994	5085	1583	762	5085	1583
Satd. Flow (RTOR)			403			140			167			474
Lane Group Flow (vph)	290	149	403	41	22	140	271	607	167	92	887	659
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Free
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4	6		6	2		Free
Detector Phase	8	8	8	4	4	4	1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	3.0	10.0	10.0	3.0	10.0	
Minimum Split (s)	9.0	9.0	9.0	10.0	10.0	10.0	9.0	16.0	16.0	9.0	16.0	
Total Split (s)	30.0	30.0	30.0	27.0	27.0	27.0	15.0	43.0	43.0	20.0	48.0	
Total Split (%)	25.0%	25.0%	25.0%	22.5%	22.5%	22.5%	12.5%	35.8%	35.8%	16.7%	40.0%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	5.0	5.0	5.0	4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	
Act Effct Green (s)	17.9	17.9	17.9	8.5	8.5	8.5	77.8	66.8	66.8	75.5	65.6	120.0
Actuated g/C Ratio	0.15	0.15	0.15	0.07	0.07	0.07	0.65	0.56	0.56	0.63	0.55	1.00
v/c Ratio	0.61	0.61	0.70	0.33	0.17	0.58	0.33	0.21	0.17	0.17	0.32	0.42
Control Delay	52.5	57.9	11.1	59.2	54.0	18.4	9.1	14.9	3.2	9.2	16.6	0.8
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	52.5	57.9	11.1	59.2	54.0	18.4	9.1	14.9	3.2	9.2	16.6	0.8
LOS	D	E	B	E	D	B	A	B	A	A	B	A
Approach Delay		33.6			30.5			11.5			9.8	
Approach LOS		C			C			B			A	
Queue Length 50th (ft)	117	120	0	31	16	0	34	80	0	22	128	0
Queue Length 95th (ft)	154	184	89	66	42	61	67	134	39	54	205	0
Internal Link Dist (ft)		518			407			580			291	
Turn Bay Length (ft)			260	170		170	180		170	230		170
Base Capacity (vph)	697	354	658	324	341	404	887	2831	955	646	2781	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	0.42	0.42	0.61	0.13	0.06	0.35	0.31	0.21	0.17	0.14	0.32	0.42

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 64 (53%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
 Natural Cycle: 50
 Control Type: Actuated-Coordinated

Timings
 5: McCaslin Boulevard & Marshall Road

Existing Traffic Volumes
 PM Peak Hour

Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 16.8	Intersection LOS: B
Intersection Capacity Utilization 55.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 5: McCaslin Boulevard & Marshall Road

 Ø1	 Ø2 (R)	 Ø4	 Ø8
15 s	48 s	27 s	30 s
 Ø5	 Ø6 (R)		
20 s	43 s		

HCM 6th Roundabout
6: McCaslin Boulevard & Main Street

Existing Traffic Volumes
PM Peak Hour

Intersection							
Intersection Delay, s/veh	6.3						
Intersection LOS	A						
Approach	EB	WB	NB			SB	
Entry Lanes	1	1	2			2	
Conflicting Circle Lanes	2	2	2			2	
Adj Approach Flow, veh/h	23	165	706			1178	
Demand Flow Rate, veh/h	23	168	720			1202	
Vehicles Circulating, veh/h	1231	683	161			43	
Vehicles Exiting, veh/h	14	198	1093			682	
Ped Vol Crossing Leg, #/h	0	0	0			0	
Ped Cap Adj	1.000	1.000	1.000			1.000	
Approach Delay, s/veh	7.8	1.3	5.9			7.3	
Approach LOS	A	A	A			A	
Lane	Left	Left	Bypass	Left	Right	Left	Right
Designated Moves	LTR	LT	R	LT	TR	LT	TR
Assumed Moves	LTR	LT	R	LT	TR	LT	TR
RT Channelized	Free						
Lane Util	1.000	1.000	0.469	0.531	0.470	0.530	
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.328	4.328	126	4.645	4.328	4.645	4.328
Entry Flow, veh/h	23	42	1938	338	382	565	637
Cap Entry Lane, veh/h	499	795	0.980	1164	1238	1297	1369
Entry HV Adj Factor	0.999	0.975	124	0.982	0.979	0.980	0.980
Flow Entry, veh/h	23	41	1900	332	374	554	625
Cap Entry, veh/h	498	775	0.065	1143	1213	1272	1342
V/C Ratio	0.046	0.053	0.0	0.290	0.308	0.435	0.465
Control Delay, s/veh	7.8	5.2	A	5.9	5.8	7.2	7.3
LOS	A	A	0	A	A	A	A
95th %tile Queue, veh	0	0		1	1	2	3

HCM 6th TWSC
7: Marshall Road & Access A

Existing Traffic Volumes
PM Peak Hour

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔			↔			↔			↔		
Traffic Vol, veh/h	9	56	17	0	143	1	25	1	3	0	0	6
Future Vol, veh/h	9	56	17	0	143	1	25	1	3	0	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	61	18	0	155	1	27	1	3	0	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	156	0	0	79	0	0	249	246	40	207	255	156
Stage 1	-	-	-	-	-	-	90	90	-	156	156	-
Stage 2	-	-	-	-	-	-	159	156	-	51	99	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.93	7.33	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	1423	-	-	1518	-	-	694	656	1023	741	648	889
Stage 1	-	-	-	-	-	-	908	820	-	846	768	-
Stage 2	-	-	-	-	-	-	843	768	-	956	813	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1423	-	-	1518	-	-	685	651	1023	734	643	889
Mov Cap-2 Maneuver	-	-	-	-	-	-	685	651	-	734	643	-
Stage 1	-	-	-	-	-	-	902	814	-	840	768	-
Stage 2	-	-	-	-	-	-	837	768	-	945	807	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.8			0			10.3			9.1		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	708	1423	-	-	1518	-	-	889
HCM Lane V/C Ratio	0.045	0.007	-	-	-	-	-	0.007
HCM Control Delay (s)	10.3	7.5	0	-	0	-	-	9.1
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

HCM 6th TWSC
8: Access B & Marshall Road

Existing Traffic Volumes
PM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↔		↔	↔
Traffic Vol, veh/h	0	0	144	0	0	59
Future Vol, veh/h	0	0	144	0	0	59
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	157	0	0	64

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	221	157	0	0	157
Stage 1	157	-	-	-	-
Stage 2	64	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	767	889	-	-	1423
Stage 1	871	-	-	-	-
Stage 2	959	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	767	889	-	-	1423
Mov Cap-2 Maneuver	767	-	-	-	-
Stage 1	871	-	-	-	-
Stage 2	959	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1423
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

Timings
 1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Background Traffic Volumes
 AM Peak Hour - Year 2025



Lane Group	SBT	NWR2	NET
Lane Configurations	↑↑↑	↑↑↑	↑↑↑
Traffic Volume (vph)	911	622	870
Future Volume (vph)	911	622	870
Satd. Flow (prot)	5085	3610	5085
Flt Permitted			
Satd. Flow (perm)	5085	3610	5085
Satd. Flow (RTOR)		208	
Lane Group Flow (vph)	990	676	946
Turn Type	NA	Prot	NA
Protected Phases	2	2	8
Permitted Phases		2	
Detector Phase	2	2	8
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	17.2	17.2	19.3
Total Split (s)	50.0	50.0	70.0
Total Split (%)	41.7%	41.7%	58.3%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	3.7	3.7	5.8
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	7.2	7.2	9.3
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	C-Max	None
Act Effct Green (s)	73.1	73.1	30.4
Actuated g/C Ratio	0.61	0.61	0.25
v/c Ratio	0.32	0.30	0.74
Control Delay	12.2	8.3	64.8
Queue Delay	0.0	0.0	0.0
Total Delay	12.2	8.3	64.8
LOS	B	A	E
Approach Delay	12.2		64.8
Approach LOS	B		E
Queue Length 50th (ft)	128	67	229
Queue Length 95th (ft)	178	109	221
Internal Link Dist (ft)	259		447
Turn Bay Length (ft)			
Base Capacity (vph)	3099	2281	2572
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.32	0.30	0.37

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 48 (40%), Referenced to phase 2:SBT, Start of Green
 Natural Cycle: 40
 Control Type: Actuated-Coordinated

Timings

1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Background Traffic Volumes

AM Peak Hour - Year 2025

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 30.2

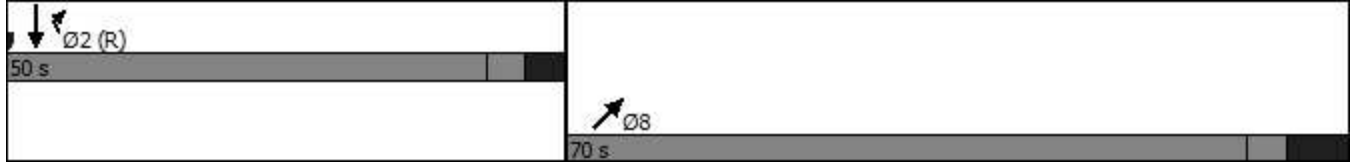
Intersection LOS: C

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp



HCM 6th TWSC
 2: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Background Traffic Volumes
 AM Peak Hour - Year 2025

Intersection						
Int Delay, s/veh	6.4					
Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations				↑↑↑	↔	
Traffic Vol, veh/h	0	0	0	911	378	0
Future Vol, veh/h	0	0	0	911	378	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	990	411	0

Major/Minor	Major2	Minor1
Conflicting Flow All	-	- 396
Stage 1	-	- 0
Stage 2	-	- 396
Critical Hdwy	-	- 5.74
Critical Hdwy Stg 1	-	-
Critical Hdwy Stg 2	-	- 6.04
Follow-up Hdwy	-	- 3.82
Pot Cap-1 Maneuver	0	- 614
Stage 1	0	-
Stage 2	0	- 594
Platoon blocked, %		-
Mov Cap-1 Maneuver	-	- 614
Mov Cap-2 Maneuver	-	- 614
Stage 1	-	-
Stage 2	-	- 594

Approach	SB	SW
HCM Control Delay, s	0	21.9
HCM LOS		C

Minor Lane/Major Mvmt	SBT SWL n1
Capacity (veh/h)	- 614
HCM Lane V/C Ratio	- 0.669
HCM Control Delay (s)	- 21.9
HCM Lane LOS	- C
HCM 95th %tile Q(veh)	- 5.1

Timings
3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

Background Traffic Volumes
AM Peak Hour - Year 2025



Lane Group	NBT	SER2	SWT
Lane Configurations	↑↑↑↑	↑↑↑↑	↑↑↑↑
Traffic Volume (vph)	1007	279	878
Future Volume (vph)	1007	279	878
Satd. Flow (prot)	5085	3610	5085
Flt Permitted			
Satd. Flow (perm)	5085	3610	5085
Satd. Flow (RTOR)		121	
Lane Group Flow (vph)	1095	303	954
Turn Type	NA	Prot	NA
Protected Phases	4	4	2
Permitted Phases		4	
Detector Phase	4	4	2
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	17.5	17.5	19.3
Total Split (s)	60.0	60.0	60.0
Total Split (%)	50.0%	50.0%	50.0%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	4.0	4.0	5.8
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	9.3
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	None	None	C-Max
Act Effct Green (s)	35.8	35.8	67.4
Actuated g/C Ratio	0.30	0.30	0.56
v/c Ratio	0.72	0.26	0.33
Control Delay	40.2	18.5	7.4
Queue Delay	0.0	0.0	0.0
Total Delay	40.2	18.5	7.4
LOS	D	B	A
Approach Delay	40.2		7.4
Approach LOS	D		A
Queue Length 50th (ft)	277	45	54
Queue Length 95th (ft)	300	68	71
Internal Link Dist (ft)	90		532
Turn Bay Length (ft)			
Base Capacity (vph)	2224	1647	2856
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.49	0.18	0.33

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 46 (38%), Referenced to phase 2:SWT, Start of Green
 Natural Cycle: 45
 Control Type: Actuated-Coordinated

Timings

3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

Background Traffic Volumes

AM Peak Hour - Year 2025

Maximum v/c Ratio: 0.72

Intersection Signal Delay: 24.1



Intersection LOS: C

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

 Ø2 (R)	 Ø4
60 s	60 s

HCM 6th TWSC
 4: U.S. 36 Eastbound Off Ramp & McCaslin Boulevard

Background Traffic Volumes
 AM Peak Hour - Year 2025

Intersection						
Int Delay, s/veh	5					
Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations	↑↑↑				↘	
Traffic Vol, veh/h	0	1007	0	0	330	0
Future Vol, veh/h	0	1007	0	0	330	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1095	0	0	359	0

























Major/Minor	Major1		Minor2	
Conflicting Flow All	-	0	438	-
Stage 1	-	-	0	-
Stage 2	-	-	438	-
Critical Hdwy	-	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	-	-	3.82	-
Pot Cap-1 Maneuver	0	-	586	0
Stage 1	0	-	-	0
Stage 2	0	-	565	0
Platoon blocked, %	-			
Mov Cap-1 Maneuver	-	-	586	-
Mov Cap-2 Maneuver	-	-	586	-
Stage 1	-	-	-	-
Stage 2	-	-	565	-

Approach	NB	NE
HCM Control Delay, s	0	20.4
HCM LOS		C

Minor Lane/Major Mvmt	NELn1	NBT
Capacity (veh/h)	586	-
HCM Lane V/C Ratio	0.612	-
HCM Control Delay (s)	20.4	-
HCM Lane LOS	C	-
HCM 95th %tile Q(veh)	4.1	-

Timings
5: McCaslin Boulevard & Marshall Road

Background Traffic Volumes
AM Peak Hour - Year 2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	31	55	22	24	129	116	673	82	204	511	288
Future Volume (vph)	68	31	55	22	24	129	116	673	82	204	511	288
Satd. Flow (prot)	3221	1682	1583	1770	1863	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.950	0.992		0.950			0.434			0.340		
Satd. Flow (perm)	3221	1682	1583	1770	1863	1583	1568	5085	1583	633	5085	1583
Satd. Flow (RTOR)			145			140			127			313
Lane Group Flow (vph)	67	41	60	24	26	140	126	732	89	222	555	313
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Free
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4	6		6	2		Free
Detector Phase	8	8	8	4	4	4	1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	3.0	10.0	10.0	3.0	10.0	
Minimum Split (s)	9.0	9.0	9.0	10.0	10.0	10.0	9.0	16.0	16.0	9.0	16.0	
Total Split (s)	30.0	30.0	30.0	27.0	27.0	27.0	15.0	43.0	43.0	20.0	48.0	
Total Split (%)	25.0%	25.0%	25.0%	22.5%	22.5%	22.5%	12.5%	35.8%	35.8%	16.7%	40.0%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	5.0	5.0	5.0	4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	
Act Effct Green (s)	8.5	8.5	8.5	7.8	7.8	7.8	85.5	76.9	76.9	91.5	80.1	120.0
Actuated g/C Ratio	0.07	0.07	0.07	0.06	0.06	0.06	0.71	0.64	0.64	0.76	0.67	1.00
v/c Ratio	0.30	0.35	0.24	0.21	0.21	0.60	0.10	0.22	0.08	0.39	0.16	0.20
Control Delay	55.5	60.4	2.3	56.1	56.0	19.5	4.7	10.5	1.0	6.5	8.5	0.3
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	55.5	60.4	2.3	56.1	56.0	19.5	4.7	10.5	1.0	6.5	8.5	0.3
LOS	E	E	A	E	E	B	A	B	A	A	A	A
Approach Delay		37.7			29.2			8.9			5.7	
Approach LOS		D			C			A			A	
Queue Length 50th (ft)	27	34	0	18	20	0	10	82	0	40	55	0
Queue Length 95th (ft)	51	73	0	45	48	61	23	136	11	83	90	0
Internal Link Dist (ft)		518			407			580			291	
Turn Bay Length (ft)			260	170		170	180		170	230		170
Base Capacity (vph)	697	364	456	324	341	404	1343	3256	1059	640	3392	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	0.10	0.11	0.13	0.07	0.08	0.35	0.09	0.22	0.08	0.35	0.16	0.20

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 64 (53%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
 Natural Cycle: 45
 Control Type: Actuated-Coordinated

Timings
 5: McCaslin Boulevard & Marshall Road

Background Traffic Volumes
 AM Peak Hour - Year 2025

Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 11.1	Intersection LOS: B
Intersection Capacity Utilization 44.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 5: McCaslin Boulevard & Marshall Road

 Ø1	 Ø2 (R)	 Ø4	 Ø8
15 s	48 s	27 s	30 s
 Ø5	 Ø6 (R)		
20 s	43 s		

HCM 6th Roundabout
6: McCaslin Boulevard & Main Street

Background Traffic Volumes
AM Peak Hour - Year 2025

Intersection							
Intersection Delay, s/veh	5.5						
Intersection LOS	A						
Approach	EB	WB	NB			SB	
Entry Lanes	1	1	2			2	
Conflicting Circle Lanes	2	2	2			2	
Adj Approach Flow, veh/h	13	156	804			540	
Demand Flow Rate, veh/h	13	159	820			550	
Vehicles Circulating, veh/h	564	758	238			40	
Vehicles Exiting, veh/h	26	300	339			757	
Ped Vol Crossing Leg, #/h	0	0	0			0	
Ped Cap Adj	1.000	1.000	1.000			1.000	
Approach Delay, s/veh	4.2	1.3	7.0			4.5	
Approach LOS	A	A	A			A	
Lane	Left	Left	Bypass	Left	Right	Left	Right
Designated Moves	LTR	LT	R	LT	TR	LT	TR
Assumed Moves	LTR	LT	R	LT	TR	LT	TR
RT Channelized	Free						
Lane Util	1.000	1.000	0.470	0.530	0.469	0.531	
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.328	4.328	120	4.645	4.328	4.645	4.328
Entry Flow, veh/h	13	39	1938	385	435	258	292
Cap Entry Lane, veh/h	879	746	0.980	1084	1160	1301	1373
Entry HV Adj Factor	1.000	0.973	118	0.982	0.980	0.984	0.980
Flow Entry, veh/h	13	38	1900	378	426	254	286
Cap Entry, veh/h	879	725	0.062	1065	1137	1280	1346
V/C Ratio	0.015	0.052	0.0	0.355	0.375	0.198	0.213
Control Delay, s/veh	4.2	5.5	A	7.0	6.9	4.5	4.5
LOS	A	A	0	A	A	A	A
95th %tile Queue, veh	0	0		2	2	1	1

HCM 6th TWSC
7: Marshall Road & Access A

Background Traffic Volumes
AM Peak Hour - Year 2025

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔			↔			↔			↔		
Traffic Vol, veh/h	0	127	28	0	72	0	7	0	0	0	0	0
Future Vol, veh/h	0	127	28	0	72	0	7	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	138	30	0	78	0	8	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	78	0	0	168	0	0	231	231	84	147	246	78
Stage 1	-	-	-	-	-	-	153	153	-	78	78	-
Stage 2	-	-	-	-	-	-	78	78	-	69	168	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.93	7.33	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	1519	-	-	1408	-	-	714	668	959	814	656	982
Stage 1	-	-	-	-	-	-	835	770	-	930	830	-
Stage 2	-	-	-	-	-	-	930	830	-	933	759	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1519	-	-	1408	-	-	714	668	959	814	656	982
Mov Cap-2 Maneuver	-	-	-	-	-	-	714	668	-	814	656	-
Stage 1	-	-	-	-	-	-	835	770	-	930	830	-
Stage 2	-	-	-	-	-	-	930	830	-	933	759	-

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

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	714	1519	-	-	1408	-	-	-
HCM Lane V/C Ratio	0.011	-	-	-	-	-	-	-
HCM Control Delay (s)	10.1	0	-	-	0	-	-	0
HCM Lane LOS	B	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	-

HCM 6th TWSC
8: Access B & Marshall Road

Background Traffic Volumes
AM Peak Hour - Year 2025

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↔		↔	↔
Traffic Vol, veh/h	0	0	72	0	0	127
Future Vol, veh/h	0	0	72	0	0	127
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	78	0	0	138

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	216	78	0	0	78	0
Stage 1	78	-	-	-	-	-
Stage 2	138	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	772	983	-	-	1520	-
Stage 1	945	-	-	-	-	-
Stage 2	889	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	772	983	-	-	1520	-
Mov Cap-2 Maneuver	772	-	-	-	-	-
Stage 1	945	-	-	-	-	-
Stage 2	889	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1520	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Timings
 1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Background Traffic Volumes
 PM Peak Hour - Year 2025



Lane Group	SBT	NWR2	NET
Lane Configurations	↑↑↑	↑↑↑	↑↑↑
Traffic Volume (vph)	1446	464	1039
Future Volume (vph)	1446	464	1039
Satd. Flow (prot)	5085	3610	5085
Flt Permitted			
Satd. Flow (perm)	5085	3610	5085
Satd. Flow (RTOR)		125	
Lane Group Flow (vph)	1572	504	1129
Turn Type	NA	Prot	NA
Protected Phases	2	2	8
Permitted Phases		2	
Detector Phase	2	2	8
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	17.2	17.2	19.3
Total Split (s)	50.0	50.0	70.0
Total Split (%)	41.7%	41.7%	58.3%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	3.7	3.7	5.8
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	7.2	7.2	9.3
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	C-Max	None
Act Effct Green (s)	67.9	67.9	35.6
Actuated g/C Ratio	0.57	0.57	0.30
v/c Ratio	0.55	0.24	0.75
Control Delay	18.0	10.6	51.7
Queue Delay	0.0	0.0	0.0
Total Delay	18.0	10.6	51.7
LOS	B	B	D
Approach Delay	18.0		51.7
Approach LOS	B		D
Queue Length 50th (ft)	269	60	228
Queue Length 95th (ft)	356	97	217
Internal Link Dist (ft)	259		447
Turn Bay Length (ft)			
Base Capacity (vph)	2876	2096	2572
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.55	0.24	0.44

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 48 (40%), Referenced to phase 2:SBT, Start of Green
 Natural Cycle: 55
 Control Type: Actuated-Coordinated

Timings

1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Background Traffic Volumes

PM Peak Hour - Year 2025

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 28.7

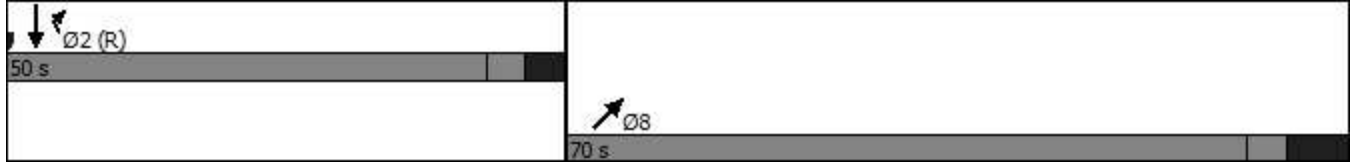
Intersection LOS: C

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp



HCM 6th TWSC
 2: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Background Traffic Volumes
 PM Peak Hour - Year 2025

Intersection						
Int Delay, s/veh	10.7					
Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations				↑↑↑	↔	
Traffic Vol, veh/h	0	0	0	1446	393	0
Future Vol, veh/h	0	0	0	1446	393	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	1572	427	0

Major/Minor	Major2	Minor1
Conflicting Flow All	-	- 629
Stage 1	-	- 0
Stage 2	-	- 629
Critical Hdwy	-	- 5.74
Critical Hdwy Stg 1	-	-
Critical Hdwy Stg 2	-	- 6.04
Follow-up Hdwy	-	- 3.82
Pot Cap-1 Maneuver	0	- 474
Stage 1	0	-
Stage 2	0	- 450
Platoon blocked, %		-
Mov Cap-1 Maneuver	-	- 474
Mov Cap-2 Maneuver	-	- 474
Stage 1	-	-
Stage 2	-	- 450

Approach	SB	SW
HCM Control Delay, s	0	50.2
HCM LOS		F

Minor Lane/Major Mvmt	SBT SWLn1
Capacity (veh/h)	- 474
HCM Lane V/C Ratio	- 0.901
HCM Control Delay (s)	- 50.2
HCM Lane LOS	- F
HCM 95th %tile Q(veh)	- 10.1

Timings
3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

Background Traffic Volumes
PM Peak Hour - Year 2025



Lane Group	NBT	SER2	SWT
Lane Configurations	↑↑↑↑	↑↑↑↑	↑↑↑↑
Traffic Volume (vph)	1159	606	1211
Future Volume (vph)	1159	606	1211
Satd. Flow (prot)	5085	3610	5085
Flt Permitted			
Satd. Flow (perm)	5085	3610	5085
Satd. Flow (RTOR)		57	
Lane Group Flow (vph)	1260	659	1316
Turn Type	NA	Prot	NA
Protected Phases	4	4	2
Permitted Phases		4	
Detector Phase	4	4	2
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	17.5	17.5	19.3
Total Split (s)	60.0	60.0	60.0
Total Split (%)	50.0%	50.0%	50.0%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	4.0	4.0	5.8
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	9.3
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	None	None	C-Max
Act Effct Green (s)	43.1	43.1	60.1
Actuated g/C Ratio	0.36	0.36	0.50
v/c Ratio	0.69	0.50	0.52
Control Delay	34.5	27.8	9.0
Queue Delay	0.0	0.0	0.0
Total Delay	34.5	27.8	9.0
LOS	C	C	A
Approach Delay	34.5		9.0
Approach LOS	C		A
Queue Length 50th (ft)	302	157	71
Queue Length 95th (ft)	310	178	88
Internal Link Dist (ft)	90		532
Turn Bay Length (ft)			
Base Capacity (vph)	2224	1611	2548
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.57	0.41	0.52

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 46 (38%), Referenced to phase 2:SWT, Start of Green
 Natural Cycle: 55
 Control Type: Actuated-Coordinated

Timings

3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

Background Traffic Volumes

PM Peak Hour - Year 2025

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 22.8



Intersection LOS: C

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

 Ø2 (R)	 Ø4
60 s	60 s

HCM 6th TWSC
 4: U.S. 36 Eastbound Off Ramp & McCaslin Boulevard

Background Traffic Volumes
 PM Peak Hour - Year 2025

Intersection						
Int Delay, s/veh	5.6					
Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations	↑↑↑				↘	
Traffic Vol, veh/h	0	1159	0	0	343	0
Future Vol, veh/h	0	1159	0	0	343	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1260	0	0	373	0

Major/Minor	Major1		Minor2	
Conflicting Flow All	-	0	504	-
Stage 1	-	-	0	-
Stage 2	-	-	504	-
Critical Hdwy	-	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	-	-	3.82	-
Pot Cap-1 Maneuver	0	-	545	0
Stage 1	0	-	-	0
Stage 2	0	-	522	0
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	545	-
Mov Cap-2 Maneuver	-	-	545	-
Stage 1	-	-	-	-
Stage 2	-	-	522	-

Approach	NB	NE
HCM Control Delay, s	0	24.7
HCM LOS		C

Minor Lane/Major Mvmt	NELn1	NBT
Capacity (veh/h)	545	-
HCM Lane V/C Ratio	0.684	-
HCM Control Delay (s)	24.7	-
HCM Lane LOS	C	-
HCM 95th %tile Q(veh)	5.2	-

Timings
5: McCaslin Boulevard & Marshall Road

Background Traffic Volumes
PM Peak Hour - Year 2025

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	43	390	40	25	189	267	68	56	108	898	630
Future Volume (vph)	380	43	390	40	25	189	267	68	56	108	898	630
Satd. Flow (prot)	3221	1637	1583	1770	1863	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.950	0.966		0.950			0.244			0.704		
Satd. Flow (perm)	3221	1637	1583	1770	1863	1583	882	5085	1583	1311	5085	1583
Satd. Flow (RTOR)			424			205			127			448
Lane Group Flow (vph)	306	154	424	43	27	205	290	74	61	117	976	685
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Free
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4	6		6	2		Free
Detector Phase	8	8	8	4	4	4	1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	3.0	10.0	10.0	3.0	10.0	
Minimum Split (s)	9.0	9.0	9.0	10.0	10.0	10.0	9.0	16.0	16.0	9.0	16.0	
Total Split (s)	30.0	30.0	30.0	27.0	27.0	27.0	15.0	43.0	43.0	20.0	48.0	
Total Split (%)	25.0%	25.0%	25.0%	22.5%	22.5%	22.5%	12.5%	35.8%	35.8%	16.7%	40.0%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	5.0	5.0	5.0	4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	
Act Effct Green (s)	18.3	18.3	18.3	8.9	8.9	8.9	76.6	65.2	65.2	75.0	64.4	120.0
Actuated g/C Ratio	0.15	0.15	0.15	0.07	0.07	0.07	0.64	0.54	0.54	0.62	0.54	1.00
v/c Ratio	0.62	0.62	0.71	0.33	0.20	0.67	0.38	0.03	0.07	0.14	0.36	0.43
Control Delay	52.7	57.6	11.0	58.1	53.8	18.1	10.0	15.6	0.1	9.3	17.9	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	52.7	57.6	11.0	58.1	53.8	18.1	10.0	15.6	0.1	9.3	17.9	0.9
LOS	D	E	B	E	D	B	B	B	A	A	B	A
Approach Delay		33.5			27.8			9.6			10.8	
Approach LOS		C			C			A			B	
Queue Length 50th (ft)	124	125	0	32	20	0	37	9	0	29	147	0
Queue Length 95th (ft)	162	189	91	67	48	72	74	23	0	70	240	0
Internal Link Dist (ft)		518			407			580			291	
Turn Bay Length (ft)			260	170		170	180		170	230		170
Base Capacity (vph)	697	354	675	324	341	457	816	2762	917	931	2728	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	0.44	0.44	0.63	0.13	0.08	0.45	0.36	0.03	0.07	0.13	0.36	0.43

Intersection Summary


Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 64 (53%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
 Natural Cycle: 55
 Control Type: Actuated-Coordinated

Timings
 5: McCaslin Boulevard & Marshall Road

Background Traffic Volumes
 PM Peak Hour - Year 2025

Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 18.0	Intersection LOS: B
Intersection Capacity Utilization 58.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 5: McCaslin Boulevard & Marshall Road

 Ø1	 Ø2 (R)	 Ø4	 Ø8
15 s	48 s	27 s	30 s
 Ø5	 Ø6 (R)		
20 s	43 s		

HCM 6th Roundabout
6: McCaslin Boulevard & Main Street

Background Traffic Volumes
PM Peak Hour - Year 2025

Intersection							
Intersection Delay, s/veh	7.0						
Intersection LOS	A						
Approach	EB	WB	NB			SB	
Entry Lanes	1	1	2			2	
Conflicting Circle Lanes	2	2	2			2	
Adj Approach Flow, veh/h	24	345	761			1294	
Demand Flow Rate, veh/h	24	352	777			1319	
Vehicles Circulating, veh/h	1402	711	237			97	
Vehicles Exiting, veh/h	14	303	1189			710	
Ped Vol Crossing Leg, #/h	0	0	0			0	
Ped Cap Adj	1.000	1.000	1.000			1.000	
Approach Delay, s/veh	9.1	1.6	6.7			8.6	
Approach LOS	A	A	A			A	
Lane	Left	Left	Bypass	Left	Right	Left	Right
Designated Moves	LTR	LT	R	LT	TR	LT	TR
Assumed Moves	LTR	LT	R	LT	TR	LT	TR
RT Channelized	Free						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530	
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.328	4.328	256	4.645	4.328	4.645	4.328
Entry Flow, veh/h	24	96	1938	365	412	620	699
Cap Entry Lane, veh/h	431	776	0.980	1085	1161	1235	1308
Entry HV Adj Factor	0.999	0.979	251	0.980	0.980	0.981	0.981
Flow Entry, veh/h	24	94	1900	358	404	608	686
Cap Entry, veh/h	431	759	0.132	1064	1137	1211	1283
V/C Ratio	0.056	0.124	0.0	0.336	0.355	0.502	0.535
Control Delay, s/veh	9.1	6.0	A	6.8	6.7	8.4	8.7
LOS	A	A	0	A	A	A	A
95th %tile Queue, veh	0	0		1	2	3	3

HCM 6th TWSC
7: Marshall Road & Access A

Background Traffic Volumes
PM Peak Hour - Year 2025

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔			↔			↔			↔		
Traffic Vol, veh/h	9	78	17	0	208	1	26	1	3	0	0	6
Future Vol, veh/h	9	78	17	0	208	1	26	1	3	0	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	85	18	0	226	1	28	1	3	0	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	227	0	0	103	0	0	344	341	52	290	350	227
Stage 1	-	-	-	-	-	-	114	114	-	227	227	-
Stage 2	-	-	-	-	-	-	230	227	-	63	123	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.93	7.33	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	1340	-	-	1488	-	-	598	580	1005	651	574	812
Stage 1	-	-	-	-	-	-	879	801	-	775	716	-
Stage 2	-	-	-	-	-	-	772	716	-	941	794	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1340	-	-	1488	-	-	590	575	1005	644	569	812
Mov Cap-2 Maneuver	-	-	-	-	-	-	590	575	-	644	569	-
Stage 1	-	-	-	-	-	-	872	795	-	769	716	-
Stage 2	-	-	-	-	-	-	766	716	-	929	788	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.7			0			11.2			9.5		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	615	1340	-	-	1488	-	-	812
HCM Lane V/C Ratio	0.053	0.007	-	-	-	-	-	0.008
HCM Control Delay (s)	11.2	7.7	0	-	0	-	-	9.5
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0

HCM 6th TWSC
8: Access B & Marshall Road

Background Traffic Volumes
PM Peak Hour - Year 2025

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↔		↔	↔
Traffic Vol, veh/h	0	0	209	0	0	81
Future Vol, veh/h	0	0	209	0	0	81
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	227	0	0	88

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	315	227	0	0	227	0
Stage 1	227	-	-	-	-	-
Stage 2	88	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	678	812	-	-	1341	-
Stage 1	811	-	-	-	-	-
Stage 2	935	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	678	812	-	-	1341	-
Mov Cap-2 Maneuver	678	-	-	-	-	-
Stage 1	811	-	-	-	-	-
Stage 2	935	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1341
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

Timings
 1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Background Traffic Volumes
 AM Peak Hour - Year 2043



Lane Group	SBT	NWR2	NET
Lane Configurations	↑↑↑	↑↑↑	↑↑↑
Traffic Volume (vph)	1314	897	1255
Future Volume (vph)	1314	897	1255
Satd. Flow (prot)	5085	3610	5085
Flt Permitted			
Satd. Flow (perm)	5085	3610	5085
Satd. Flow (RTOR)		57	
Lane Group Flow (vph)	1428	975	1364
Turn Type	NA	Prot	NA
Protected Phases	2	2	8
Permitted Phases		2	
Detector Phase	2	2	8
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	17.2	17.2	19.3
Total Split (s)	60.0	60.0	60.0
Total Split (%)	50.0%	50.0%	50.0%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	3.7	3.7	5.8
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	7.2	7.2	9.3
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	C-Max	None
Act Effct Green (s)	62.5	62.5	41.0
Actuated g/C Ratio	0.52	0.52	0.34
v/c Ratio	0.54	0.51	0.78
Control Delay	20.8	19.5	24.0
Queue Delay	0.0	0.0	0.0
Total Delay	20.8	19.5	24.0
LOS	C	B	C
Approach Delay	20.8		24.0
Approach LOS	C		C
Queue Length 50th (ft)	261	196	143
Queue Length 95th (ft)	342	275	143
Internal Link Dist (ft)	259		447
Turn Bay Length (ft)			
Base Capacity (vph)	2646	1906	2148
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.54	0.51	0.64

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 48 (40%), Referenced to phase 2:SBT, Start of Green
 Natural Cycle: 55
 Control Type: Actuated-Coordinated

Timings

1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Background Traffic Volumes

AM Peak Hour - Year 2043

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 21.6

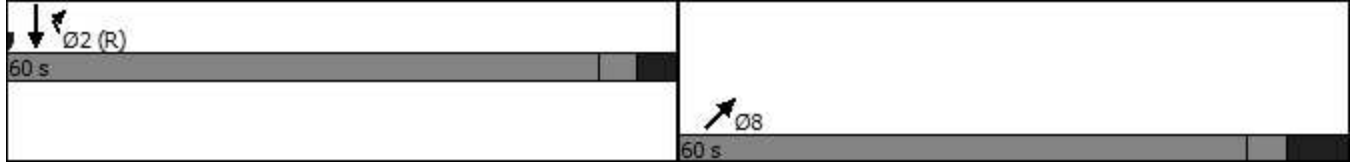
Intersection LOS: C

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp



HCM 6th TWSC
 2: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Background Traffic Volumes
 AM Peak Hour - Year 2043

Intersection						
Int Delay, s/veh	35.7					
Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations				↑↑↑	↑	
Traffic Vol, veh/h	0	0	0	1314	544	0
Future Vol, veh/h	0	0	0	1314	544	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	1428	591	0

Major/Minor	Major2	Minor1
Conflicting Flow All	-	- 571
Stage 1	-	- 0
Stage 2	-	- 571
Critical Hdwy	-	- 5.74
Critical Hdwy Stg 1	-	- -
Critical Hdwy Stg 2	-	- 6.04
Follow-up Hdwy	-	- 3.82
Pot Cap-1 Maneuver	0	- ~ 506
Stage 1	0	- - 0
Stage 2	0	- ~ 482
Platoon blocked, %		-
Mov Cap-1 Maneuver	-	- ~ 506
Mov Cap-2 Maneuver	-	- ~ 506
Stage 1	-	- -
Stage 2	-	- ~ 482

Approach	SB	SW
HCM Control Delay, s	0	122
HCM LOS		F

Minor Lane/Major Mvmt	SBT SWL n1
Capacity (veh/h)	- 506
HCM Lane V/C Ratio	- 1.169
HCM Control Delay (s)	- 122
HCM Lane LOS	- F
HCM 95th %tile Q(veh)	- 21.1

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

Timings
 3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

Background Traffic Volumes
 AM Peak Hour - Year 2043



Lane Group	NBT	SER2	SWT
Lane Configurations	↑↑↑↑	↑↑↑↑	↑↑↑↑
Traffic Volume (vph)	1437	372	1236
Future Volume (vph)	1437	372	1236
Satd. Flow (prot)	5085	3610	5085
Flt Permitted			
Satd. Flow (perm)	5085	3610	5085
Satd. Flow (RTOR)		57	
Lane Group Flow (vph)	1562	404	1343
Turn Type	NA	Prot	NA
Protected Phases	4	4	2
Permitted Phases		4	
Detector Phase	4	4	2
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	17.5	17.5	19.3
Total Split (s)	62.0	62.0	58.0
Total Split (%)	51.7%	51.7%	48.3%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	4.0	4.0	5.8
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	9.3
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	None	None	C-Max
Act Effct Green (s)	48.9	48.9	54.3
Actuated g/C Ratio	0.41	0.41	0.45
v/c Ratio	0.75	0.27	0.58
Control Delay	32.7	19.9	15.4
Queue Delay	0.0	0.0	0.0
Total Delay	32.7	19.9	15.4
LOS	C	B	B
Approach Delay	32.7		15.4
Approach LOS	C		B
Queue Length 50th (ft)	369	75	125
Queue Length 95th (ft)	395	98	148
Internal Link Dist (ft)	90		532
Turn Bay Length (ft)			
Base Capacity (vph)	2309	1670	2300
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.68	0.24	0.58

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 46 (38%), Referenced to phase 2:SWT, Start of Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated

Default

Timings

3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

Background Traffic Volumes

AM Peak Hour - Year 2043

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 24.1



Intersection LOS: C

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

 Ø2 (R)	 Ø4
58 s	62 s

HCM 6th TWSC
 4: U.S. 36 Eastbound Off Ramp & McCaslin Boulevard

Background Traffic Volumes
 AM Peak Hour - Year 2043

Intersection						
Int Delay, s/veh	23.9					
Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations	↑↑↑				↘	
Traffic Vol, veh/h	0	1437	0	0	476	0
Future Vol, veh/h	0	1437	0	0	476	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1562	0	0	517	0

Major/Minor	Major1		Minor2	
Conflicting Flow All	-	0	625	-
Stage 1	-	-	0	-
Stage 2	-	-	625	-
Critical Hdwy	-	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	-	-	3.82	-
Pot Cap-1 Maneuver	0	-	~ 476	0
Stage 1	0	-	-	0
Stage 2	0	-	~ 452	0
Platoon blocked, %	-			
Mov Cap-1 Maneuver	-	-	~ 476	-
Mov Cap-2 Maneuver	-	-	~ 476	-
Stage 1	-	-	-	-
Stage 2	-	-	~ 452	-

























Approach	NB	NE
HCM Control Delay, s	0	96
HCM LOS		F

Minor Lane/Major Mvmt	NELn1	NBT
Capacity (veh/h)	476	-
HCM Lane V/C Ratio	1.087	-
HCM Control Delay (s)	96	-
HCM Lane LOS	F	-
HCM 95th %tile Q(veh)	16.8	-

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

Timings
5: McCaslin Boulevard & Marshall Road

Background Traffic Volumes
AM Peak Hour - Year 2043

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	44	689	32	34	175	106	950	119	277	693	416
Future Volume (vph)	98	44	689	32	34	175	106	950	119	277	693	416
Satd. Flow (prot)	3221	1680	1583	1770	1863	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.950	0.991		0.950			0.354			0.135		
Satd. Flow (perm)	3221	1680	1583	1770	1863	1583	1279	5085	1583	251	5085	1583
Satd. Flow (RTOR)			467			190			127			383
Lane Group Flow (vph)	96	59	749	35	37	190	115	1033	129	301	753	452
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Free
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4	6		6	2		Free
Detector Phase	8	8	8	4	4	4	1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	3.0	10.0	10.0	3.0	10.0	
Minimum Split (s)	9.0	9.0	9.0	10.0	10.0	10.0	9.0	16.0	16.0	9.0	16.0	
Total Split (s)	30.0	30.0	30.0	27.0	27.0	27.0	15.0	43.0	43.0	20.0	48.0	
Total Split (%)	25.0%	25.0%	25.0%	22.5%	22.5%	22.5%	12.5%	35.8%	35.8%	16.7%	40.0%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	5.0	5.0	5.0	4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	
Act Effct Green (s)	39.5	39.5	39.5	8.5	8.5	8.5	46.6	37.0	37.0	59.0	45.4	120.0
Actuated g/C Ratio	0.33	0.33	0.33	0.07	0.07	0.07	0.39	0.31	0.31	0.49	0.38	1.00
v/c Ratio	0.09	0.11	0.90	0.28	0.28	0.66	0.18	0.66	0.22	0.93	0.39	0.29
Control Delay	29.2	30.0	29.5	57.1	56.9	18.7	17.4	38.5	6.5	60.7	28.1	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	29.2	30.0	29.5	57.1	56.9	18.7	17.4	38.5	6.5	60.7	28.1	0.5
LOS	C	C	C	E	E	B	B	D	A	E	C	A
Approach Delay		29.5			29.2			33.3			26.3	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	28	34	238	26	28	0	23	253	1	157	154	0
Queue Length 95th (ft)	53	74	#535	58	61	69	39	304	46	#327	194	0
Internal Link Dist (ft)		518			407			580			291	
Turn Bay Length (ft)			260	170		170	180		170	230		170
Base Capacity (vph)	1060	553	834	324	341	445	730	1567	575	325	1923	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	0.09	0.11	0.90	0.11	0.11	0.43	0.16	0.66	0.22	0.93	0.39	0.29

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 64 (53%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
 Natural Cycle: 75
 Control Type: Actuated-Coordinated

Timings
 5: McCaslin Boulevard & Marshall Road

Background Traffic Volumes
 AM Peak Hour - Year 2043

Maximum v/c Ratio: 0.93
 Intersection Signal Delay: 29.5 Intersection LOS: C
 Intersection Capacity Utilization 72.7% ICU Level of Service C
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 5: McCaslin Boulevard & Marshall Road

 Ø1	 Ø2 (R)	 Ø4	 Ø8
15 s	48 s	27 s	30 s
 Ø5	 Ø6 (R)		
20 s	43 s		

HCM 6th Roundabout
6: McCaslin Boulevard & Main Street

Background Traffic Volumes
AM Peak Hour - Year 2043

Intersection							
Intersection Delay, s/veh	7.6						
Intersection LOS	A						
Approach	EB	WB	NB		SB		
Entry Lanes	1	1	2		2		
Conflicting Circle Lanes	2	2	2		2		
Adj Approach Flow, veh/h	20	192	1141		726		
Demand Flow Rate, veh/h	20	196	1164		741		
Vehicles Circulating, veh/h	749	1094	290		48		
Vehicles Exiting, veh/h	40	360	479		1092		
Ped Vol Crossing Leg, #/h	0	0	0		0		
Ped Cap Adj	1.000	1.000	1.000		1.000		
Approach Delay, s/veh	5.1	1.8	10.1		5.2		
Approach LOS	A	A	B		A		
Lane	Left	Left	Bypass	Left	Right	Left	Right
Designated Moves	LTR	LT	R	LT	TR	LT	TR
Assumed Moves	LTR	LT	R	LT	TR	LT	TR
RT Channelized	Free						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530	
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.328	4.328	150	4.645	4.328	4.645	4.328
Entry Flow, veh/h	20	46	1938	547	617	348	393
Cap Entry Lane, veh/h	751	560	0.980	1034	1110	1292	1363
Entry HV Adj Factor	1.000	0.976	147	0.980	0.980	0.981	0.980
Flow Entry, veh/h	20	45	1900	536	605	341	385
Cap Entry, veh/h	751	547	0.077	1013	1088	1267	1336
V/C Ratio	0.027	0.082	0.0	0.529	0.556	0.269	0.288
Control Delay, s/veh	5.1	7.6	A	10.1	10.2	5.2	5.2
LOS	A	A	0	B	B	A	A
95th %tile Queue, veh	0	0		3	4	1	1

HCM 6th TWSC
7: Marshall Road & Access A

Background Traffic Volumes
AM Peak Hour - Year 2043

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔			↔↔			↔↔			↔↔		
Traffic Vol, veh/h	0	169	41	0	92	0	11	0	0	0	0	0
Future Vol, veh/h	0	169	41	0	92	0	11	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	184	45	0	100	0	12	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	100	0	0	229	0	0	307	307	115	192	329	100
Stage 1	-	-	-	-	-	-	207	207	-	100	100	-
Stage 2	-	-	-	-	-	-	100	100	-	92	229	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.93	7.33	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	1492	-	-	1338	-	-	634	606	916	759	589	955
Stage 1	-	-	-	-	-	-	776	730	-	906	812	-
Stage 2	-	-	-	-	-	-	906	812	-	905	714	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1492	-	-	1338	-	-	634	606	916	759	589	955
Mov Cap-2 Maneuver	-	-	-	-	-	-	634	606	-	759	589	-
Stage 1	-	-	-	-	-	-	776	730	-	906	812	-
Stage 2	-	-	-	-	-	-	906	812	-	905	714	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			10.8			0		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	634	1492	-	-	1338	-	-	-
HCM Lane V/C Ratio	0.019	-	-	-	-	-	-	-
HCM Control Delay (s)	10.8	0	-	-	0	-	-	0
HCM Lane LOS	B	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-

HCM 6th TWSC
8: Access B & Marshall Road

Background Traffic Volumes
AM Peak Hour - Year 2043

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙↘		↖↗		↙↘	↖↗
Traffic Vol, veh/h	0	0	92	0	0	169
Future Vol, veh/h	0	0	92	0	0	169
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	100	0	0	184

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	284	100	0	0	100
Stage 1	100	-	-	-	-
Stage 2	184	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	706	956	-	-	1493
Stage 1	924	-	-	-	-
Stage 2	848	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	706	956	-	-	1493
Mov Cap-2 Maneuver	706	-	-	-	-
Stage 1	924	-	-	-	-
Stage 2	848	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1493
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

Timings
 1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Background Traffic Volumes
 PM Peak Hour - Year 2043



Lane Group	SBT	NWR2	NET
Lane Configurations	↑↑↑	↑↑↑	↑↑↑
Traffic Volume (vph)	2085	669	1499
Future Volume (vph)	2085	669	1499
Satd. Flow (prot)	5085	3610	5085
Flt Permitted			
Satd. Flow (perm)	5085	3610	5085
Satd. Flow (RTOR)		57	
Lane Group Flow (vph)	2266	727	1629
Turn Type	NA	Prot	NA
Protected Phases	2	2	8
Permitted Phases		2	
Detector Phase	2	2	8
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	17.2	17.2	19.3
Total Split (s)	67.0	67.0	53.0
Total Split (%)	55.8%	55.8%	44.2%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	3.7	3.7	5.8
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	7.2	7.2	9.3
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	C-Max	None
Act Effct Green (s)	60.5	60.5	43.0
Actuated g/C Ratio	0.50	0.50	0.36
v/c Ratio	0.88	0.39	0.89
Control Delay	32.1	17.7	27.1
Queue Delay	0.0	0.0	0.0
Total Delay	32.1	17.7	27.1
LOS	C	B	C
Approach Delay	32.1		27.1
Approach LOS	C		C
Queue Length 50th (ft)	563	137	162
Queue Length 95th (ft)	640	176	269
Internal Link Dist (ft)	259		447
Turn Bay Length (ft)			
Base Capacity (vph)	2563	1847	1851
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.88	0.39	0.88

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 48 (40%), Referenced to phase 2:SBT, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated

Timings

1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Background Traffic Volumes

PM Peak Hour - Year 2043

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 28.1

Intersection LOS: C

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp



HCM 6th TWSC
 2: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Background Traffic Volumes
 PM Peak Hour - Year 2043

Intersection						
Int Delay, s/veh	76					
Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations				↑↑↑	↔	
Traffic Vol, veh/h	0	0	0	2085	549	0
Future Vol, veh/h	0	0	0	2085	549	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	2266	597	0

Major/Minor	Major2	Minor1
Conflicting Flow All	-	- 906
Stage 1	-	- 0
Stage 2	-	- 906
Critical Hdwy	-	- 5.74
Critical Hdwy Stg 1	-	- -
Critical Hdwy Stg 2	-	- 6.04
Follow-up Hdwy	-	- 3.82
Pot Cap-1 Maneuver	0	- ~ 346
Stage 1	0	- - 0
Stage 2	0	- ~ 321
Platoon blocked, %		-
Mov Cap-1 Maneuver	-	- ~ 346
Mov Cap-2 Maneuver	-	- ~ 346
Stage 1	-	- -
Stage 2	-	- ~ 321

Approach	SB	SW
HCM Control Delay, s	0	\$ 364.6
HCM LOS		F

Minor Lane/Major Mvmt	SBT SWLn1
Capacity (veh/h)	- 346
HCM Lane V/C Ratio	- 1.725
HCM Control Delay (s)	- \$ 364.6
HCM Lane LOS	- F
HCM 95th %tile Q(veh)	- 37.3

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

Timings
3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

Background Traffic Volumes
PM Peak Hour - Year 2043



Lane Group	NBT	SER2	SWT
Lane Configurations	↑↑↑↑	↑↑↑↑	↑↑↑↑
Traffic Volume (vph)	1636	857	1729
Future Volume (vph)	1636	857	1729
Satd. Flow (prot)	5085	3610	5085
Flt Permitted			
Satd. Flow (perm)	5085	3610	5085
Satd. Flow (RTOR)		57	
Lane Group Flow (vph)	1778	932	1879
Turn Type	NA	Prot	NA
Protected Phases	4	4	2
Permitted Phases		4	
Detector Phase	4	4	2
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	17.5	17.5	19.3
Total Split (s)	57.0	57.0	63.0
Total Split (%)	47.5%	47.5%	52.5%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	4.0	4.0	5.8
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	9.3
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	None	None	C-Max
Act Effct Green (s)	49.5	49.5	53.7
Actuated g/C Ratio	0.41	0.41	0.45
v/c Ratio	0.85	0.61	0.83
Control Delay	36.7	27.9	25.3
Queue Delay	0.0	0.0	0.0
Total Delay	36.7	27.9	25.3
LOS	D	C	C
Approach Delay	36.7		25.3
Approach LOS	D		C
Queue Length 50th (ft)	449	230	235
Queue Length 95th (ft)	515	288	295
Internal Link Dist (ft)	90		532
Turn Bay Length (ft)			
Base Capacity (vph)	2097	1522	2275
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.85	0.61	0.83

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 46 (38%), Referenced to phase 2:SWT, Start of Green
 Natural Cycle: 80
 Control Type: Actuated-Coordinated

Timings

3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

Background Traffic Volumes

PM Peak Hour - Year 2043

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 30.2

Intersection LOS: C

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

 Ø2 (R)	 Ø4
63 s	57 s

HCM 6th TWSC
 4: U.S. 36 Eastbound Off Ramp & McCaslin Boulevard

Background Traffic Volumes
 PM Peak Hour - Year 2043

Intersection						
Int Delay, s/veh	36.3					
Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations	↑↑↑				↘	
Traffic Vol, veh/h	0	1636	0	0	495	0
Future Vol, veh/h	0	1636	0	0	495	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1778	0	0	538	0

Major/Minor	Major1		Minor2	
Conflicting Flow All	-	0	711	-
Stage 1	-	-	0	-
Stage 2	-	-	711	-
Critical Hdwy	-	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	-	-	3.82	-
Pot Cap-1 Maneuver	0	-	~ 432	0
Stage 1	0	-	-	0
Stage 2	0	-	~ 407	0
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	~ 432	-
Mov Cap-2 Maneuver	-	-	~ 432	-
Stage 1	-	-	-	-
Stage 2	-	-	~ 407	-

























Approach	NB	NE
HCM Control Delay, s	0	156.4
HCM LOS		F

Minor Lane/Major Mvmt	NELn1	NBT
Capacity (veh/h)	432	-
HCM Lane V/C Ratio	1.245	-
HCM Control Delay (s)	156.4	-
HCM Lane LOS	F	-
HCM 95th %tile Q(veh)	22.3	-

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

Timings
5: McCaslin Boulevard & Marshall Road

Background Traffic Volumes
PM Peak Hour - Year 2043

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	548	61	561	57	34	249	382	941	81	148	1283	909
Future Volume (vph)	548	61	561	57	34	249	382	941	81	148	1283	909
Satd. Flow (prot)	3221	1637	1583	1770	1863	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.950	0.966		0.950			0.094			0.203		
Satd. Flow (perm)	3221	1637	1583	1770	1863	1583	340	5085	1583	378	5085	1583
Satd. Flow (RTOR)			391			189			127			452
Lane Group Flow (vph)	441	221	610	62	37	271	415	1023	88	161	1395	988
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Free
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4	6		6	2		Free
Detector Phase	8	8	8	4	4	4	1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	3.0	10.0	10.0	3.0	10.0	
Minimum Split (s)	9.0	9.0	9.0	10.0	10.0	10.0	9.0	16.0	16.0	9.0	16.0	
Total Split (s)	30.0	30.0	30.0	27.0	27.0	27.0	15.0	43.0	43.0	20.0	48.0	
Total Split (%)	25.0%	25.0%	25.0%	22.5%	22.5%	22.5%	12.5%	35.8%	35.8%	16.7%	40.0%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	5.0	5.0	5.0	4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	
Act Effct Green (s)	27.6	27.6	27.6	13.0	13.0	13.0	62.8	49.2	49.2	61.3	48.1	120.0
Actuated g/C Ratio	0.23	0.23	0.23	0.11	0.11	0.11	0.52	0.41	0.41	0.51	0.40	1.00
v/c Ratio	0.60	0.59	0.92	0.32	0.18	0.80	0.84	0.49	0.12	0.50	0.68	0.62
Control Delay	44.6	47.7	35.8	51.4	47.6	33.5	41.8	29.5	2.1	21.0	33.3	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	44.6	47.7	35.8	51.4	47.6	33.5	41.8	29.5	2.1	21.0	33.3	1.9
LOS	D	D	D	D	D	C	D	C	A	C	C	A
Approach Delay		40.9			37.9			31.3				20.3
Approach LOS		D			D			C				C
Queue Length 50th (ft)	154	154	170	45	27	61	111	233	0	67	352	0
Queue Length 95th (ft)	230	267	#433	82	56	147	#224	299	16	110	411	0
Internal Link Dist (ft)		518			407			580				291
Turn Bay Length (ft)			260	170		170	180		170	230		170
Base Capacity (vph)	786	399	682	324	341	444	495	2083	723	392	2038	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	0.56	0.55	0.89	0.19	0.11	0.61	0.84	0.49	0.12	0.41	0.68	0.62

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 64 (53%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
 Natural Cycle: 75
 Control Type: Actuated-Coordinated

Timings
 5: McCaslin Boulevard & Marshall Road

Background Traffic Volumes
 PM Peak Hour - Year 2043

Maximum v/c Ratio: 0.92
 Intersection Signal Delay: 29.0 Intersection LOS: C
 Intersection Capacity Utilization 76.2% 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: 5: McCaslin Boulevard & Marshall Road

 Ø1	 Ø2 (R)	 Ø4	 Ø8
15 s	48 s	27 s	30 s
 Ø5	 Ø6 (R)		
20 s	43 s		

HCM 6th Roundabout
6: McCaslin Boulevard & Main Street

Background Traffic Volumes
PM Peak Hour - Year 2043

Intersection							
Intersection Delay, s/veh	11.9						
Intersection LOS	B						
Approach	EB	WB	NB		SB		
Entry Lanes	1	1	2		2		
Conflicting Circle Lanes	2	2	2		2		
Adj Approach Flow, veh/h	38	423	1087		1836		
Demand Flow Rate, veh/h	39	431	1109		1873		
Vehicles Circulating, veh/h	1970	1027	314		119		
Vehicles Exiting, veh/h	22	396	1695		1025		
Ped Vol Crossing Leg, #/h	0	0	0		0		
Ped Cap Adj	1.000	1.000	1.000		1.000		
Approach Delay, s/veh	17.0	2.4	10.0		15.0		
Approach LOS	C	A	A		C		
Lane	Left	Left	Bypass	Left	Right	Left	Right
Designated Moves	LTR	LT	R	LT	TR	LT	TR
Assumed Moves	LTR	LT	R	LT	TR	LT	TR
RT Channelized	Free						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530	
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.328	4.328	314	4.645	4.328	4.645	4.328
Entry Flow, veh/h	39	117	1938	521	588	880	993
Cap Entry Lane, veh/h	266	593	0.980	1011	1087	1210	1283
Entry HV Adj Factor	0.973	0.982	308	0.981	0.980	0.981	0.980
Flow Entry, veh/h	38	115	1900	511	576	863	973
Cap Entry, veh/h	259	582	0.162	992	1066	1186	1258
V/C Ratio	0.147	0.197	0.0	0.515	0.541	0.727	0.774
Control Delay, s/veh	17.0	8.7	A	10.0	10.0	14.3	15.7
LOS	C	A	1	A	A	B	C
95th %tile Queue, veh	1	1		3	3	7	8

HCM 6th TWSC
7: Marshall Road & Access A

Background Traffic Volumes
PM Peak Hour - Year 2043

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔			↔			↔			↔		
Traffic Vol, veh/h	9	106	26	0	274	1	38	2	5	0	0	6
Future Vol, veh/h	9	106	26	0	274	1	38	2	5	0	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	115	28	0	298	1	41	2	5	0	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	299	0	0	143	0	0	451	448	72	378	462	299
Stage 1	-	-	-	-	-	-	149	149	-	299	299	-
Stage 2	-	-	-	-	-	-	302	299	-	79	163	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.93	7.33	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	1261	-	-	1438	-	-	505	505	976	567	496	740
Stage 1	-	-	-	-	-	-	839	773	-	709	666	-
Stage 2	-	-	-	-	-	-	706	666	-	921	763	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1261	-	-	1438	-	-	497	500	976	558	492	740
Mov Cap-2 Maneuver	-	-	-	-	-	-	497	500	-	558	492	-
Stage 1	-	-	-	-	-	-	831	766	-	703	666	-
Stage 2	-	-	-	-	-	-	700	666	-	905	756	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0			12.5			9.9		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	526	1261	-	-	1438	-	-	740
HCM Lane V/C Ratio	0.093	0.008	-	-	-	-	-	0.009
HCM Control Delay (s)	12.5	7.9	0	-	0	-	-	9.9
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0

HCM 6th TWSC
8: Access B & Marshall Road

Background Traffic Volumes
PM Peak Hour - Year 2043

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↖↗		↘↗	↖↗
Traffic Vol, veh/h	0	0	275	0	0	111
Future Vol, veh/h	0	0	275	0	0	111
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	299	0	0	121

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	420	299	0	0	299
Stage 1	299	-	-	-	-
Stage 2	121	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	590	741	-	-	1262
Stage 1	752	-	-	-	-
Stage 2	904	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	590	741	-	-	1262
Mov Cap-2 Maneuver	590	-	-	-	-
Stage 1	752	-	-	-	-
Stage 2	904	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1262	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Timings

1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Total Traffic Volumes

AM Peak Hour - Year 2025



Lane Group	SBT	NWR2	NET
Lane Configurations	↑↑↑	↑↑↑	↑↑↑
Traffic Volume (vph)	913	622	872
Future Volume (vph)	913	622	872
Satd. Flow (prot)	5085	3610	5085
Flt Permitted			
Satd. Flow (perm)	5085	3610	5085
Satd. Flow (RTOR)		207	
Lane Group Flow (vph)	992	676	948
Turn Type	NA	Prot	NA
Protected Phases	2	2	8
Permitted Phases		2	
Detector Phase	2	2	8
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	17.2	17.2	19.3
Total Split (s)	50.0	50.0	70.0
Total Split (%)	41.7%	41.7%	58.3%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	3.7	3.7	5.8
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	7.2	7.2	9.3
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	C-Max	None
Act Effct Green (s)	73.1	73.1	30.4
Actuated g/C Ratio	0.61	0.61	0.25
v/c Ratio	0.32	0.30	0.74
Control Delay	12.2	8.3	64.8
Queue Delay	0.0	0.0	0.0
Total Delay	12.2	8.3	64.8
LOS	B	A	E
Approach Delay	12.2		64.8
Approach LOS	B		E
Queue Length 50th (ft)	128	67	229
Queue Length 95th (ft)	178	109	221
Internal Link Dist (ft)	259		447
Turn Bay Length (ft)			
Base Capacity (vph)	3096	2279	2572
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.32	0.30	0.37

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 48 (40%), Referenced to phase 2:SBT, Start of Green
 Natural Cycle: 40
 Control Type: Actuated-Coordinated

Timings

1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Total Traffic Volumes

AM Peak Hour - Year 2025

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 30.3

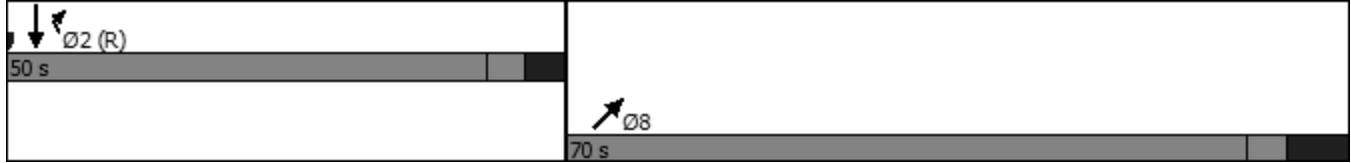
Intersection LOS: C

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp



HCM 6th TWSC
 2: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Total Traffic Volumes
 AM Peak Hour - Year 2025

Intersection						
Int Delay, s/veh	6.8					
Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations				↑↑↑	↔	
Traffic Vol, veh/h	0	0	0	913	387	0
Future Vol, veh/h	0	0	0	913	387	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	992	421	0

Major/Minor	Major2	Minor1
Conflicting Flow All	-	- 397
Stage 1	-	- 0
Stage 2	-	- 397
Critical Hdwy	-	- 5.74
Critical Hdwy Stg 1	-	- -
Critical Hdwy Stg 2	-	- 6.04
Follow-up Hdwy	-	- 3.82
Pot Cap-1 Maneuver	0	- 613
Stage 1	0	- - 0
Stage 2	0	- 593
Platoon blocked, %		-
Mov Cap-1 Maneuver	-	- 613
Mov Cap-2 Maneuver	-	- 613
Stage 1	-	- -
Stage 2	-	- 593

Approach	SB	SW
HCM Control Delay, s	0	22.7
HCM LOS		C

Minor Lane/Major Mvmt	SBT SWL n1
Capacity (veh/h)	- 613
HCM Lane V/C Ratio	- 0.686
HCM Control Delay (s)	- 22.7
HCM Lane LOS	- C
HCM 95th %tile Q(veh)	- 5.4

Timings
3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

Total Traffic Volumes
AM Peak Hour - Year 2025



Lane Group	NBT	SER2	SWT
Lane Configurations	↑↑↑	↑↑↑	↑↑↑
Traffic Volume (vph)	1016	287	889
Future Volume (vph)	1016	287	889
Satd. Flow (prot)	5085	3610	5085
Flt Permitted			
Satd. Flow (perm)	5085	3610	5085
Satd. Flow (RTOR)		116	
Lane Group Flow (vph)	1104	312	966
Turn Type	NA	Prot	NA
Protected Phases	4	4	2
Permitted Phases		4	
Detector Phase	4	4	2
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	17.5	17.5	19.3
Total Split (s)	60.0	60.0	60.0
Total Split (%)	50.0%	50.0%	50.0%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	4.0	4.0	5.8
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	9.3
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	None	None	C-Max
Act Effct Green (s)	36.0	36.0	67.2
Actuated g/C Ratio	0.30	0.30	0.56
v/c Ratio	0.72	0.27	0.34
Control Delay	40.1	19.3	7.6
Queue Delay	0.0	0.0	0.0
Total Delay	40.1	19.3	7.6
LOS	D	B	A
Approach Delay	40.1		7.6
Approach LOS	D		A
Queue Length 50th (ft)	279	49	56
Queue Length 95th (ft)	301	72	72
Internal Link Dist (ft)	90		532
Turn Bay Length (ft)			
Base Capacity (vph)	2224	1644	2847
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.50	0.19	0.34

Intersection Summary
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 46 (38%), Referenced to phase 2:SWT, Start of Green
 Natural Cycle: 45
 Control Type: Actuated-Coordinated

Timings

3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

Total Traffic Volumes

AM Peak Hour - Year 2025

Maximum v/c Ratio: 0.72

Intersection Signal Delay: 24.2



Intersection LOS: C

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

 Ø2 (R)	 Ø4
60 s	60 s

HCM 6th TWSC
 4: U.S. 36 Eastbound Off Ramp & McCaslin Boulevard

Total Traffic Volumes
 AM Peak Hour - Year 2025

Intersection						
Int Delay, s/veh	5					
Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations	↑↑↑				↘	
Traffic Vol, veh/h	0	1016	0	0	330	0
Future Vol, veh/h	0	1016	0	0	330	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1104	0	0	359	0
































Major/Minor	Major1		Minor2	
Conflicting Flow All	-	0	442	-
Stage 1	-	-	0	-
Stage 2	-	-	442	-
Critical Hdwy	-	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	-	-	3.82	-
Pot Cap-1 Maneuver	0	-	584	0
Stage 1	0	-	-	0
Stage 2	0	-	562	0
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	584	-
Mov Cap-2 Maneuver	-	-	584	-
Stage 1	-	-	-	-
Stage 2	-	-	562	-

Approach	NB	NE
HCM Control Delay, s	0	20.5
HCM LOS		C

Minor Lane/Major Mvmt	NELn1	NBT
Capacity (veh/h)	584	-
HCM Lane V/C Ratio	0.614	-
HCM Control Delay (s)	20.5	-
HCM Lane LOS	C	-
HCM 95th %tile Q(veh)	4.2	-

Timings
5: McCaslin Boulevard & Marshall Road

Total Traffic Volumes
AM Peak Hour - Year 2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 	 	 	 	 	 	  	 			
Traffic Volume (vph)	68	32	55	23	25	145	116	673	83	223	511	288
Future Volume (vph)	68	32	55	23	25	145	116	673	83	223	511	288
Satd. Flow (prot)	3221	1682	1583	1770	1863	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.950	0.992		0.950			0.434			0.337		
Satd. Flow (perm)	3221	1682	1583	1770	1863	1583	1568	5085	1583	628	5085	1583
Satd. Flow (RTOR)			145			158			127			313
Lane Group Flow (vph)	67	42	60	25	27	158	126	732	90	242	555	313
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Free
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4	6		6	2		Free
Detector Phase	8	8	8	4	4	4	1	6	6	5	2	
Switch Phase							Lead	Lag	Lag	Lead	Lag	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	3.0	10.0	10.0	3.0	10.0	
Minimum Split (s)	9.0	9.0	9.0	10.0	10.0	10.0	9.0	16.0	16.0	9.0	16.0	
Total Split (s)	30.0	30.0	30.0	27.0	27.0	27.0	15.0	43.0	43.0	20.0	48.0	
Total Split (%)	25.0%	25.0%	25.0%	22.5%	22.5%	22.5%	12.5%	35.8%	35.8%	16.7%	40.0%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	5.0	5.0	5.0	4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	
Act Effct Green (s)	8.5	8.5	8.5	8.0	8.0	8.0	84.8	76.1	76.1	91.4	79.8	120.0
Actuated g/C Ratio	0.07	0.07	0.07	0.07	0.07	0.07	0.71	0.63	0.63	0.76	0.66	1.00
v/c Ratio	0.29	0.35	0.24	0.21	0.22	0.63	0.10	0.23	0.09	0.42	0.16	0.20
Control Delay	55.4	60.5	2.3	55.9	55.8	19.3	4.8	10.9	1.1	6.9	8.7	0.3
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	55.4	60.5	2.3	55.9	55.8	19.3	4.8	10.9	1.1	6.9	8.7	0.3
LOS	E	E	A	E	E	B	A	B	A	A	A	A
Approach Delay		37.8			28.4			9.2			5.9	
Approach LOS		D			C			A			A	
Queue Length 50th (ft)	27	35	0	19	20	0	10	83	0	44	55	0
Queue Length 95th (ft)	51	74	0	46	49	64	24	140	11	93	91	0
Internal Link Dist (ft)		518			407			580			291	
Turn Bay Length (ft)			260	170		170	180		170	230		170
Base Capacity (vph)	697	364	456	324	341	419	1334	3226	1050	636	3381	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	0.10	0.12	0.13	0.08	0.08	0.38	0.09	0.23	0.09	0.38	0.16	0.20

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 64 (53%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
 Natural Cycle: 45
 Control Type: Actuated-Coordinated

Timings
 5: McCaslin Boulevard & Marshall Road

Total Traffic Volumes
 AM Peak Hour - Year 2025

Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 11.3	Intersection LOS: B
Intersection Capacity Utilization 45.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 5: McCaslin Boulevard & Marshall Road

 Ø1	 Ø2 (R)	 Ø4	 Ø8
15 s	48 s	27 s	30 s
 Ø5	 Ø6 (R)		
20 s	43 s		

HCM 6th Roundabout
6: McCaslin Boulevard & Main Street

Total Traffic Volumes
AM Peak Hour - Year 2025

Intersection							
Intersection Delay, s/veh	5.5						
Intersection LOS	A						
Approach	EB	WB	NB		SB		
Entry Lanes	1	1	2		2		
Conflicting Circle Lanes	2	2	2		2		
Adj Approach Flow, veh/h	13	156	806		541		
Demand Flow Rate, veh/h	13	159	822		551		
Vehicles Circulating, veh/h	565	760	238		40		
Vehicles Exiting, veh/h	26	300	340		759		
Ped Vol Crossing Leg, #/h	0	0	0		0		
Ped Cap Adj	1.000	1.000	1.000		1.000		
Approach Delay, s/veh	4.2	1.3	7.0		4.5		
Approach LOS	A	A	A		A		
Lane	Left	Left	Bypass	Left	Right	Left	Right
Designated Moves	LTR	LT	R	LT	TR	LT	TR
Assumed Moves	LTR	LT	R	LT	TR	LT	TR
RT Channelized	Free						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530	
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.328	4.328	120	4.645	4.328	4.645	4.328
Entry Flow, veh/h	13	39	1938	386	436	259	292
Cap Entry Lane, veh/h	878	744	0.980	1084	1160	1301	1373
Entry HV Adj Factor	1.000	0.973	118	0.982	0.980	0.982	0.982
Flow Entry, veh/h	13	38	1900	379	427	254	287
Cap Entry, veh/h	878	724	0.062	1065	1137	1277	1348
V/C Ratio	0.015	0.052	0.0	0.356	0.376	0.199	0.213
Control Delay, s/veh	4.2	5.5	A	7.0	6.9	4.5	4.5
LOS	A	A	0	A	A	A	A
95th %tile Queue, veh	0	0		2	2	1	1

HCM 6th TWSC
7: Marshall Road & Access A

Total Traffic Volumes
AM Peak Hour - Year 2025

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔			↔			↔			↔		
Traffic Vol, veh/h	0	148	28	0	86	0	7	0	0	0	0	4
Future Vol, veh/h	0	148	28	0	86	0	7	0	0	0	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	161	30	0	93	0	8	0	0	0	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	93	0	0	191	0	0	271	269	96	174	284	93
Stage 1	-	-	-	-	-	-	176	176	-	93	93	-
Stage 2	-	-	-	-	-	-	95	93	-	81	191	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.93	7.33	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	1500	-	-	1381	-	-	671	637	942	781	624	964
Stage 1	-	-	-	-	-	-	809	753	-	913	818	-
Stage 2	-	-	-	-	-	-	911	818	-	919	742	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1500	-	-	1381	-	-	668	637	942	781	624	964
Mov Cap-2 Maneuver	-	-	-	-	-	-	668	637	-	781	624	-
Stage 1	-	-	-	-	-	-	809	753	-	913	818	-
Stage 2	-	-	-	-	-	-	907	818	-	919	742	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			10.5			8.8		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	668	1500	-	-	1381	-	-	964
HCM Lane V/C Ratio	0.011	-	-	-	-	-	-	0.005
HCM Control Delay (s)	10.5	0	-	-	0	-	-	8.8
HCM Lane LOS		B	A	-	-	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

HCM 6th TWSC
8: Access B & Marshall Road

Total Traffic Volumes
AM Peak Hour - Year 2025

Intersection						
Int Delay, s/veh	1.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↔		↔	↔
Traffic Vol, veh/h	0	14	72	0	21	127
Future Vol, veh/h	0	14	72	0	21	127
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	15	78	0	23	138

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	262	78	0	0	78	0
Stage 1	78	-	-	-	-	-
Stage 2	184	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	727	983	-	-	1520	-
Stage 1	945	-	-	-	-	-
Stage 2	848	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	716	983	-	-	1520	-
Mov Cap-2 Maneuver	716	-	-	-	-	-
Stage 1	945	-	-	-	-	-
Stage 2	835	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.7	0	1.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	983	1520
HCM Lane V/C Ratio	-	-	0.015	0.015
HCM Control Delay (s)	-	-	8.7	7.4
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Timings

Total Traffic Volumes

1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

PM Peak Hour - Year 2025



Lane Group	SBT	NWR2	NET
Lane Configurations	↑↑↑	↑↑↑	↑↑↑
Traffic Volume (vph)	1448	464	1042
Future Volume (vph)	1448	464	1042
Satd. Flow (prot)	5085	3610	5085
Flt Permitted			
Satd. Flow (perm)	5085	3610	5085
Satd. Flow (RTOR)		124	
Lane Group Flow (vph)	1574	504	1133
Turn Type	NA	Prot	NA
Protected Phases	2	2	8
Permitted Phases		2	
Detector Phase	2	2	8
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	17.2	17.2	19.3
Total Split (s)	50.0	50.0	70.0
Total Split (%)	41.7%	41.7%	58.3%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	3.7	3.7	5.8
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	7.2	7.2	9.3
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	C-Max	None
Act Effct Green (s)	67.8	67.8	35.7
Actuated g/C Ratio	0.56	0.56	0.30
v/c Ratio	0.55	0.24	0.75
Control Delay	18.0	10.6	51.6
Queue Delay	0.0	0.0	0.0
Total Delay	18.0	10.6	51.6
LOS	B	B	D
Approach Delay	18.0		51.6
Approach LOS	B		D
Queue Length 50th (ft)	269	60	229
Queue Length 95th (ft)	357	97	218
Internal Link Dist (ft)	259		447
Turn Bay Length (ft)			
Base Capacity (vph)	2872	2092	2572
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.55	0.24	0.44

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 48 (40%), Referenced to phase 2:SBT, Start of Green
 Natural Cycle: 55
 Control Type: Actuated-Coordinated

Timings

1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Total Traffic Volumes

PM Peak Hour - Year 2025

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 28.7

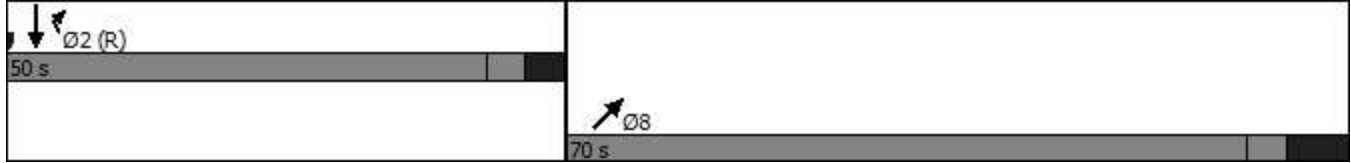
Intersection LOS: C

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp



HCM 6th TWSC
 2: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Total Traffic Volumes
 PM Peak Hour - Year 2025

Intersection						
Int Delay, s/veh	11.7					
Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations				↑↑↑	↖	
Traffic Vol, veh/h	0	0	0	1448	401	0
Future Vol, veh/h	0	0	0	1448	401	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	1574	436	0

Major/Minor	Major2	Minor1
Conflicting Flow All	-	630
Stage 1	-	0
Stage 2	-	630
Critical Hdwy	-	5.74
Critical Hdwy Stg 1	-	-
Critical Hdwy Stg 2	-	6.04
Follow-up Hdwy	-	3.82
Pot Cap-1 Maneuver	0	473
Stage 1	0	0
Stage 2	0	449
Platoon blocked, %	-	-
Mov Cap-1 Maneuver	-	473
Mov Cap-2 Maneuver	-	473
Stage 1	-	-
Stage 2	-	449

Approach	SB	SW
HCM Control Delay, s	0	53.8
HCM LOS		F

Minor Lane/Major Mvmt	SBT SWLn1
Capacity (veh/h)	- 473
HCM Lane V/C Ratio	- 0.922
HCM Control Delay (s)	- 53.8
HCM Lane LOS	- F
HCM 95th %tile Q(veh)	- 10.7

Timings
3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

Total Traffic Volumes
PM Peak Hour - Year 2025



Lane Group	NBT	SER2	SWT
Lane Configurations	↑↑↑↑	↑↑↑↑	↑↑↑↑
Traffic Volume (vph)	1170	614	1221
Future Volume (vph)	1170	614	1221
Satd. Flow (prot)	5085	3610	5085
Flt Permitted			
Satd. Flow (perm)	5085	3610	5085
Satd. Flow (RTOR)		57	
Lane Group Flow (vph)	1272	667	1327
Turn Type	NA	Prot	NA
Protected Phases	4	4	2
Permitted Phases		4	
Detector Phase	4	4	2
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	17.5	17.5	19.3
Total Split (s)	60.0	60.0	60.0
Total Split (%)	50.0%	50.0%	50.0%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	4.0	4.0	5.8
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	9.3
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	None	None	C-Max
Act Effct Green (s)	43.3	43.3	59.9
Actuated g/C Ratio	0.36	0.36	0.50
v/c Ratio	0.69	0.50	0.52
Control Delay	34.4	27.7	9.2
Queue Delay	0.0	0.0	0.0
Total Delay	34.4	27.7	9.2
LOS	C	C	A
Approach Delay	34.4		9.2
Approach LOS	C		A
Queue Length 50th (ft)	304	159	72
Queue Length 95th (ft)	313	180	93
Internal Link Dist (ft)	90		532
Turn Bay Length (ft)			
Base Capacity (vph)	2224	1611	2537
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.57	0.41	0.52

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 46 (38%), Referenced to phase 2:SWT, Start of Green
 Natural Cycle: 55
 Control Type: Actuated-Coordinated

Timings

3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

Total Traffic Volumes

PM Peak Hour - Year 2025

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 22.8



Intersection LOS: C

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

 Ø2 (R)	 Ø4
60 s	60 s

HCM 6th TWSC
 4: U.S. 36 Eastbound Off Ramp & McCaslin Boulevard

Total Traffic Volumes
 PM Peak Hour - Year 2025

Intersection						
Int Delay, s/veh	5.7					
Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations	↑↑↑				↘	
Traffic Vol, veh/h	0	1170	0	0	343	0
Future Vol, veh/h	0	1170	0	0	343	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1272	0	0	373	0

























Major/Minor	Major1		Minor2	
Conflicting Flow All	-	0	509	-
Stage 1	-	-	0	-
Stage 2	-	-	509	-
Critical Hdwy	-	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	-	-	3.82	-
Pot Cap-1 Maneuver	0	-	542	0
Stage 1	0	-	-	0
Stage 2	0	-	519	0
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	542	-
Mov Cap-2 Maneuver	-	-	542	-
Stage 1	-	-	-	-
Stage 2	-	-	519	-

Approach	NB	NE
HCM Control Delay, s	0	25
HCM LOS		D

Minor Lane/Major Mvmt	NELn1	NBT
Capacity (veh/h)	542	-
HCM Lane V/C Ratio	0.688	-
HCM Control Delay (s)	25	-
HCM Lane LOS	D	-
HCM 95th %tile Q(veh)	5.3	-

Timings
5: McCaslin Boulevard & Marshall Road

Total Traffic Volumes
PM Peak Hour - Year 2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	44	390	41	26	208	267	68	57	126	898	630
Future Volume (vph)	380	44	390	41	26	208	267	68	57	126	898	630
Satd. Flow (prot)	3221	1639	1583	1770	1863	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.950	0.967		0.950			0.246			0.704		
Satd. Flow (perm)	3221	1639	1583	1770	1863	1583	889	5085	1583	1311	5085	1583
Satd. Flow (RTOR)			424			226			127			448
Lane Group Flow (vph)	306	155	424	45	28	226	290	74	62	137	976	685
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Free
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4	6		6	2		Free
Detector Phase	8	8	8	4	4	4	1	6	6	5	2	
Switch Phase							Lead	Lag	Lag	Lead	Lag	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	3.0	10.0	10.0	3.0	10.0	
Minimum Split (s)	9.0	9.0	9.0	10.0	10.0	10.0	9.0	16.0	16.0	9.0	16.0	
Total Split (s)	30.0	30.0	30.0	27.0	27.0	27.0	15.0	43.0	43.0	20.0	48.0	
Total Split (%)	25.0%	25.0%	25.0%	22.5%	22.5%	22.5%	12.5%	35.8%	35.8%	16.7%	40.0%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	5.0	5.0	5.0	4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	
Act Effct Green (s)	18.3	18.3	18.3	9.1	9.1	9.1	75.8	64.4	64.4	75.4	64.2	120.0
Actuated g/C Ratio	0.15	0.15	0.15	0.08	0.08	0.08	0.63	0.54	0.54	0.63	0.54	1.00
v/c Ratio	0.62	0.62	0.71	0.34	0.20	0.69	0.38	0.03	0.07	0.16	0.36	0.43
Control Delay	52.7	57.7	11.0	58.0	53.6	17.9	10.2	16.1	0.1	9.5	18.0	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	52.7	57.7	11.0	58.0	53.6	17.9	10.2	16.1	0.1	9.5	18.0	0.9
LOS	D	E	B	E	D	B	B	B	A	A	B	A
Approach Delay		33.6			27.3			9.7			10.8	
Approach LOS		C			C			A			B	
Queue Length 50th (ft)	124	126	0	34	21	0	37	9	0	34	147	0
Queue Length 95th (ft)	162	190	91	69	49	74	75	23	0	81	242	0
Internal Link Dist (ft)		518			407			580			291	
Turn Bay Length (ft)			260	170		170	180		170	230		170
Base Capacity (vph)	697	355	675	324	341	474	815	2730	908	929	2720	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	0.44	0.44	0.63	0.14	0.08	0.48	0.36	0.03	0.07	0.15	0.36	0.43

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 64 (53%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
 Natural Cycle: 55
 Control Type: Actuated-Coordinated

Timings
 5: McCaslin Boulevard & Marshall Road

Total Traffic Volumes
 PM Peak Hour - Year 2025

Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 18.1	Intersection LOS: B
Intersection Capacity Utilization 58.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 5: McCaslin Boulevard & Marshall Road

 Ø1	 Ø2 (R)	 Ø4	 Ø8
15 s	48 s	27 s	30 s
 Ø5	 Ø6 (R)		
20 s	43 s		

HCM 6th Roundabout
6: McCaslin Boulevard & Main Street

Total Traffic Volumes
PM Peak Hour - Year 2025

Intersection							
Intersection Delay, s/veh	7.0						
Intersection LOS	A						
Approach	EB	WB	NB		SB		
Entry Lanes	1	1	2		2		
Conflicting Circle Lanes	2	2	2		2		
Adj Approach Flow, veh/h	24	345	762		1295		
Demand Flow Rate, veh/h	24	352	778		1320		
Vehicles Circulating, veh/h	1403	712	237		97		
Vehicles Exiting, veh/h	14	303	1190		711		
Ped Vol Crossing Leg, #/h	0	0	0		0		
Ped Cap Adj	1.000	1.000	1.000		1.000		
Approach Delay, s/veh	9.1	1.6	6.7		8.6		
Approach LOS	A	A	A		A		
Lane	Left	Left	Bypass	Left	Right	Left	Right
Designated Moves	LTR	LT	R	LT	TR	LT	TR
Assumed Moves	LTR	LT	R	LT	TR	LT	TR
RT Channelized	Free						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530	
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.328	4.328	256	4.645	4.328	4.645	4.328
Entry Flow, veh/h	24	96	1938	366	412	620	700
Cap Entry Lane, veh/h	431	775	0.980	1085	1161	1235	1308
Entry HV Adj Factor	0.999	0.979	251	0.979	0.981	0.981	0.980
Flow Entry, veh/h	24	94	1900	358	404	608	686
Cap Entry, veh/h	430	759	0.132	1063	1139	1212	1282
V/C Ratio	0.056	0.124	0.0	0.337	0.355	0.502	0.535
Control Delay, s/veh	9.1	6.0	A	6.8	6.7	8.4	8.7
LOS	A	A	0	A	A	A	A
95th %tile Queue, veh	0	0		2	2	3	3

HCM 6th TWSC
7: Marshall Road & Access A

Total Traffic Volumes
PM Peak Hour - Year 2025

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔			↔			↔			↔		
Traffic Vol, veh/h	9	88	17	0	225	1	26	1	3	0	0	10
Future Vol, veh/h	9	88	17	0	225	1	26	1	3	0	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	96	18	0	245	1	28	1	3	0	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	246	0	0	114	0	0	376	371	57	315	380	246
Stage 1	-	-	-	-	-	-	125	125	-	246	246	-
Stage 2	-	-	-	-	-	-	251	246	-	69	134	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.93	7.33	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	1319	-	-	1474	-	-	569	558	998	626	552	792
Stage 1	-	-	-	-	-	-	866	792	-	757	702	-
Stage 2	-	-	-	-	-	-	752	702	-	933	785	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1319	-	-	1474	-	-	558	554	998	619	548	792
Mov Cap-2 Maneuver	-	-	-	-	-	-	558	554	-	619	548	-
Stage 1	-	-	-	-	-	-	859	786	-	751	702	-
Stage 2	-	-	-	-	-	-	742	702	-	921	779	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0			11.5			9.6		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	584	1319	-	-	1474	-	-	792
HCM Lane V/C Ratio	0.056	0.007	-	-	-	-	-	0.014
HCM Control Delay (s)	11.5	7.8	0	-	0	-	-	9.6
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0

HCM 6th TWSC
8: Access B & Marshall Road

Total Traffic Volumes
PM Peak Hour - Year 2025

Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↖↗		↘↗	↖↗
Traffic Vol, veh/h	0	17	209	0	20	81
Future Vol, veh/h	0	17	209	0	20	81
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	18	227	0	22	88

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	359	227	0	0	227	0
Stage 1	227	-	-	-	-	-
Stage 2	132	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	640	812	-	-	1341	-
Stage 1	811	-	-	-	-	-
Stage 2	894	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	630	812	-	-	1341	-
Mov Cap-2 Maneuver	630	-	-	-	-	-
Stage 1	811	-	-	-	-	-
Stage 2	880	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	1.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	812	1341
HCM Lane V/C Ratio	-	-	0.023	0.016
HCM Control Delay (s)	-	-	9.5	7.7
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Timings

Total Traffic Volumes

1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

AM Peak Hour - Year 2043



Lane Group	SBT	NWR2	NET
Lane Configurations	↑↑↑	↑↑↑	↑↑↑
Traffic Volume (vph)	1316	897	1257
Future Volume (vph)	1316	897	1257
Satd. Flow (prot)	5085	3610	5085
Flt Permitted			
Satd. Flow (perm)	5085	3610	5085
Satd. Flow (RTOR)		57	
Lane Group Flow (vph)	1430	975	1366
Turn Type	NA	Prot	NA
Protected Phases	2	2	8
Permitted Phases		2	
Detector Phase	2	2	8
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	17.2	17.2	19.3
Total Split (s)	60.0	60.0	60.0
Total Split (%)	50.0%	50.0%	50.0%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	3.7	3.7	5.8
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	7.2	7.2	9.3
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	C-Max	None
Act Effct Green (s)	62.4	62.4	41.1
Actuated g/C Ratio	0.52	0.52	0.34
v/c Ratio	0.54	0.51	0.79
Control Delay	20.9	19.5	24.1
Queue Delay	0.0	0.0	0.0
Total Delay	20.9	19.5	24.1
LOS	C	B	C
Approach Delay	20.9		24.1
Approach LOS	C		C
Queue Length 50th (ft)	262	196	144
Queue Length 95th (ft)	344	275	143
Internal Link Dist (ft)	259		447
Turn Bay Length (ft)			
Base Capacity (vph)	2645	1905	2148
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.54	0.51	0.64

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 48 (40%), Referenced to phase 2:SBT, Start of Green
 Natural Cycle: 55
 Control Type: Actuated-Coordinated

Timings

1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Total Traffic Volumes

AM Peak Hour - Year 2043

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 21.7

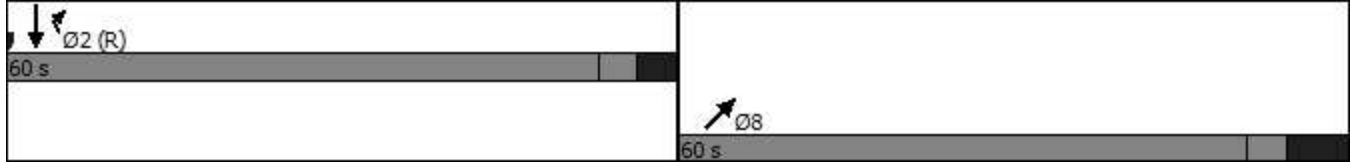
Intersection LOS: C

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp



HCM 6th TWSC
 2: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Total Traffic Volumes
 AM Peak Hour - Year 2043

Intersection						
Int Delay, s/veh	38.5					
Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations				↑↑↑	↑	
Traffic Vol, veh/h	0	0	0	1316	553	0
Future Vol, veh/h	0	0	0	1316	553	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	1430	601	0

Major/Minor	Major2	Minor1
Conflicting Flow All	-	- 572
Stage 1	-	- 0
Stage 2	-	- 572
Critical Hdwy	-	- 5.74
Critical Hdwy Stg 1	-	-
Critical Hdwy Stg 2	-	- 6.04
Follow-up Hdwy	-	- 3.82
Pot Cap-1 Maneuver	0	- ~ 505
Stage 1	0	-
Stage 2	0	- ~ 482
Platoon blocked, %		-
Mov Cap-1 Maneuver	-	- ~ 505
Mov Cap-2 Maneuver	-	- ~ 505
Stage 1	-	-
Stage 2	-	- ~ 482

Approach	SB	SW
HCM Control Delay, s	0	130.1
HCM LOS		F

Minor Lane/Major Mvmt	SBT SWL n1
Capacity (veh/h)	- 505
HCM Lane V/C Ratio	- 1.19
HCM Control Delay (s)	- 130.1
HCM Lane LOS	- F
HCM 95th %tile Q(veh)	- 22.2

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

Timings
3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

Total Traffic Volumes
AM Peak Hour - Year 2043



Lane Group	NBT	SER2	SWT
Lane Configurations	↑↑↑↑	↑↑↑↑	↑↑↑↑
Traffic Volume (vph)	1446	380	1247
Future Volume (vph)	1446	380	1247
Satd. Flow (prot)	5085	3610	5085
Flt Permitted			
Satd. Flow (perm)	5085	3610	5085
Satd. Flow (RTOR)		57	
Lane Group Flow (vph)	1572	413	1355
Turn Type	NA	Prot	NA
Protected Phases	4	4	2
Permitted Phases		4	
Detector Phase	4	4	2
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	17.5	17.5	19.3
Total Split (s)	62.0	62.0	58.0
Total Split (%)	51.7%	51.7%	48.3%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	4.0	4.0	5.8
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	9.3
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	None	None	C-Max
Act Effct Green (s)	49.0	49.0	54.2
Actuated g/C Ratio	0.41	0.41	0.45
v/c Ratio	0.76	0.27	0.59
Control Delay	32.7	20.0	15.5
Queue Delay	0.0	0.0	0.0
Total Delay	32.7	20.0	15.5
LOS	C	C	B
Approach Delay	32.7		15.5
Approach LOS	C		B
Queue Length 50th (ft)	372	77	127
Queue Length 95th (ft)	398	100	150
Internal Link Dist (ft)	90		532
Turn Bay Length (ft)			
Base Capacity (vph)	2309	1670	2295
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.68	0.25	0.59

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 46 (38%), Referenced to phase 2:SWT, Start of Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated

Default

Timings

3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

Total Traffic Volumes

AM Peak Hour - Year 2043

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 24.2



Intersection LOS: C

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

 Ø2 (R)	 Ø4
58 s	62 s

HCM 6th TWSC
 4: U.S. 36 Eastbound Off Ramp & McCaslin Boulevard

Total Traffic Volumes
 AM Peak Hour - Year 2043

Intersection						
Int Delay, s/veh	24.2					
Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations	↑↑↑				↘	
Traffic Vol, veh/h	0	1446	0	0	476	0
Future Vol, veh/h	0	1446	0	0	476	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1572	0	0	517	0

Major/Minor	Major1		Minor2	
Conflicting Flow All	-	0	629	
Stage 1	-	-	0	
Stage 2	-	-	629	
Critical Hdwy	-	-	5.74	
Critical Hdwy Stg 1	-	-	-	
Critical Hdwy Stg 2	-	-	6.04	
Follow-up Hdwy	-	-	3.82	
Pot Cap-1 Maneuver	0	-	~ 474	
Stage 1	0	-	-	
Stage 2	0	-	~ 450	
Platoon blocked, %	-			
Mov Cap-1 Maneuver	-	-	~ 474	
Mov Cap-2 Maneuver	-	-	~ 474	
Stage 1	-	-	-	
Stage 2	-	-	~ 450	

























Approach	NB	NE
HCM Control Delay, s	0	97.7
HCM LOS		F

Minor Lane/Major Mvmt	NELn1	NBT
Capacity (veh/h)	474	-
HCM Lane V/C Ratio	1.092	-
HCM Control Delay (s)	97.7	-
HCM Lane LOS	F	-
HCM 95th %tile Q(veh)	16.9	-

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

Timings
5: McCaslin Boulevard & Marshall Road

Total Traffic Volumes
AM Peak Hour - Year 2043

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	45	689	33	35	191	106	950	120	296	693	416
Future Volume (vph)	98	45	689	33	35	191	106	950	120	296	693	416
Satd. Flow (prot)	3221	1680	1583	1770	1863	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.950	0.991		0.950			0.354			0.135		
Satd. Flow (perm)	3221	1680	1583	1770	1863	1583	1279	5085	1583	251	5085	1583
Satd. Flow (RTOR)			465			208			127			383
Lane Group Flow (vph)	96	60	749	36	38	208	115	1033	130	322	753	452
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Free
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4	6		6	2		Free
Detector Phase	8	8	8	4	4	4	1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	3.0	10.0	10.0	3.0	10.0	
Minimum Split (s)	9.0	9.0	9.0	10.0	10.0	10.0	9.0	16.0	16.0	9.0	16.0	
Total Split (s)	30.0	30.0	30.0	27.0	27.0	27.0	15.0	43.0	43.0	20.0	48.0	
Total Split (%)	25.0%	25.0%	25.0%	22.5%	22.5%	22.5%	12.5%	35.8%	35.8%	16.7%	40.0%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	5.0	5.0	5.0	4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	
Act Effct Green (s)	39.4	39.4	39.4	8.6	8.6	8.6	46.6	37.0	37.0	59.0	45.4	120.0
Actuated g/C Ratio	0.33	0.33	0.33	0.07	0.07	0.07	0.39	0.31	0.31	0.49	0.38	1.00
v/c Ratio	0.09	0.11	0.90	0.28	0.29	0.68	0.18	0.66	0.23	0.99	0.39	0.29
Control Delay	29.3	30.2	30.0	57.0	56.7	18.5	17.4	38.5	6.6	75.8	28.1	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	29.3	30.2	30.0	57.0	56.7	18.5	17.4	38.5	6.6	75.8	28.1	0.5
LOS	C	C	C	E	E	B	B	D	A	E	C	A
Approach Delay		30.0			28.6			33.3			30.0	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	28	35	240	27	29	0	23	253	2	176	154	0
Queue Length 95th (ft)	53	76	#540	59	62	72	39	304	47	#368	194	0
Internal Link Dist (ft)		518			407			580			291	
Turn Bay Length (ft)			260	170		170	180		170	230		170
Base Capacity (vph)	1056	551	831	324	341	460	730	1567	575	325	1923	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	0.09	0.11	0.90	0.11	0.11	0.45	0.16	0.66	0.23	0.99	0.39	0.29

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 64 (53%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
 Natural Cycle: 75
 Control Type: Actuated-Coordinated

Timings
 5: McCaslin Boulevard & Marshall Road

Total Traffic Volumes
 AM Peak Hour - Year 2043

Maximum v/c Ratio: 0.99
 Intersection Signal Delay: 30.9 Intersection LOS: C
 Intersection Capacity Utilization 72.7% ICU Level of Service C
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 5: McCaslin Boulevard & Marshall Road

 Ø1	 Ø2 (R)	 Ø4	 Ø8
15 s	48 s	27 s	30 s
 Ø5	 Ø6 (R)		
20 s	43 s		

HCM 6th Roundabout
6: McCaslin Boulevard & Main Street

Total Traffic Volumes
AM Peak Hour - Year 2043

Intersection							
Intersection Delay, s/veh	7.6						
Intersection LOS	A						
Approach	EB	WB	NB		SB		
Entry Lanes	1	1	2		2		
Conflicting Circle Lanes	2	2	2		2		
Adj Approach Flow, veh/h	20	192	1142		727		
Demand Flow Rate, veh/h	20	196	1165		742		
Vehicles Circulating, veh/h	750	1095	290		48		
Vehicles Exiting, veh/h	40	360	480		1093		
Ped Vol Crossing Leg, #/h	0	0	0		0		
Ped Cap Adj	1.000	1.000	1.000		1.000		
Approach Delay, s/veh	5.1	1.8	10.1		5.2		
Approach LOS	A	A	B		A		
Lane	Left	Left	Bypass	Left	Right	Left	Right
Designated Moves	LTR	LT	R	LT	TR	LT	TR
Assumed Moves	LTR	LT	R	LT	TR	LT	TR
RT Channelized	Free						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530	
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.328	4.328	150	4.645	4.328	4.645	4.328
Entry Flow, veh/h	20	46	1938	548	617	349	393
Cap Entry Lane, veh/h	751	560	0.980	1034	1110	1292	1363
Entry HV Adj Factor	1.000	0.976	147	0.979	0.981	0.980	0.981
Flow Entry, veh/h	20	45	1900	537	605	342	386
Cap Entry, veh/h	751	546	0.077	1012	1089	1265	1337
V/C Ratio	0.027	0.082	0.0	0.530	0.556	0.270	0.288
Control Delay, s/veh	5.1	7.6	A	10.1	10.1	5.2	5.2
LOS	A	A	0	B	B	A	A
95th %tile Queue, veh	0	0		3	4	1	1

HCM 6th TWSC
7: Marshall Road & Access A

Total Traffic Volumes
AM Peak Hour - Year 2043

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔			↔			↔			↔		
Traffic Vol, veh/h	0	190	41	0	106	0	11	0	0	0	0	4
Future Vol, veh/h	0	190	41	0	106	0	11	0	0	0	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	207	45	0	115	0	12	0	0	0	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	115	0	0	252	0	0	347	345	126	219	367	115
Stage 1	-	-	-	-	-	-	230	230	-	115	115	-
Stage 2	-	-	-	-	-	-	117	115	-	104	252	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.93	7.33	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	1473	-	-	1312	-	-	595	577	901	728	561	937
Stage 1	-	-	-	-	-	-	753	713	-	889	800	-
Stage 2	-	-	-	-	-	-	887	800	-	891	698	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1473	-	-	1312	-	-	592	577	901	728	561	937
Mov Cap-2 Maneuver	-	-	-	-	-	-	592	577	-	728	561	-
Stage 1	-	-	-	-	-	-	753	713	-	889	800	-
Stage 2	-	-	-	-	-	-	883	800	-	891	698	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			11.2			8.9		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	592	1473	-	-	1312	-	-	937
HCM Lane V/C Ratio	0.02	-	-	-	-	-	-	0.005
HCM Control Delay (s)	11.2	0	-	-	0	-	-	8.9
HCM Lane LOS	B	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

HCM 6th TWSC
8: Access B & Marshall Road

Total Traffic Volumes
AM Peak Hour - Year 2043

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↔		↔	↔
Traffic Vol, veh/h	0	14	92	0	21	169
Future Vol, veh/h	0	14	92	0	21	169
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	15	100	0	23	184

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	330	100	0	0	100
Stage 1	100	-	-	-	-
Stage 2	230	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	665	956	-	-	1493
Stage 1	924	-	-	-	-
Stage 2	808	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	655	956	-	-	1493
Mov Cap-2 Maneuver	655	-	-	-	-
Stage 1	924	-	-	-	-
Stage 2	796	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	0.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	956	1493
HCM Lane V/C Ratio	-	-	0.016	0.015
HCM Control Delay (s)	-	-	8.8	7.4
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Timings
 1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Background Traffic Volumes
 PM Peak Hour - Year 2043



Lane Group	SBT	NWR2	NET
Lane Configurations	↑↑↑	↑↑↑	↑↑↑
Traffic Volume (vph)	2087	669	1502
Future Volume (vph)	2087	669	1502
Satd. Flow (prot)	5085	3610	5085
Flt Permitted			
Satd. Flow (perm)	5085	3610	5085
Satd. Flow (RTOR)		57	
Lane Group Flow (vph)	2268	727	1633
Turn Type	NA	Prot	NA
Protected Phases	2	2	8
Permitted Phases		2	
Detector Phase	2	2	8
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	17.2	17.2	19.3
Total Split (s)	67.0	67.0	53.0
Total Split (%)	55.8%	55.8%	44.2%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	3.7	3.7	5.8
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	7.2	7.2	9.3
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	C-Max	None
Act Effct Green (s)	60.5	60.5	43.0
Actuated g/C Ratio	0.50	0.50	0.36
v/c Ratio	0.88	0.39	0.90
Control Delay	32.1	17.7	27.4
Queue Delay	0.0	0.0	0.0
Total Delay	32.1	17.7	27.4
LOS	C	B	C
Approach Delay	32.1		27.4
Approach LOS	C		C
Queue Length 50th (ft)	564	137	164
Queue Length 95th (ft)	640	176	275
Internal Link Dist (ft)	259		447
Turn Bay Length (ft)			
Base Capacity (vph)	2563	1847	1851
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.88	0.39	0.88

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 48 (40%), Referenced to phase 2:SBT, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated

Timings

1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Background Traffic Volumes

PM Peak Hour - Year 2043

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 28.2

Intersection LOS: C

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 1: McCaslin Boulevard & U.S. 36 Westbound Off Ramp



HCM 6th TWSC
 2: McCaslin Boulevard & U.S. 36 Westbound Off Ramp

Background Traffic Volumes
 PM Peak Hour - Year 2043

Intersection						
Int Delay, s/veh	79.1					
Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations				↑↑↑	↔	
Traffic Vol, veh/h	0	0	0	2087	557	0
Future Vol, veh/h	0	0	0	2087	557	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	2268	605	0

Major/Minor	Major2	Minor1
Conflicting Flow All	-	- 907
Stage 1	-	- 0
Stage 2	-	- 907
Critical Hdwy	-	- 5.74
Critical Hdwy Stg 1	-	- -
Critical Hdwy Stg 2	-	- 6.04
Follow-up Hdwy	-	- 3.82
Pot Cap-1 Maneuver	0	- ~ 346
Stage 1	0	- - 0
Stage 2	0	- ~ 320
Platoon blocked, %		-
Mov Cap-1 Maneuver	-	- ~ 346
Mov Cap-2 Maneuver	-	- ~ 346
Stage 1	-	- -
Stage 2	-	- ~ 320

Approach	SB	SW
HCM Control Delay, s	0	\$ 375.6
HCM LOS		F

Minor Lane/Major Mvmt	SBT SWL n1
Capacity (veh/h)	- 346
HCM Lane V/C Ratio	- 1.75
HCM Control Delay (s)	- \$ 375.6
HCM Lane LOS	- F
HCM 95th %tile Q(veh)	- 38.4

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

Timings
3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

Background Traffic Volumes
PM Peak Hour - Year 2043



Lane Group	NBT	SER2	SWT
Lane Configurations	↑↑↑↑	↑↑↑↑	↑↑↑↑
Traffic Volume (vph)	1647	865	1739
Future Volume (vph)	1647	865	1739
Satd. Flow (prot)	5085	3610	5085
Flt Permitted			
Satd. Flow (perm)	5085	3610	5085
Satd. Flow (RTOR)		57	
Lane Group Flow (vph)	1790	940	1890
Turn Type	NA	Prot	NA
Protected Phases	4	4	2
Permitted Phases		4	
Detector Phase	4	4	2
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	17.5	17.5	19.3
Total Split (s)	57.0	57.0	63.0
Total Split (%)	47.5%	47.5%	52.5%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	4.0	4.0	5.8
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	9.3
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	None	None	C-Max
Act Effct Green (s)	49.5	49.5	53.7
Actuated g/C Ratio	0.41	0.41	0.45
v/c Ratio	0.85	0.62	0.83
Control Delay	37.0	28.1	25.4
Queue Delay	0.0	0.0	0.0
Total Delay	37.0	28.1	25.4
LOS	D	C	C
Approach Delay	37.0		25.4
Approach LOS	D		C
Queue Length 50th (ft)	453	233	238
Queue Length 95th (ft)	520	290	297
Internal Link Dist (ft)	90		532
Turn Bay Length (ft)			
Base Capacity (vph)	2097	1522	2275
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.85	0.62	0.83

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 46 (38%), Referenced to phase 2:SWT, Start of Green
 Natural Cycle: 80
 Control Type: Actuated-Coordinated

Timings

3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

Background Traffic Volumes

PM Peak Hour - Year 2043

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 30.4

Intersection LOS: C

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: McCaslin Boulevard & U.S. 36 Eastbound Off Ramp

 Ø2 (R)	 Ø4
63 s	57 s

HCM 6th TWSC
 4: U.S. 36 Eastbound Off Ramp & McCaslin Boulevard

Background Traffic Volumes
 PM Peak Hour - Year 2043

Intersection						
Int Delay, s/veh	36.7					
Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations	↑↑↑				↘	
Traffic Vol, veh/h	0	1647	0	0	495	0
Future Vol, veh/h	0	1647	0	0	495	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1790	0	0	538	0

Major/Minor	Major1		Minor2	
Conflicting Flow All	-	0	716	-
Stage 1	-	-	0	-
Stage 2	-	-	716	-
Critical Hdwy	-	-	5.74	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	-	-	3.82	-
Pot Cap-1 Maneuver	0	-	~ 430	0
Stage 1	0	-	-	0
Stage 2	0	-	~ 405	0
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	~ 430	-
Mov Cap-2 Maneuver	-	-	~ 430	-
Stage 1	-	-	-	-
Stage 2	-	-	~ 405	-

























Approach	NB	NE
HCM Control Delay, s	0	158.8
HCM LOS		F

Minor Lane/Major Mvmt	NELn1	NBT
Capacity (veh/h)	430	-
HCM Lane V/C Ratio	1.251	-
HCM Control Delay (s)	158.8	-
HCM Lane LOS	F	-
HCM 95th %tile Q(veh)	22.5	-

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

Timings
5: McCaslin Boulevard & Marshall Road

Background Traffic Volumes
PM Peak Hour - Year 2043

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	548	62	561	58	35	268	382	941	82	166	1283	909
Future Volume (vph)	548	62	561	58	35	268	382	941	82	166	1283	909
Satd. Flow (prot)	3221	1637	1583	1770	1863	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.950	0.966		0.950			0.095			0.196		
Satd. Flow (perm)	3221	1637	1583	1770	1863	1583	343	5085	1583	365	5085	1583
Satd. Flow (RTOR)			389			189			127			452
Lane Group Flow (vph)	441	222	610	63	38	291	415	1023	89	180	1395	988
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Free
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4	6		6	2		Free
Detector Phase	8	8	8	4	4	4	1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	3.0	10.0	10.0	3.0	10.0	
Minimum Split (s)	9.0	9.0	9.0	10.0	10.0	10.0	9.0	16.0	16.0	9.0	16.0	
Total Split (s)	30.0	30.0	30.0	27.0	27.0	27.0	15.0	43.0	43.0	20.0	48.0	
Total Split (%)	25.0%	25.0%	25.0%	22.5%	22.5%	22.5%	12.5%	35.8%	35.8%	16.7%	40.0%	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	5.0	5.0	5.0	4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	
Act Effct Green (s)	27.2	27.2	27.2	14.0	14.0	14.0	61.5	47.8	47.8	61.4	47.6	120.0
Actuated g/C Ratio	0.23	0.23	0.23	0.12	0.12	0.12	0.51	0.40	0.40	0.51	0.40	1.00
v/c Ratio	0.60	0.60	0.93	0.31	0.18	0.83	0.85	0.50	0.13	0.55	0.69	0.62
Control Delay	45.2	48.6	37.2	49.8	46.4	37.4	43.6	30.5	2.2	22.5	33.7	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	45.2	48.6	37.2	49.8	46.4	37.4	43.6	30.5	2.2	22.5	33.7	1.9
LOS	D	D	D	D	D	D	D	C	A	C	C	A
Approach Delay		42.0			40.3			32.4				20.6
Approach LOS		D			D			C				C
Queue Length 50th (ft)	156	157	174	45	27	77	114	239	0	77	352	0
Queue Length 95th (ft)	230	267	#436	84	57	171	#224	301	16	122	411	0
Internal Link Dist (ft)		518			407			580				291
Turn Bay Length (ft)			260	170		170	180		170	230		170
Base Capacity (vph)	773	393	675	324	341	444	488	2027	707	384	2018	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	0.57	0.56	0.90	0.19	0.11	0.66	0.85	0.50	0.13	0.47	0.69	0.62

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 64 (53%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
 Natural Cycle: 65
 Control Type: Actuated-Coordinated

Timings
 5: McCaslin Boulevard & Marshall Road

Background Traffic Volumes
 PM Peak Hour - Year 2043

Maximum v/c Ratio: 0.93
 Intersection Signal Delay: 29.8 Intersection LOS: C
 Intersection Capacity Utilization 76.2% 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: 5: McCaslin Boulevard & Marshall Road

 Ø1	 Ø2 (R)	 Ø4	 Ø8
15 s	48 s	27 s	30 s
 Ø5	 Ø6 (R)		
20 s	43 s		

HCM 6th Roundabout
6: McCaslin Boulevard & Main Street

Background Traffic Volumes
PM Peak Hour - Year 2043

Intersection							
Intersection Delay, s/veh	11.9						
Intersection LOS	B						
Approach	EB	WB	NB		SB		
Entry Lanes	1	1	2		2		
Conflicting Circle Lanes	2	2	2		2		
Adj Approach Flow, veh/h	38	423	1088		1837		
Demand Flow Rate, veh/h	39	431	1110		1874		
Vehicles Circulating, veh/h	1971	1028	314		119		
Vehicles Exiting, veh/h	22	396	1696		1026		
Ped Vol Crossing Leg, #/h	0	0	0		0		
Ped Cap Adj	1.000	1.000	1.000		1.000		
Approach Delay, s/veh	17.0	2.4	10.0		15.1		
Approach LOS	C	A	A		C		
Lane	Left	Left	Bypass	Left	Right	Left	Right
Designated Moves	LTR	LT	R	LT	TR	LT	TR
Assumed Moves	LTR	LT	R	LT	TR	LT	TR
RT Channelized	Free						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530	
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.328	4.328	314	4.645	4.328	4.645	4.328
Entry Flow, veh/h	39	117	1938	522	588	881	993
Cap Entry Lane, veh/h	266	593	0.980	1011	1087	1210	1283
Entry HV Adj Factor	0.973	0.982	308	0.980	0.981	0.980	0.981
Flow Entry, veh/h	38	115	1900	512	577	863	974
Cap Entry, veh/h	259	582	0.162	991	1067	1186	1259
V/C Ratio	0.147	0.197	0.0	0.516	0.541	0.728	0.774
Control Delay, s/veh	17.0	8.7	A	10.0	10.0	14.3	15.7
LOS	C	A	1	B	A	B	C
95th %tile Queue, veh	1	1		3	3	7	8

HCM 6th TWSC
7: Marshall Road & Access A

Background Traffic Volumes
PM Peak Hour - Year 2043

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔			↔			↔			↔		
Traffic Vol, veh/h	9	126	26	0	291	1	38	2	5	0	0	10
Future Vol, veh/h	9	126	26	0	291	1	38	2	5	0	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	137	28	0	316	1	41	2	5	0	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	317	0	0	165	0	0	493	488	83	407	502	317
Stage 1	-	-	-	-	-	-	171	171	-	317	317	-
Stage 2	-	-	-	-	-	-	322	317	-	90	185	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.93	7.33	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	1241	-	-	1412	-	-	472	479	960	541	471	723
Stage 1	-	-	-	-	-	-	815	757	-	693	654	-
Stage 2	-	-	-	-	-	-	689	654	-	908	746	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1241	-	-	1412	-	-	462	475	960	532	467	723
Mov Cap-2 Maneuver	-	-	-	-	-	-	462	475	-	532	467	-
Stage 1	-	-	-	-	-	-	808	750	-	687	654	-
Stage 2	-	-	-	-	-	-	679	654	-	892	739	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0			13.1			10.1		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	491	1241	-	-	1412	-	-	723
HCM Lane V/C Ratio	0.1	0.008	-	-	-	-	-	0.015
HCM Control Delay (s)	13.1	7.9	0	-	0	-	-	10.1
HCM Lane LOS	B	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0

HCM 6th TWSC
8: Access B & Marshall Road

Background Traffic Volumes
PM Peak Hour - Year 2043

Intersection						
Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↔		↔	↔
Traffic Vol, veh/h	0	17	275	0	20	111
Future Vol, veh/h	0	17	275	0	20	111
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	18	299	0	22	121

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	464	299	0	0	299
Stage 1	299	-	-	-	-
Stage 2	165	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	556	741	-	-	1262
Stage 1	752	-	-	-	-
Stage 2	864	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	547	741	-	-	1262
Mov Cap-2 Maneuver	547	-	-	-	-
Stage 1	752	-	-	-	-
Stage 2	849	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	1.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	741	1262
HCM Lane V/C Ratio	-	-	0.025	0.017
HCM Control Delay (s)	-	-	10	7.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1