LSC TRANSPORTATION CONSULTANTS, INC.
545 East Pikes Peak Avenue, Suite 210
Colorado Springs, CO 80903
(719) 633-2868
FAX (719) 633-5430
E-mail: lsc@lsctrans.com
Website: http://www.lsctrans.com

Falcon Marketplace
Traffic Impact Analysis
SP-17-001/ CDR-16-007

(LSC #164350)
October 23, 2017
(August 15, 2018 Revision)

Traffic Engineer's Statement

This traffic report and supporting information were prepared under my responsible charge and they comport with the standard of care. So far as is consistent with the standard of care, said report was prepared in general conformance with the criteria established by the County for traffic reports.

Developer's Statement

I, the Developer, have read and will comply with all commitments made on my behalf within this report.

8/15/18

Falcon Marketplace

Updated Traffic Impact Analysis

Prepared for:

Hummel Investments, LLC
8117 Preston Road, Suite 120
Dallas, TX 75225
(214) 416-9820

Prepared by:

LSC Transportation Consultants, Inc.
545 East Pikes Peak Avenue
Colorado Springs, CO 80903
(719) 633-2868

LSC #164350

October 23, 2017
Revised August 15, 2018

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Executive Summary

TRAFFIC REPORT

- This updated traffic report has been prepared to address staff comments.

- This report presents analysis of the proposed right-in-only access to Woodmen Road combined with a proposed roundabout intersection with the Woodmen Frontage Road in the southwest corner of the site.

- The report also includes, for comparison purposes, analysis assuming no right-in-only access.

- This report contains short- and long-term traffic projections for Falcon Marketplace, other area properties, and study area roadways and intersections. Traffic analysis has been performed based on the projected volumes.

- Based on the analysis, detailed findings and study area roadway improvements have been presented for both **"with"** and **"without"** the proposed **right-in access** (and accompanying roundabout) scenarios.

- The overall report recommendation is to approve the proposed right-in-only access from Woodmen Road and accompanying roundabout. **Analysis results indicate significantly improved area traffic circulation and benefits to operations at the study area intersections.**

MATERIAL CHANGE TO THE RIGHT-IN DESIGN AND BENEFITS OF NEW DESIGN

- The inclusion of a roundabout into the design of the right-in access **will provide for public access to the westbound frontage road**—a significant change to the previous design. This enhancement will not only **provide better access** for these nearby residential and non-residential developments, but will also offer **superior access for emergency response vehicles** thereby reducing their response times to all properties on the north side of Woodmen between Meridian and Golden Sage—a significant and meaningful change.

- The new design for the right-in with a roundabout **allows for direct public access to the Woodmen Frontage Road** for passenger vehicles, trucks, and buses, as well as fire and emergency response vehicles as requested by the Falcon Fire Protection District. This accommodation will significantly improve the access to the Courtyards residential development, Mountain View Electric Association (MVEA), Falcon School District 49 (and other properties), which currently have poor access.

- Due to its configuration, the previously requested right-in-only access would have essentially served only the proposed Falcon Marketplace development as there was no public access from the right-in to the Woodmen Frontage Road. Additionally, the new configuration includes changing the required internal roadway (required by the 2008 BOCC-approved rezoning of the

site), which extends from Eastonville to the Woodmen Frontage Road, from a private access easement drive to a public right-of-way.

- The previously requested right-in-only was configured to direct traffic from westbound Woodmen northward into the site only, with no "direct" access for westbound travel to the neighboring residential and non-residential properties along the Woodmen Frontage Road west of the proposed Falcon Marketplace development. In the previous design, access for westbound travel along the Woodmen Frontage Road would have required a circuitous route into Falcon Marketplace in order to reverse direction.

- With this new design of the right-in combined with a roundabout, residents, employees, and other motorists traveling to the properties along the frontage road from westbound Woodmen or northbound Meridian (many traveling from eastbound US Highway 24) would have **a new direct connection to the east end of the Woodmen Frontage Road** and will no longer need to do either of the following to access their destination:

  - travel west for over a mile along Woodmen Road to the Golden Sage/Woodmen intersection, make a 180-degree turn and travel back to the east along the Woodmen Frontage Road, or alternatively,
  - travel north to the Eastonville/Meridian intersection, turn left and travel through the proposed Falcon Marketplace development, a route of over one-half mile including a traffic signal.

- The proposed right-in-only with the roundabout would also **benefit operations at the Woodmen/Golden Sage and Woodmen Frontage Road/Golden Sage** intersection by reducing existing and future traffic turning movements from these closely spaced intersections.

- This site is within the commercial “node” of Falcon as defined in the Falcon/Peyton Small Area Master Plan and an access from Woodmen Road at the proposed location is reasonable for a regional commercial development as allowed by the Commercial Regional zoning approved for the site in 2008. Furthermore, additional access points to Woodmen were contemplated by the BOCC-approved resolution adopting the Woodmen Road Access Management Plan.

SUMMARY OF TRAFFIC OPERATIONS ANALYSIS AND COMPARISON

- The three key intersections within this study are (a) the southwest roundabout at the proposed right-in-only access from Woodmen, (b) the meridian/Eastonville intersection, and (3) the Meridian/Woodmen intersection.

- The comparison between the two analysis scenarios (**with** and **without** the proposed right-in-only access from Woodmen) with respect to operations at the Meridian/Eastonville intersection shows significantly better operations with the proposed Woodmen access/roundabout. In addition to the intersection analysis, the right-in-only access would significantly reduce overall travel times and emergency response times for those traveling to destinations along the frontage road and Falcon Marketplace.

Right-In-Only Access/Roundabout

- The continuous lane along westbound Woodmen Road between Meridian and the access is projected to operate at weaving LOS C during the morning peak hour and LOS B during the afternoon peak hour.

- Multiple methods of analysis indicate level of service A for all roundabout approaches during the peak hours **based on 2040 volumes**.

- The southwest roundabout will see **minimal queuing** for traffic exiting Woodmen Road and entering the roundabout. A maximum queue during the peak hour of about 100-120 feet is projected and even this maximum queue will clear quickly as the queue will be more of a **"rolling" queue**.

- The proposed Woodmen access will have **little effect** on the operation of Woodmen Road as the turning movements will be right-turn in-only from westbound Woodmen Road with a continuous acceleration/deceleration lane between Meridian and the point of right-turn entry into the site.

- The roundabout has been designed to accommodate large tractor-trailer trucks/semis.

Meridian/Eastonville Intersection

- The northbound left turn at this intersection is projected to operate at **LOS F** during the afternoon peak hour **without the right-in-only access off Woodmen. However, it will operate at LOS D** during the afternoon peak hour with the right-in-only access off of Woodmen with the roundabout.

- The northbound left-turn queue would be **significantly longer without the Woodmen-access** scenario. **Without the right-in-only access off of Woodmen** the projected maximum queue will fill the dual left-turn **lanes** (457-foot queue within the lanes) and will **overspill** into the adjacent northbound through lane during the peak analysis interval unless the lanes are lengthened. Any significant lengthening would reduce the storage length of the southbound left turn lane for the Woodmen/Meridian intersection to the south as this northbound left turn lane is "back-to-back" with the southbound left turn lane at the Woodmen/Meridian intersection. There is a shared transition taper for both lanes and any lengthening would require either shortening the shared taper and/or shortening of that southbound left turn lane at Woodmen/Meridian (likely both).

Meridian/Woodmen Intersection

- The addition of the proposed right-in-only access off of Woodmen will provide motorists approaching from the south the option to utilize the existing dual left-turn lanes to go westbound on Woodmen to enter the project site. This allows motorists to adjust to the path of least congestion and will benefit the overall intersection. Providing this option will reduce the quantity of northbound through traffic. This will be especially helpful during the afternoon peak hour. Although the overall intersection delays shown in the table are comparable, the

analysis shows failure of the northbound through movement (with two northbound through lanes) without the right-in-only access off of Woodmen. A comparison with **three** northbound through lanes on this intersection approach has also been included in this report as required by staff. Analysis results with an additional northbound through lane indicate improvement from LOS F to LOS E for this approach. However, the implementation of three through lanes at this one intersection in advance of an overall project to convert Meridian Road from a four to six-lane arterial would involve significant cost for improvements at this intersection and to the north to create three-northbound "receiving" lanes and a merge lane back to two northbound through lanes. Moreover, from an operational standpoint, although a third through lane would add capacity at the intersection, this would introduce a potentially confusing and awkward "lane-add" followed by a lane reduction/merge just downstream to the north.

- Without the requested right-in-only from Woodmen, the northbound through movement is projected to operate at **LOS F** during the 2040 afternoon peak hour.

CHAPTER 1

Introduction

LSC Transportation Consultants, Inc. has prepared this updated traffic impact analysis for the 36-acre Falcon Marketplace to be located west of Meridian Road and north of Woodmen Road in the Falcon area of El Paso County, Colorado. The site is planned to be developed for a mixture of commercial and medical office land uses. Figure 1 shows the site location. Access is proposed to Meridian Road and the Woodmen Road Frontage Road. The previous report date was August 7, 2017.

The report has been updated to include analysis of a right-in-only access from Woodmen Road combined with a roundabout intersection with the Woodmen Frontage Road in the southwest corner of the site. This new right-in-only access with the proposed roundabout intersection connecting to the Woodmen Frontage Road would significantly improve access not only to the site, but also to the properties to the west along the Woodmen Frontage Road. This new provision for public access from westbound Woodmen Road to the westbound Woodmen Frontage Road is a **significant change** from the previously proposed right-in-only access configuration, which essentially only served the proposed Falcon Marketplace.

The salient points of the significant change are:

- Allows direct public access to east end of the frontage road.
- Provides badly needed access for emergency response vehicles.
- Takes traffic off of the Golden Sage intersection by providing access from the east.
- Addition of roundabout keeps traffic moving at a steady flow.
- Reduces potential backup on the frontage road.

Approximate Scale
Scale: 1"= 1,200'

Figure 1

Vicinity Map

Falcon Marketplace (LSC #164350)

REPORT CONTENTS

The report contains the following:

- The proposed site land uses and circulation plan for the site.
- The proposed plan to allow for a public street connection through the site between the current terminus of the Woodmen Frontage Road and Meridian Road.
- The existing and planned roadways in the study area including the number of lanes, classifications, posted speed limits, lane geometries, traffic controls, etc.
- Traffic volumes for the Meridian/Woodmen and Meridian/Eastonville intersections plus added traffic count data for the intersection of Woodmen Road and Golden Sage Road.
- The projected future peak-hour traffic volumes for the access points, internal intersections and the intersections adjacent to the site, the intersection of Golden Sage/Woodmen and along the Woodmen Frontage Road with and without the proposed right-in-only access from Woodmen Road.
- The resulting traffic impacts. The traffic impacts have been quantified by determining the future levels of service at the access points, internal intersections and adjacent intersections with and without the proposed right-in-only access from Woodmen Road.
- Recommended improvements.

CHAPTER 2

Site Land Use and Access/Circulation Plan

SITE CONTEXT

The site is located within the downtown Falcon commercial/service area. This site is part of the Falcon "commercial node." Several shopping centers exist south and southeast of this site on the south side of Woodmen Road. The Safeway shopping center is located to the east, and the Bent Grass Commercial Center is directly north of the site and the Owl Lane area.

LAND USE

The 36-acre site is located north of Woodmen Road and west of Meridian Road. The site is planned to contain a large grocery store anchor with associated gas station. The peripheral development lots are planned to include a pet supply store, in-line retail buildings, three free-standing fast-food restaurants, a coffee shop with drive-through, and an urgent/primary care clinic.

ACCESS AND CIRCULATION

Full-movement site access is proposed from Meridian Road aligning with Eastonville Road and via a connection to the current terminus of the Woodmen Frontage Road. A right-in/right-out access to Meridian Road is also proposed between Eastonville and Woodmen. In addition to the connection to the current terminus of the Woodmen Frontage Road, a right-in-only access from westbound Woodmen Road is also proposed in the southwest corner of the site.

Figures 2 and 3 show the access/intersection spacing for Woodmen Road and Meridian Road, respectively.

The site plan also shows a street stub to the property to the north to allow for a planned future connection to Bent Grass Meadows Drive. The access points and the proposed public street connection through the site is also shown on the site plan.

INTERSECTION/ACCESS SIGHT DISTANCE ANALYSIS

Figure 4 shows the sight distance analysis for the Meridian Road access points. There are currently no posted speed limit signs for southbound traffic on the approach to Eastonville Road and the speed limit to the north is 55 miles per hour (mph). This analysis assumes (following development of the site) a future posted speed limit of 45 mph (design speed of 50 mph) for southbound Meridian in the vicinity of and adjacent to the site. This is based on the *Meridian Road North Corridor Plan* dated December 2009.

Sight distance analysis for the internal intersections within the Preliminary Plan is included with the deviation request for Falcon Market Place.

Truck Turning Analysis

Truck turning analysis using AutoTurn for the internal intersections within the Preliminary Plan is included with the deviation request for Falcon Market Place. The truck turning analysis for the roundabout proposed for the southwest corner of the site is included in this report as it is directly associated with the driveway permit application.

Approximate Scale
Scale: 1"=600'

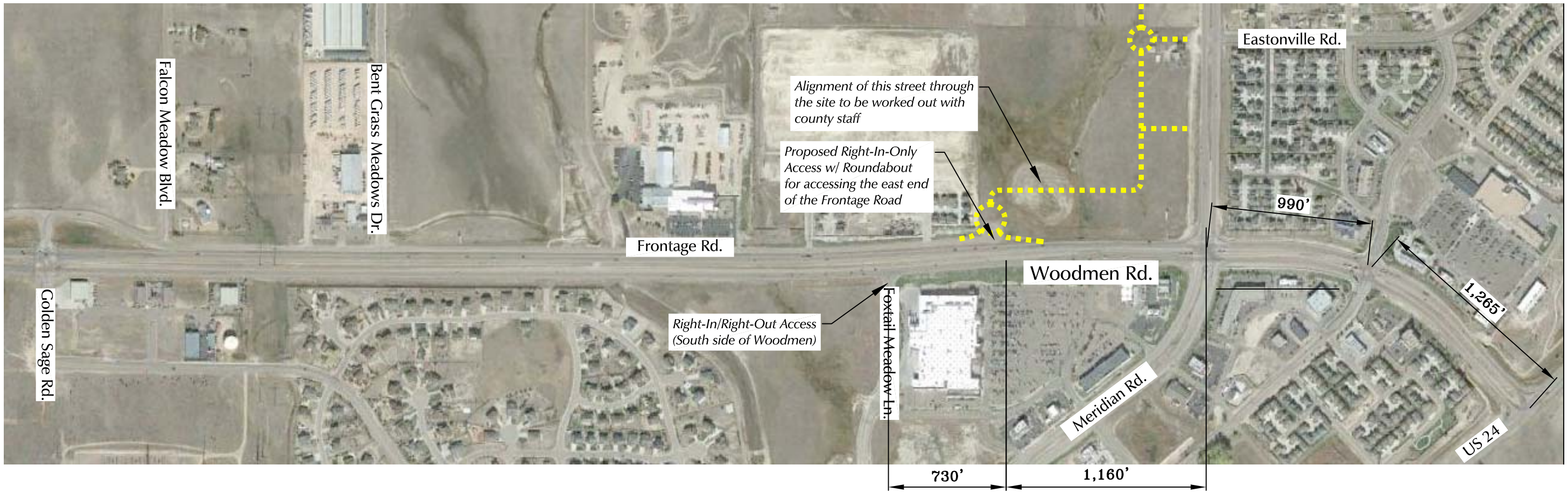


Figure 2

Woodmen Road Intersection/Access Spacing

Falcon Marketplace (LSC #164350)

LSC TRANSPORTATION CONSULTANTS, INC.

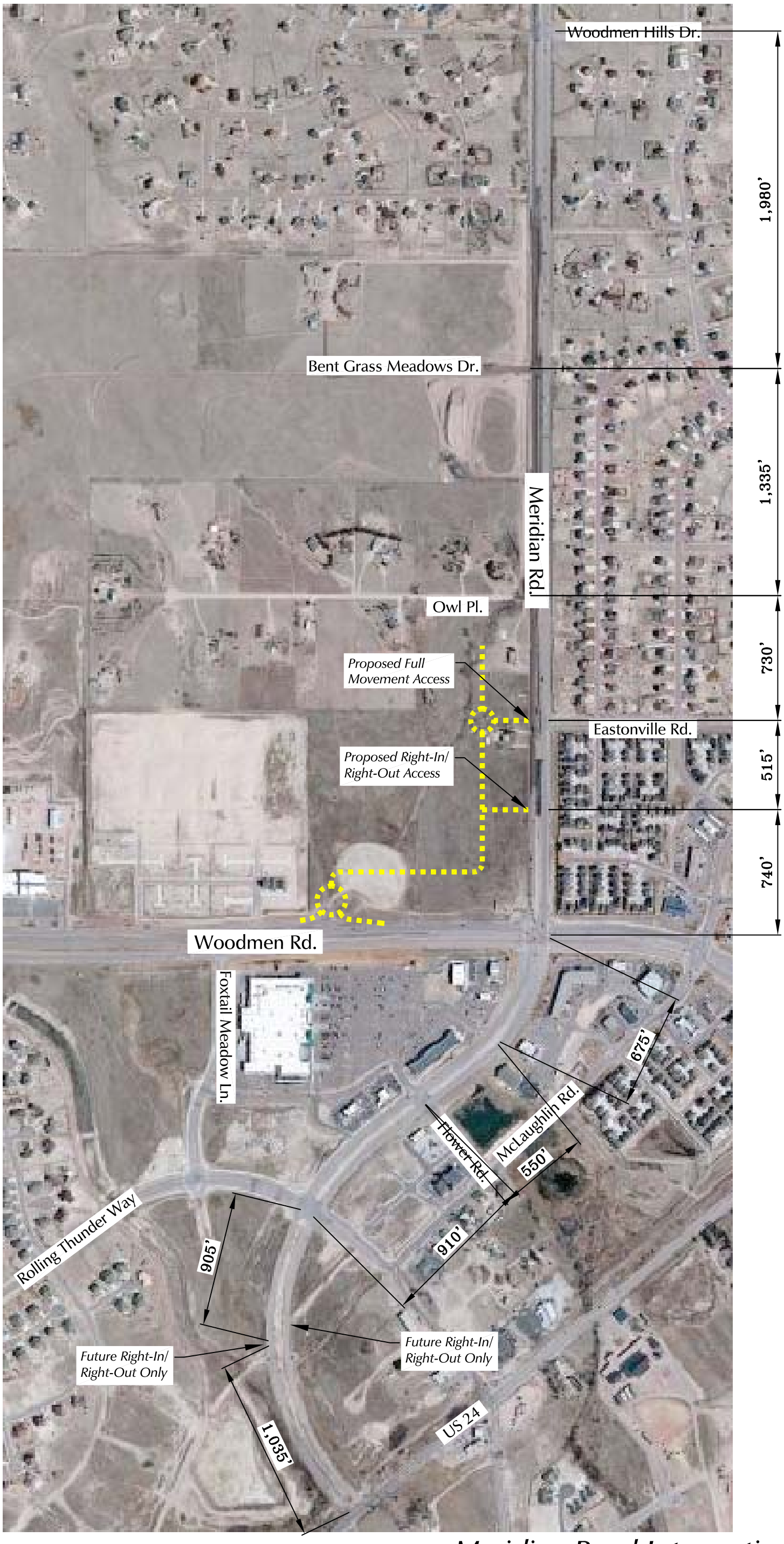
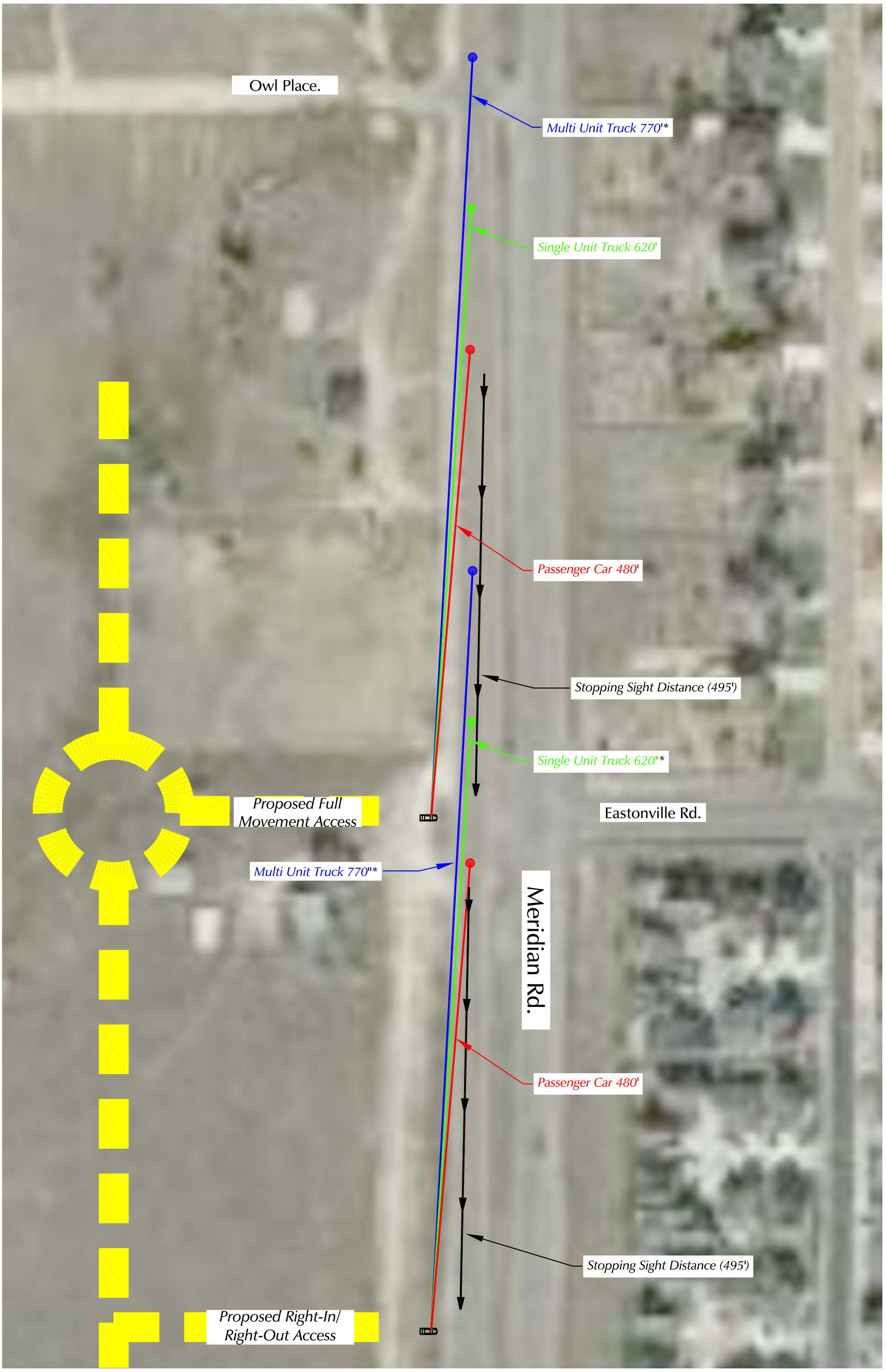


Figure 3

Meridian Road Intersection/Access Spacing

Falcon Marketplace (LSC #164350)

LSC TRANSPORTATION CONSULTANTS, INC.



LEGEND:

= Required intersection sight distance for passenger cars

= Required intersection sight distance for single–unit trucks

= Required intersection sight distance for multi–unit trucks

= Required stopping sight distance

Based on an anticipated post-development speed limit of 45mph (50 mph design speed)

TRANSPORTATION CONSULTANTS, INC.

Figure 4

Sight Distance for Meridian Road

Falcon Marketplace (LSC #164350)

CHAPTER 3

Existing Roadway and Traffic Conditions

AREA ROADWAYS

The roadways in the study area are shown on Figure 1 and are described below.

- **US Highway (US) 24** is generally a two-lane State Highway extending east/west across Colorado connecting the Buena Vista, Colorado Springs, and Limon areas. US 24 is planned to be widened to four lanes through the Falcon area. US 24 is classified as an Expressway by the Colorado Department of Transportation (CDOT) and the *El Paso County Major Transportation Corridors Plan (MTCP).* The posted speed limit on US 24 in the vicinity of Woodmen Road is 50 mph.

- **Woodmen Road** is shown on the *El Paso County 2040 Major Transportation Corridors Plan* and the *Preserved Corridor Network Plan* as a four-lane Expressway adjacent to and in the vicinity of the site. The posted speed limit on Woodmen Road adjacent to the site is 45 mph. The posted speed limit on Woodmen Road just west of the site is 55 mph.

- **Woodmen Frontage Road** is a paved two-lane frontage road along the north side of Woodmen Road. The Woodmen Frontage Road extends west from this site to its current terminus west of Golden Sage Road. The posted speed limit on the Woodmen Frontage Road is 30 mph.

- **Meridian Road** is shown on the MTCP as a four-lane Principal Arterial adjacent to the site. Meridian Road is currently four lanes plus some auxiliary turn lanes at intersections north of Rolling Thunder. There is a center median adjacent to the site. There are no speed limit signs specifically for the section of Meridian adjacent to the site. However, the posted limit on the section to the north is 55 mph. Meridian Road south of Rolling Thunder is not currently open and the road does not connect to US Highway 24. However, Meridian Road is planned to be opened south from Rolling Thunder to a new intersection with US 24 and extended south to Falcon Highway in the near future.

- **Eastonville Road** is a two-lane roadway extending northeast from Meridian Road to past Hodgen Road. It is shown as a two-lane Minor Arterial on the MTCP. The intersection of Meridian Road and Eastonville Road is currently stop-sign controlled.

EXISTING TRAFFIC CONDITIONS

Figure 5 shows the morning and afternoon peak-hour traffic volumes at the intersections of Woodmen Road/Meridian Road, Woodmen Road/Golden Sage Road, and Eastonville Road/Meridian Road based on counts conducted by LSC in September 2015, February 2016, March 2017, and June 2017. The traffic count reports are attached. The traffic volumes at Woodmen/Meridian have been adjusted to balance with more recent counts to the west and north.

ACCIDENT/CRASH HISTORY

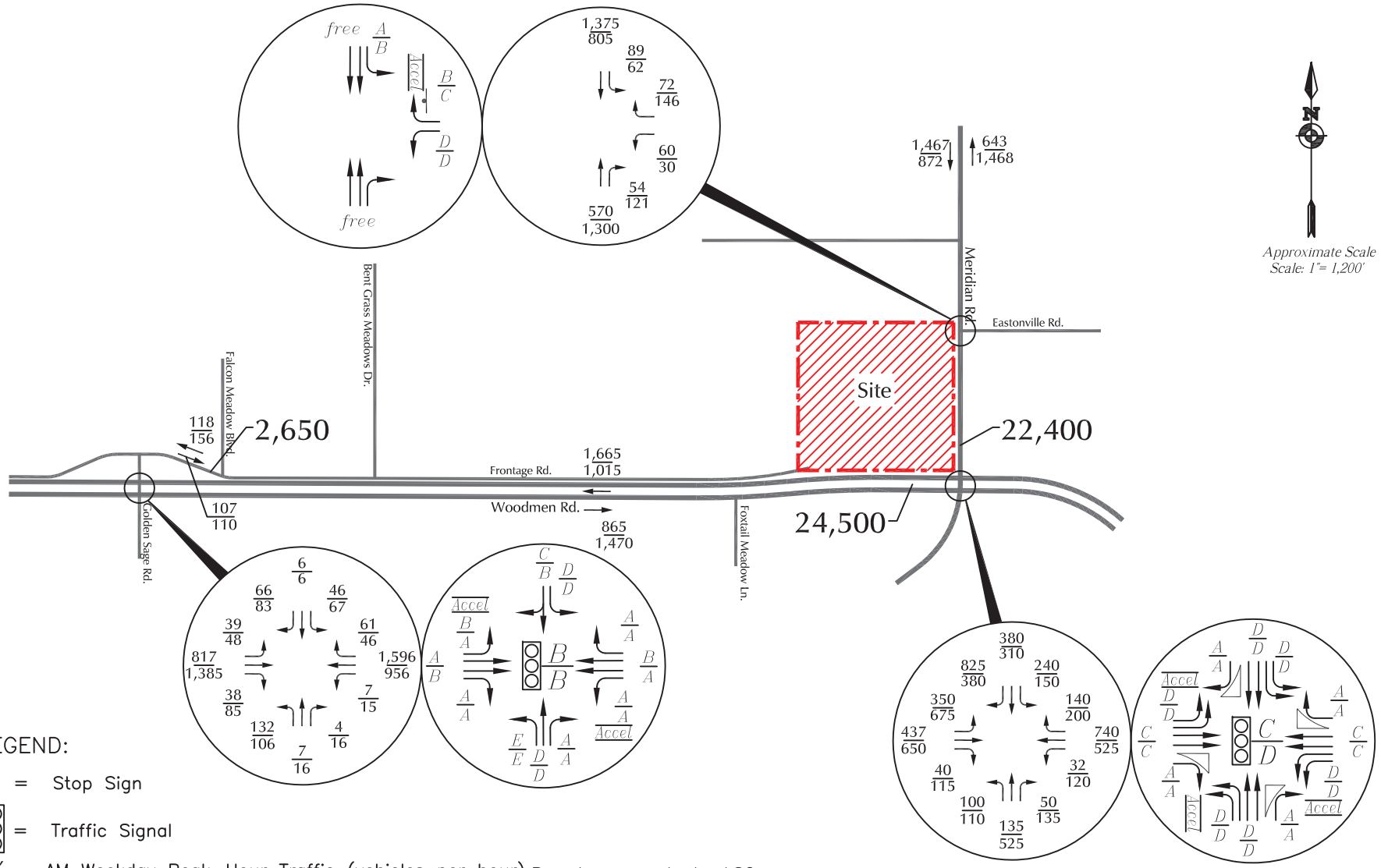
Traffic accident/crash data at study area intersections are attached. These have been provided by the Colorado State Patrol. The data show crashes by calendar year for 2014, 2015, and 2016 as well as year-to-date crashes for 2017.

There were seven reported crashes at the Woodmen/Golden Sage intersection in 2016. Five of the seven crashes in 2016 were non-intersection related. The remaining two crashes were rear-end crashes involving eastbound vehicles. The first crash resulted in property damage only and the second crash resulted in two injuries. There have also been seven crashes in 2017 (from January 1 to July 26). Of these crashes, two were non-intersection related. One involved an eastbound left-turning vehicle hitting a westbound through vehicle. This crash resulted in a fatality. The remaining four crashes were rear-end crashes (two involving westbound vehicles and two involving eastbound vehicles). These rear-end crashes all resulted in property damage only.

There were six reported crashes at the Woodmen/Meridian intersection in 2016. One of the crashes was non-intersection related. This was the only crash at this intersection in 2016 and 2017 that resulted in an injury. Three of the 2016 crashes were rear-end crashes (two involved vehicles in the westbound through lanes and one involved vehicles in the southbound to westbound acceleration lane). One 2016 crash involved a westbound vehicle that failed to stop for the red light and hit a northbound vehicle. The final 2016 crash involved a single vehicle traveling the wrong direction in the westbound acceleration lane hitting the pedestrian island in the northwest corner of the intersection. Based on the data provided, there has been one reported accident in 2017 (from January 1 to July 26). This crash was a rear-end accident involving vehicles in the eastbound left-turn lanes.

There were two reported crashes at the Eastonville/Meridian intersection in 2016. In the first crash, two vehicles were attempting to turn left from Eastonville Road onto Meridian Road. The first vehicle attempted a two-stage left turn, stopping in the median on Meridian Road, and was rear-ended by the second vehicle. This crash resulted in property damage only. The second crash involved an eastbound left-turn vehicle and a bicycle in the northbound shoulder. This crash resulted in an injury. There has been one crash at this intersection recorded in 2017 (from January 1 to July 26). This injury crash involved a southbound left-turning vehicle turning in front of a northbound through vehicle.

The estimated three-year crash/accident rate at Woodmen/Meridian is 0.46. This is based on an estimated average of 33,500 entering vehicles per day and 17 total intersection-related crashes in three years. **This is a relatively low accident rate.** For comparison, the Powers and Barnes intersection, which is one of the City of Colorado Springs' high accident locations, had a 2016 accident rate of about 2.25.



Approximate Scale
Scale: 1"= 1,200'

LEGEND:

= Stop Sign

= Traffic Signal

$\frac{XX}{XX}$ = AM Weekday Peak–Hour Traffic (vehicles per hour) / PM Weekday Peak–Hour Traffic (vehicles per hour) Based on counts by LSC Sept 2015 and March 2017

$\frac{A}{B}$ = AM Individual Movement Peak–Hour Level of Service / PM Individual Movement Peak–Hour Level of Service

$\frac{C}{D}$ = AM Entire Intersection Peak–Hour Level of Service / PM Entire Intersection Peak–Hour Level of Service

XXX = Average Weekday Traffic (vehicles per day) Estimated by LSC

Figure 5

Existing Traffic, Lane Geometry, Traffic Control and Levels of Service

Falcon Marketplace (LSC #164350)

EXISTING LEVELS OF SERVICE

Level of service (LOS) is a quantitative measure of the level of congestion or delay at an intersection. Level of service is indicated on a scale from "A" to "F." LOS A represents control delay of less than 10 seconds for unsignalized and signalized intersections. LOS F represents control delay of more than 50 seconds for unsignalized intersections and more than 80 seconds for signalized intersections. For reference, Table 1 shows the level of service delay ranges.

Table 1
Intersection Levels of Service Delay Ranges

	Signalized Intersections		Unsignalized Intersections
Level of Service	Average Control Delay (seconds per vehicle)	V/C[1]	Average Control Delay (seconds per vehicle)[2]
A	10.0 sec or less	less than 0.60	10.0 sec or less
B	10.1-20.0 sec	0.60-0.69	10.1-15.0 sec
C	20.1-35.0 sec	0.70-0.79	15.1-25.0 sec
D	35.1-55.0 sec	0.80-0.89	25.1-35.0 sec
E	55.1-80.0 sec	0.90-0.99	35.1-50.0 sec
F	80.1 sec or more	1.00 and greater	50.1 sec or more

(1) Source: *Transportation Research Circular 212*
(2) For unsignalized intersections if V/C ratio is greater than 1.0 the level of service is LOS F regardless of the projected average control delay per vehicle.

The intersections of Woodmen Road/Meridian Road and Woodmen Road/Golden Sage Road were analyzed to determine the existing levels of service using Synchro. The intersection of Eastonville Road/ Meridian Road was analyzed based on the unsignalized method of analysis procedures found in the *Highway Capacity Manual, 6th Edition* by the Transportation Research Board. As shown on Figure 5, these intersections are operating at acceptable levels of service during peak periods. **The detailed level of service analysis reports are attached.**

CHAPTER 4

Projected Future Background Traffic Conditions

Baseline or "background" traffic is the traffic estimated to be on the adjacent roadways and at adjacent intersections without the proposed development's trip generation and resulting added traffic volumes (site traffic is presented in the following chapter). New baseline/background traffic is the difference between future background traffic and existing traffic.

The background traffic analysis hypothetically assumes the site street connections and access points to be in place (but without site traffic). Background traffic includes the through traffic and the traffic generated by nearby developments, but hypothetically assumes zero traffic generated by the site for analysis purposes.

SHORT-TERM BACKGROUND TRAFFIC

Background traffic is the traffic estimated to be on the adjacent roadways and at adjacent intersections without the proposed development's trip generation and resulting site-generated traffic volumes. However, the site street connections and access points were assumed to be in place. Background traffic includes the through traffic and the traffic generated by nearby developments, but hypothetically assumes zero traffic generated by the site for analysis purposes. Figure 6a and 7a show the background traffic volumes traveling through the site and in the vicinity of the site for the short term. The short-term background traffic volumes were based on some growth in existing traffic volumes shown in Figure 5, with some adjustments to the existing traffic patterns due to the planned Meridian Road project to the south, the proposed vehicular connection through the site (between the end of the Woodmen Frontage Road and Eastonville Road) via access easement(s) and internal commercial drives, and the new west leg of the intersection of Meridian Road and Eastonville Road. The volumes shown in Figure 6a assume no access to Woodmen Road and the volumes shown in Figure 7a assume the proposed right-in-only access from Woodmen Road. The short-term background traffic volumes assume some additional traffic due to buildout of the Woodmen Courtyards development just west of the site.

Figures 6b and 7b show the lane geometry, traffic control, and level of service at the key intersections based on the short-term background volumes.

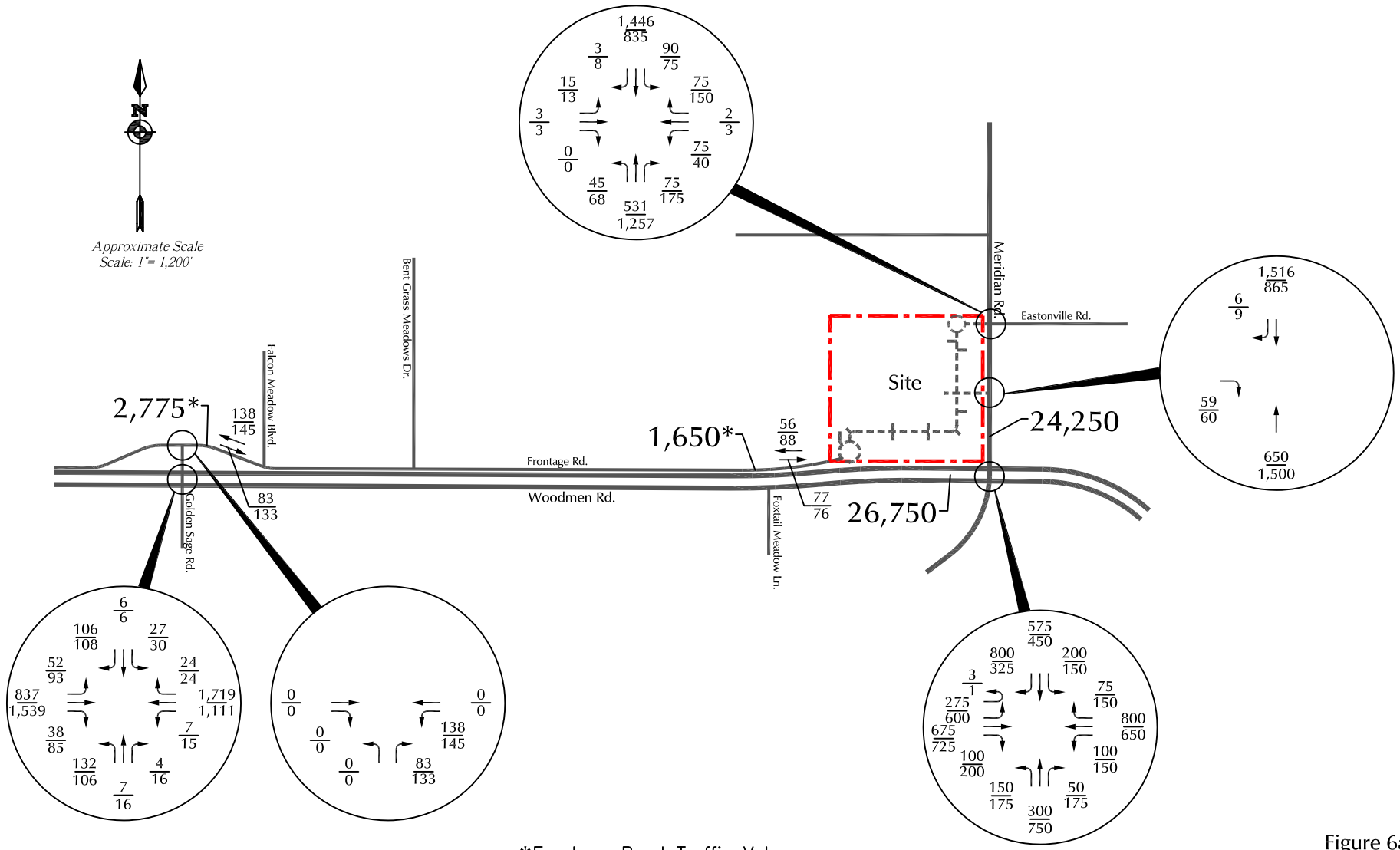


Figure 6a

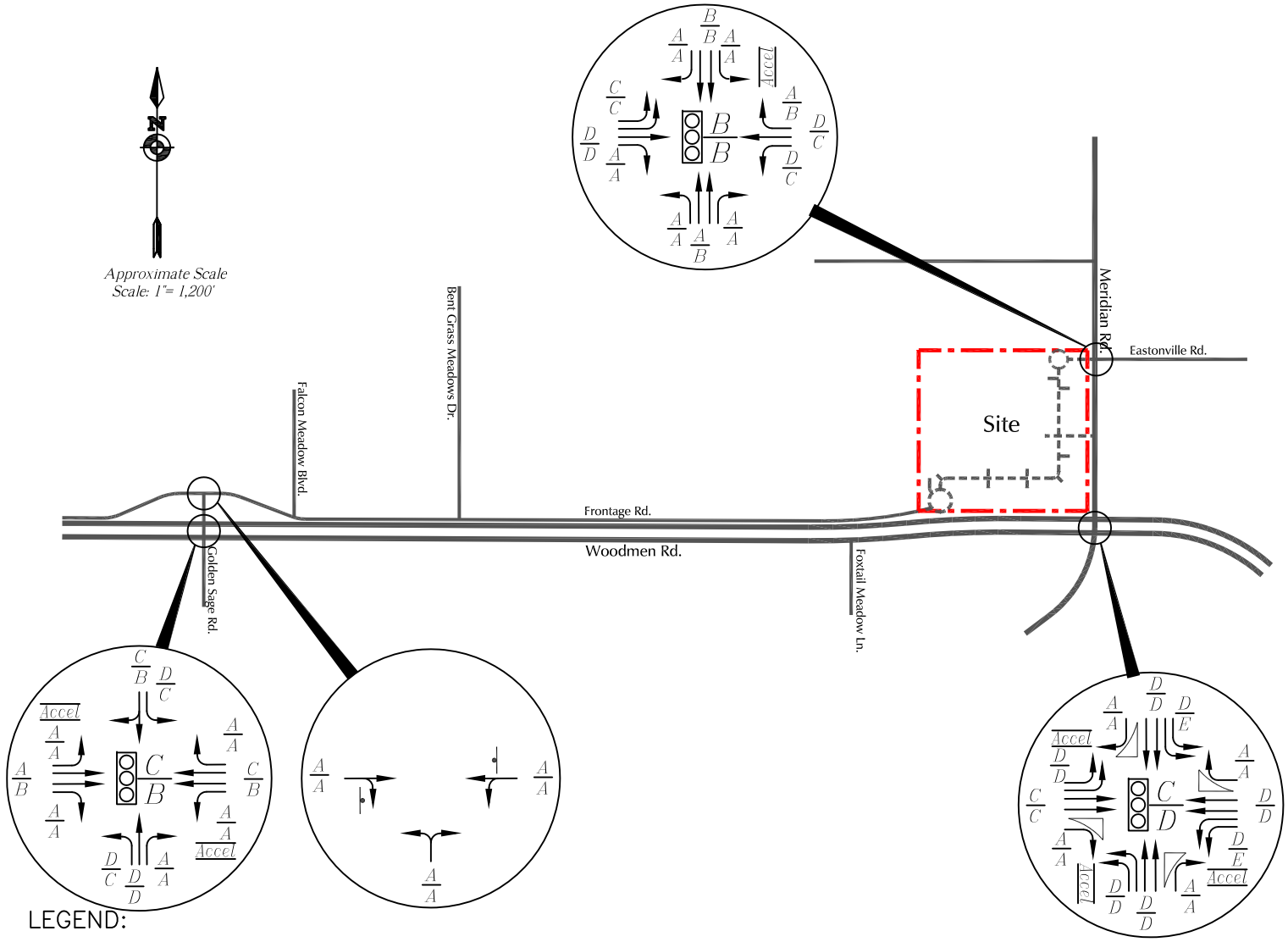
Short-Term Background Traffic Without Proposed Right-In Access

Falcon Marketplace (LSC #164350)

LEGEND:

$\frac{XX}{XX}$ = $\frac{\text{AM Weekday Peak-Hour Traffic (vehicles per hour)}}{\text{PM Weekday Peak-Hour Traffic (vehicles per hour)}}$

XXX = Average Weekday Traffic (vehicles per day) Estimated by LSC



LEGEND:

= Stop Sign

= Traffic Signal

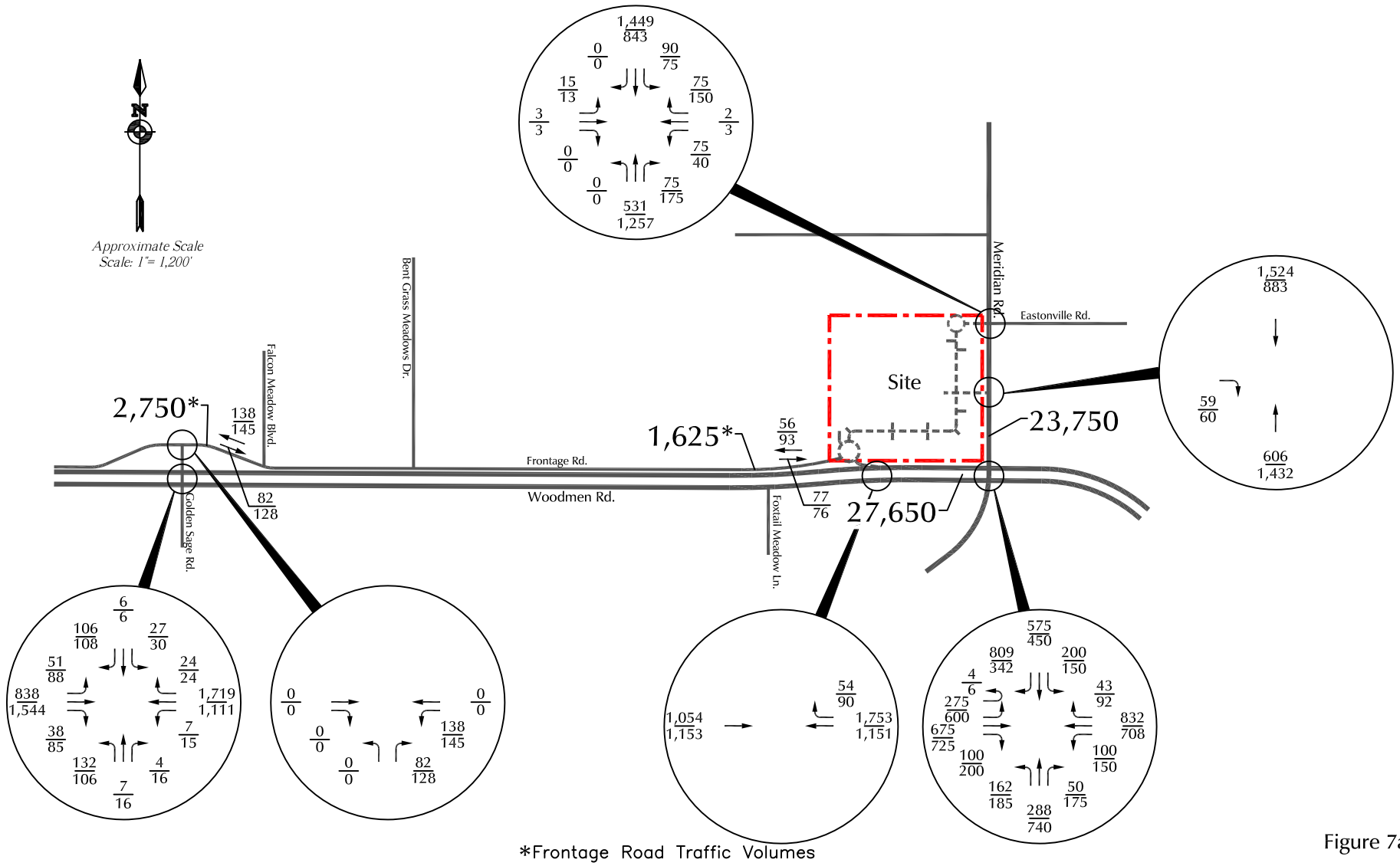
$\frac{A}{B}$ = AM Individual Movement Peak–Hour Level of Service / PM Individual Movement Peak–Hour Level of Service

$\frac{C}{D}$ = AM Entire Intersection Peak–Hour Level of Service / PM Entire Intersection Peak–Hour Level of Service

Figure 6b

Short-Term Background Lane Geometry, Traffic Control and Levels of Service Without Proposed Right-In Access

Falcon Marketplace (LSC #164350)



*Frontage Road Traffic Volumes

Figure 7a

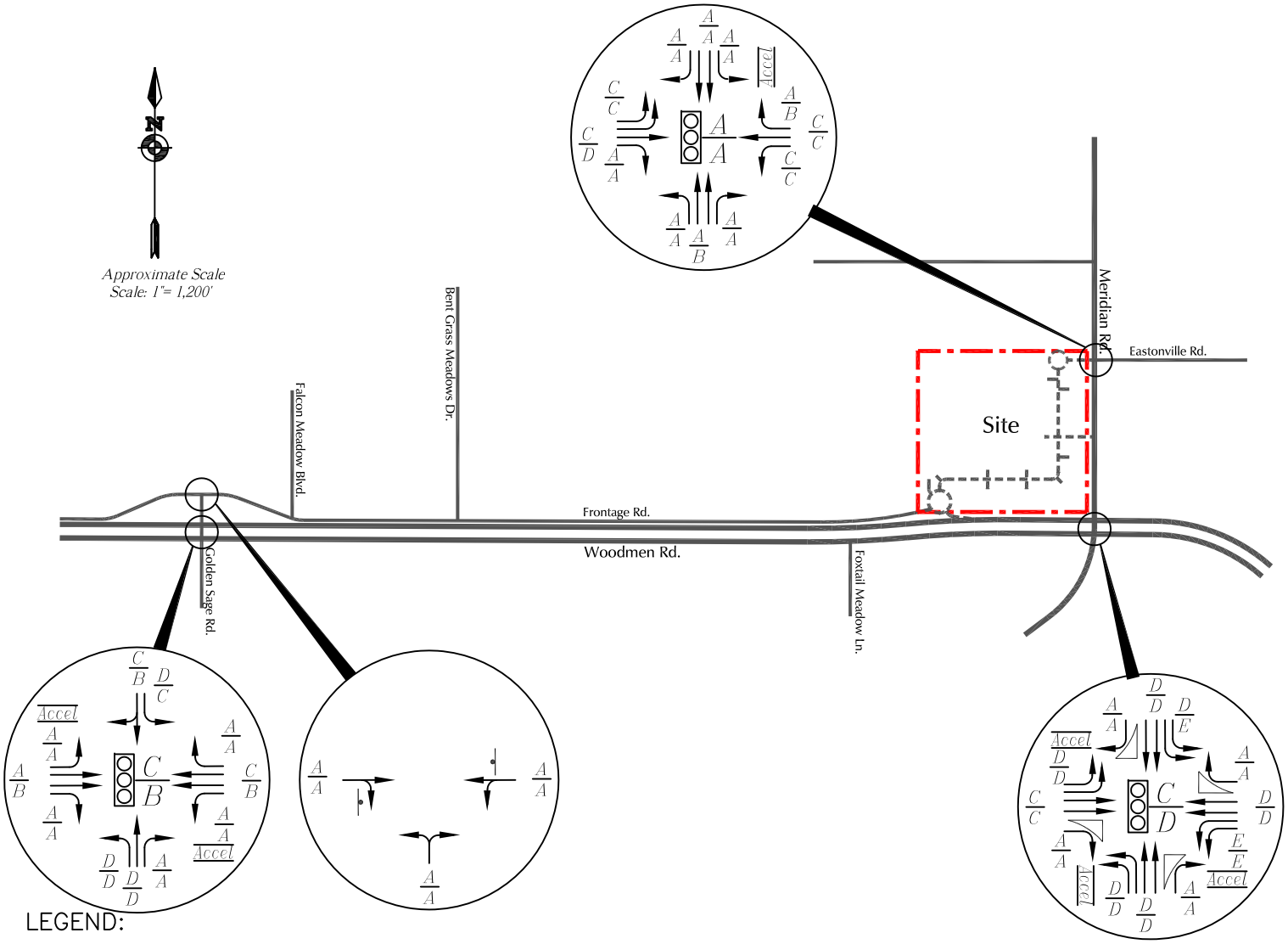
Short-Term Background Traffic With Proposed Right-In Access

Falcon Marketplace (LSC #164350)

LEGEND:

XX/XX = AM Weekday Peak–Hour Traffic (vehicles per hour) / PM Weekday Peak–Hour Traffic (vehicles per hour)

XXX = Average Weekday Traffic (vehicles per day) Estimated by LSC



LEGEND:

= Stop Sign

= Traffic Signal

$\frac{A}{B}$ = AM Individual Movement Peak–Hour Level of Service / PM Individual Movement Peak–Hour Level of Service

$\frac{C}{D}$ = AM Entire Intersection Peak–Hour Level of Service / PM Entire Intersection Peak–Hour Level of Service

Figure 7b

Short-Term Background Lane Geometry, Traffic Control and Levels of Service With Proposed Right-In Access

Falcon Marketplace (LSC #164350)

2040 BACKGROUND TRAFFIC

Figures 8a and 9a show the background traffic volumes for the year 2040. The volumes shown in Figure 8a assume no access from Woodmen Road and the volumes shown in Figure 9a assume the proposed right-in-only access. The 2040 background traffic volume estimates were based on the *El Paso County Major Transportation Corridors Plan (MTCP) 2040* and previous work completed in the area by LSC, including the Bent Grass Subdivision PUD/Preliminary Plan Updated Traffic Impact Study and the previous studies for this site, other area traffic studies, and traffic count data. The 2040 background traffic includes buildout of the Bent Grass subdivision, the Latigo site northeast of Bent Grass Meadows Drive/ Woodmen Frontage Road (assuming the current I-2 industrial zoning -- although previous reports have been prepared contemplating rezoning to commercial/shopping center land uses), and potential Owl Lane redevelopment for commercial land uses with the planned north/south street connection between Eastonville and Bent Grass Meadows Drive. Increases in through traffic are also included. The 2040 background traffic estimates also take into account the Stapleton Drive extension to the west to the Briargate Parkway/Black Forest Road intersection.

Figures 8b and 9b show the lane geometry, traffic control, and level of service at the key intersections based on the 2040 background volumes.

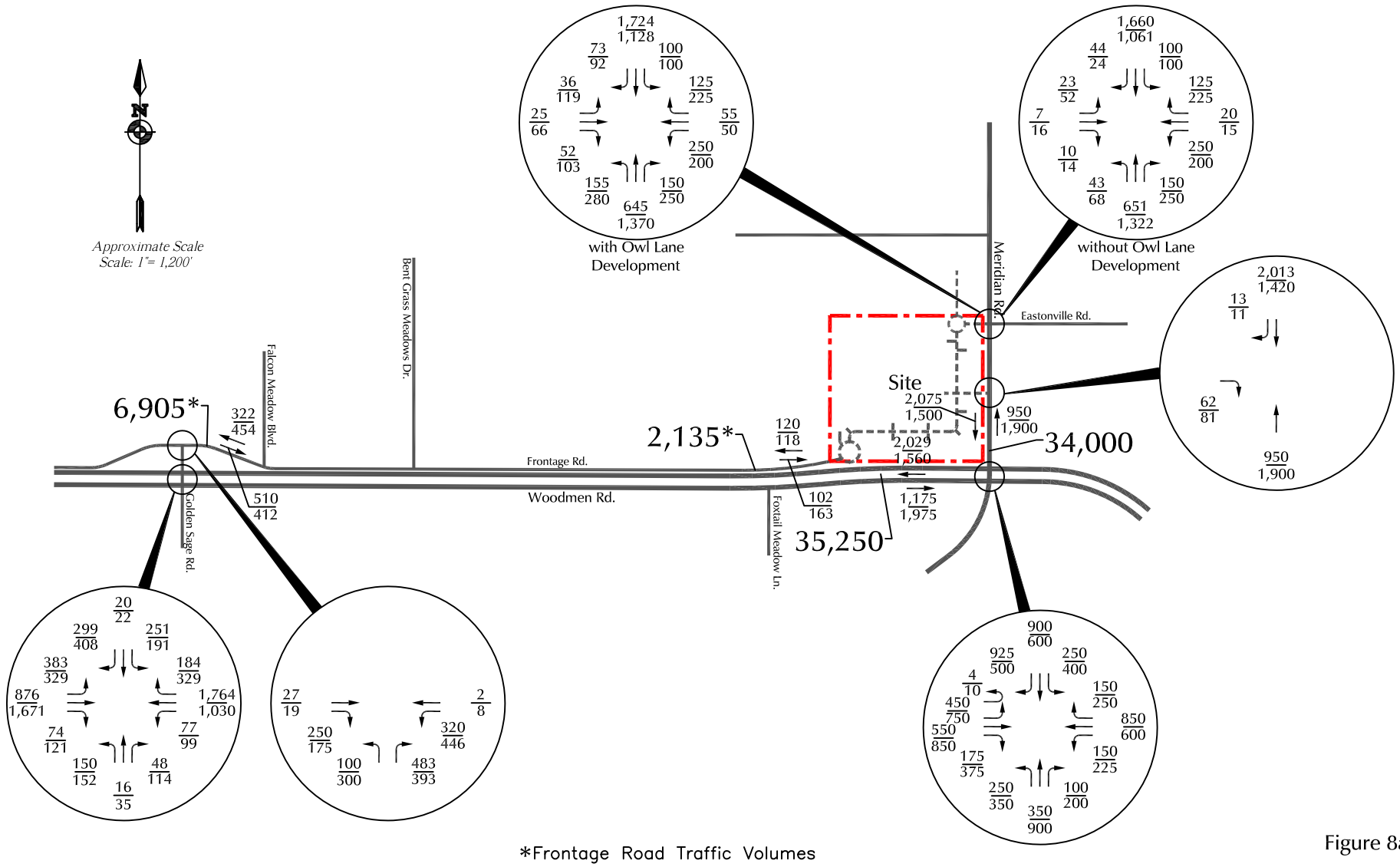


Figure 8a

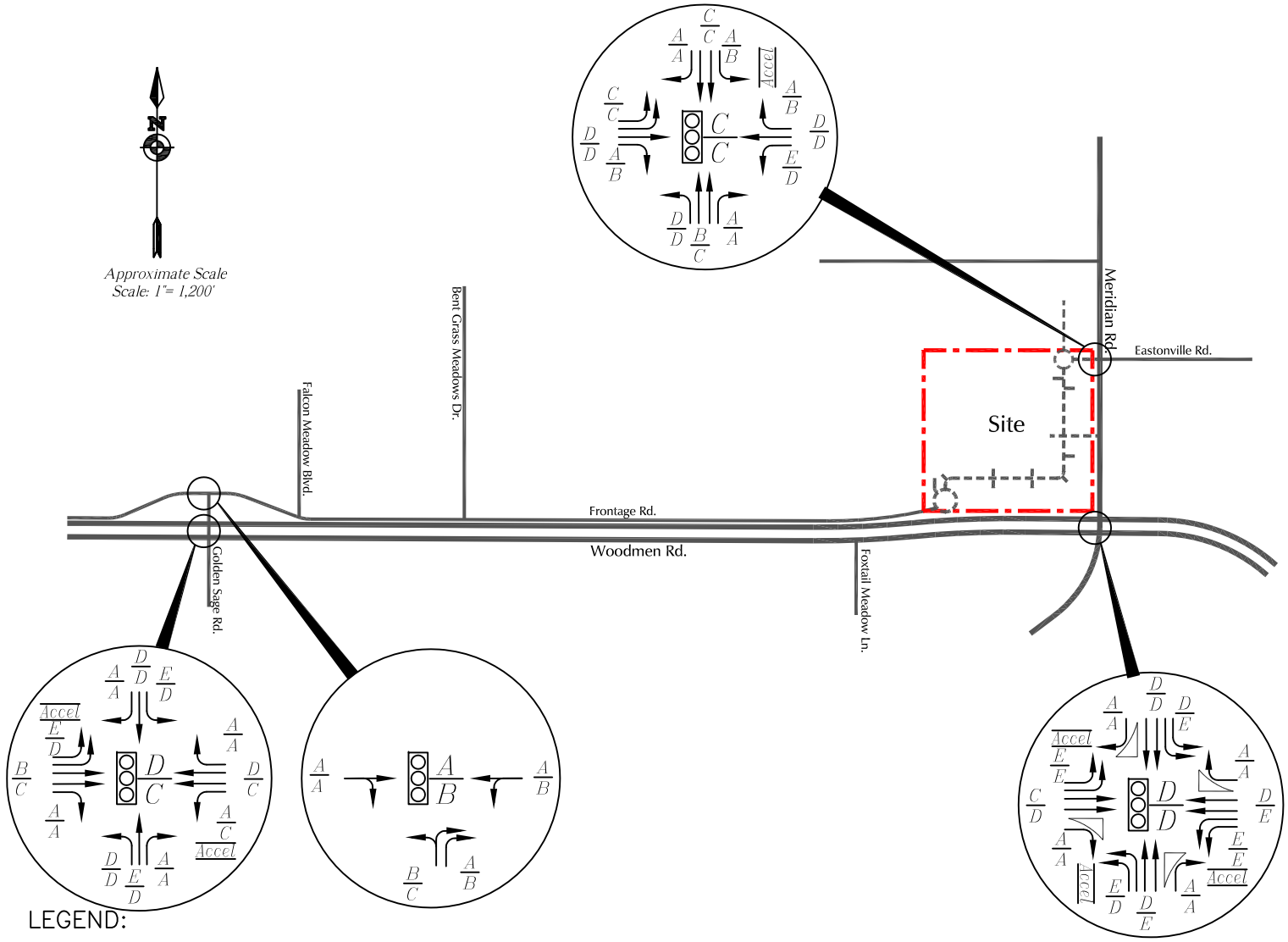
Year 2040 Background Traffic Without Proposed Right-In Access

Falcon Marketplace (LSC #164350)

LEGEND:

$\frac{XX}{XX}$ = $\frac{\text{AM Weekday Peak-Hour Traffic (vehicles per hour)}}{\text{PM Weekday Peak-Hour Traffic (vehicles per hour)}}$

XXX = Average Weekday Traffic (vehicles per day) Estimated by LSC



LEGEND:

= Stop Sign

= Traffic Signal

$\frac{A}{B}$ = AM Individual Movement Peak–Hour Level of Service / PM Individual Movement Peak–Hour Level of Service

$\frac{C}{D}$ = AM Entire Intersection Peak–Hour Level of Service / PM Entire Intersection Peak–Hour Level of Service

Figure 8b

Year 2040 Background Lane Geometry, Traffic Control and Levels of Service Without Proposed Right-In Access

Falcon Marketplace (LSC #164350)

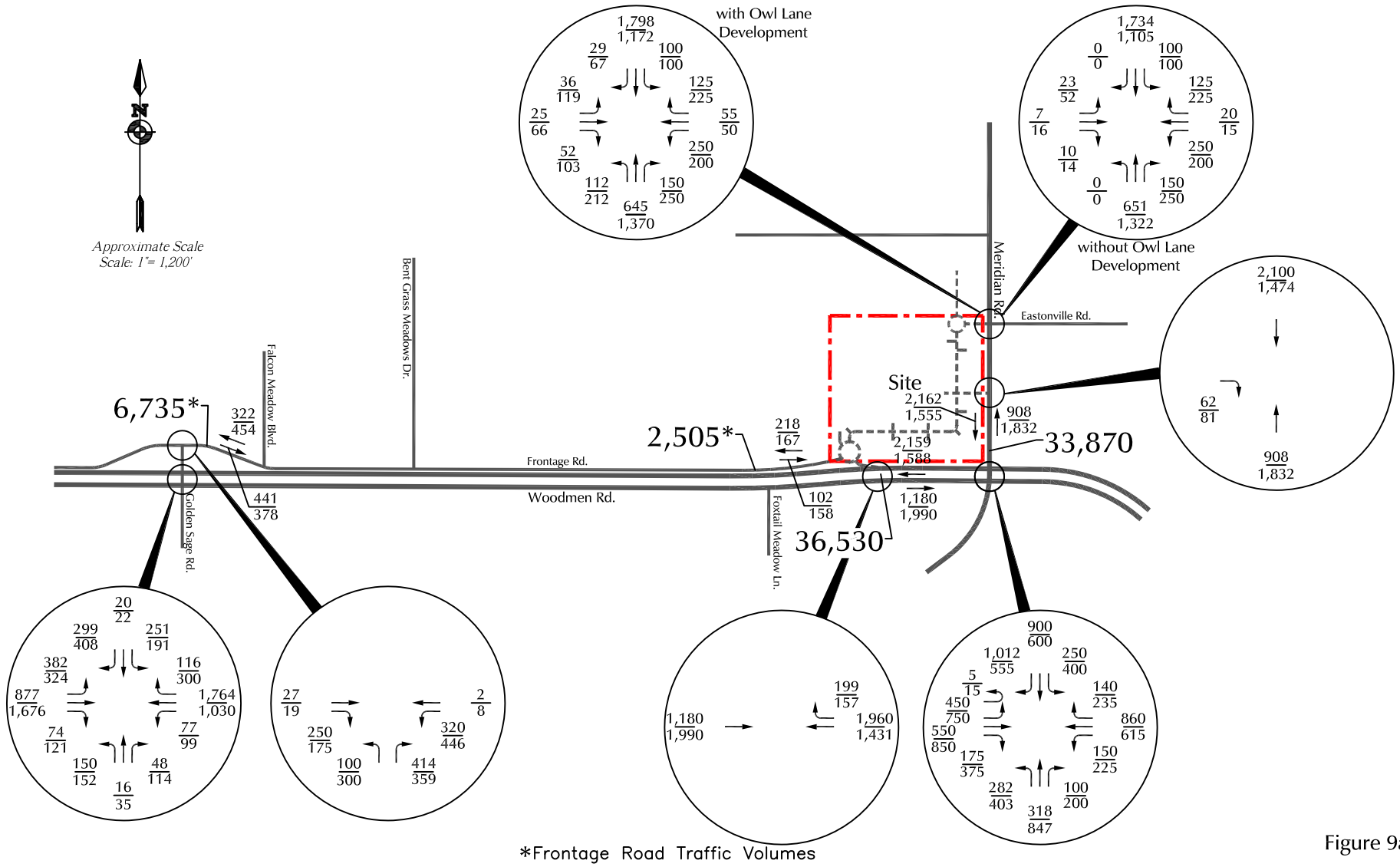


Figure 9a

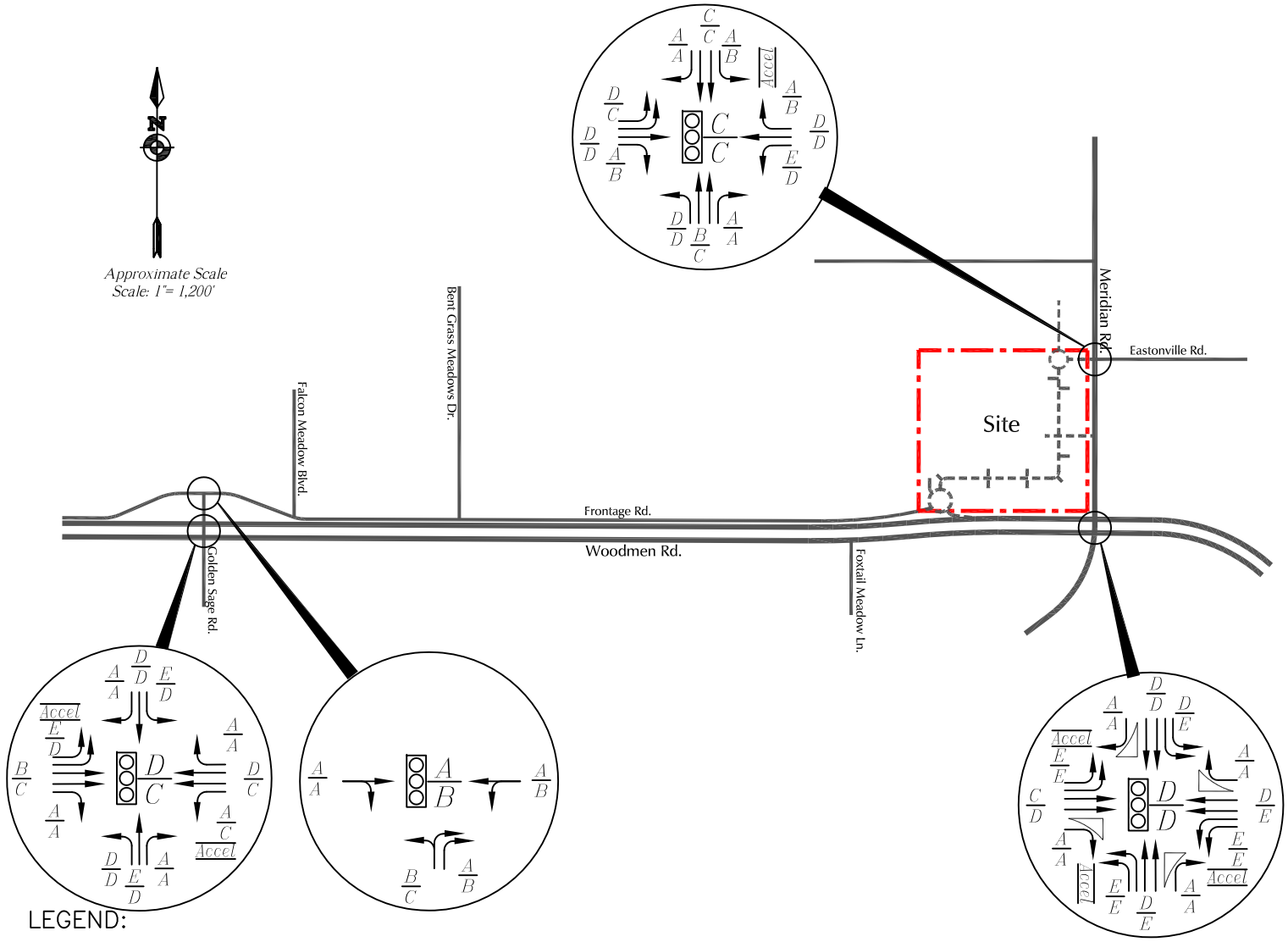
Year 2040 Background Traffic With Proposed Right-In Access

Falcon Marketplace (LSC #164350)

LEGEND:

$\frac{XX}{XX}$ = $\frac{\text{AM Weekday Peak-Hour Traffic (vehicles per hour)}}{\text{PM Weekday Peak-Hour Traffic (vehicles per hour)}}$

XXX = Average Weekday Traffic (vehicles per day) Estimated by LSC



LEGEND:

= Stop Sign

= Traffic Signal

$\frac{A}{B}$ = AM Individual Movement Peak–Hour Level of Service / PM Individual Movement Peak–Hour Level of Service

$\frac{C}{D}$ = AM Entire Intersection Peak–Hour Level of Service / PM Entire Intersection Peak–Hour Level of Service

Figure 9b

Year 2040 Background Lane Geometry, Traffic Control and Levels of Service With Proposed Right-In Access

Falcon Marketplace (LSC #164350)

CHAPTER 5

Trip Generation, Distribution, and Traffic Volume Estimates

TRIP GENERATION

Estimates of the traffic volumes expected to be generated by the existing and proposed land uses within the study area were made using the nationally published trip generation rates found in *Trip Generation, 9th Edition, 2012* by the Institute of Transportation Engineers (ITE). Table 2 shows the trip generation estimates.

The total number of vehicle-trips generated by the land uses has been reduced to account for the internal vehicle-trips made within the site between land uses, without use of the external streets surrounding the site. Table 2 shows the number of internal trips assumed for each land use. The internal trip reduction is an estimate by LSC based on National Highway Cooperative Highway Research Program (NCHRP) Report 684 *Enhancing Internal Trip Capture Estimation for Mixed-Use Developments.* The results of the spreadsheet model are attached.

The total number of external new impact vehicle-trips generated by the retail land uses has been reduced to take into account the "pass-by" and "diverted link" phenomena. A pass-by trip is made by a motorist who would already be on the adjacent roadways regardless of the proposed development, but who stops in at the site while passing by. The motorist would then continue on his or her way to a final destination in the original direction. The pass-by percentages shown on Table 2 are from the *Trip Generation Handbook - An ITE Proposed Recommended Practice, 3rd Edition, 2014* by ITE. A diverted link trip is one made by a motorist who would already be traveling on a nearby (but not adjacent) roadway regardless of this development who now uses another roadway to access the site before continuing on his or her way to a final destination in the original direction. Diverted link trips are included in the distribution percentages.

The site is projected to generate about 9,558 new external vehicle-trips on the average weekday, with about half entering and half exiting the site during a 24-hour period.
Figure 8a

Table 2
Trip Generation Estimate
Falcon Marketplace

Lot	Land Use Code	Land Use Description	Trip Generation Units	Trip Generation Rates [1] Average Weekday Traffic	Morning Peak Hour In	Morning Peak Hour Out	Afternoon Peak Hour In	Afternoon Peak Hour Out	Total Trips Generated Average Weekday Traffic	Morning Peak Hour In	Morning Peak Hour Out	Afternoon Peak Hour In	Afternoon Peak Hour Out	Internal Trips[7] Average Weekday Traffic	Morning Peak Hour In	Morning Peak Hour Out	Afternoon Peak Hour In	Afternoon Peak Hour Out	Total External Trips Generated Average Weekday Traffic	Morning Peak Hour In	Morning Peak Hour Out	Afternoon Peak Hour In	Afternoon Peak Hour Out	Pass-By Trips[2]	New External Trips Generated Average New Weekday Traffic
	Trip Generation Estimate Based on the Currently Proposed Plan																								
1	866	Pet Supply Superstore[3]	15 KSF[4]	38.24	0.53	0.33	1.69	1.69	574	8	5	25	25	54	1	2	3	2	520	7	3	22	23	10%	468
2	850	Supermarket	123 KSF	78.26	2.11	1.29	3.76	3.62	9,626	259	159	463	445	909	17	26	48	37	8,717	242	133	415	408	36%	5,579
3	944	Gasoline/Service Station	18 VFP[5]	168.56	6.20	5.96	6.94	6.94	3,034	112	107	125	125	286	5	8	15	12	2,748	107	99	110	113	56%	1,209
4	934	Fast-Food Restaurant with Drive-Through Window[6]	2.5 KSF	496.12	0.42	0.39	16.98	15.67	1,240	1	1	42	39	380	0	0	12	17	860	1	1	30	22	50%	430
5	820	Shopping Center	5 KSF	55.14	0.77	0.47	2.36	2.51	276	4	2	12	13	26	1	0	1	1	250	3	2	11	12	34%	165
6	848	Tire Store	7.72 KSF	24.87	1.82	1.07	1.78	2.37	192	14	8	14	18	18	0	1	1	1	174	14	7	13	17	28%	125
7	934	Fast-Food Restaurant with Drive-Through Window	3.5 KSF	496.12	23.16	22.26	16.98	15.67	1,736	81	78	59	55	532	26	12	17	24	1,204	55	66	42	31	50%	602
8	934	Fast-Food Restaurant with Drive-Through Window[6]	2.5 KSF	496.12	0.42	0.39	16.98	15.67	1,240	1	1	42	39	380	0	0	12	17	860	1	1	30	22	50%	430
9	610	Clinic	7.8 KSF	31.45	2.19	2.19	2.12	3.06	245	17	17	17	24	40	3	16	10	5	205	14	1	7	19	0%	205
10	820	Shopping Center	8 KSF	55.14	0.77	0.47	2.36	2.51	441	6	4	19	20	42	1	1	2	2	399	5	3	17	18	34%	263
11	937	Coffee/Donut Shop With Drive-Through Window	1.3 KSF	818.58	51.30	49.28	21.40	21.40	1,064	67	64	28	28	326	21	10	9	12	738	46	54	19	16	89%	81
									19,669	**570**	**446**	**846**	**831**	**2,993**	**75**	**76**	**130**	**130**	**16,676**	**495**	**370**	**716**	**701**		**9,558**

Notes:
(1) Source: "Trip Generation, 9th Edition, 2012" by the Institute of Transportation Engineers (ITE)
(2) Source: "Trip Generation Handbook - An ITE Proposed Recommended Practice" 3rd Edition, 2014
(3) Daily and morning peak-hour trip generation rates for Pet Supply Superstore are estimates by LSC
(4) KSF = 1,000 square feet of floor space
(5) VFP = vehicle fueling position
(6) The AM peak-hour trip generation rates have been reduced by LSC as the proposed fast-food restaurant does not serve breakfast
(6) See attached NCHRP 684 Internal Trip Capture Estimate Tool Sheets

Source: LSC Transportation Consultants, Inc.

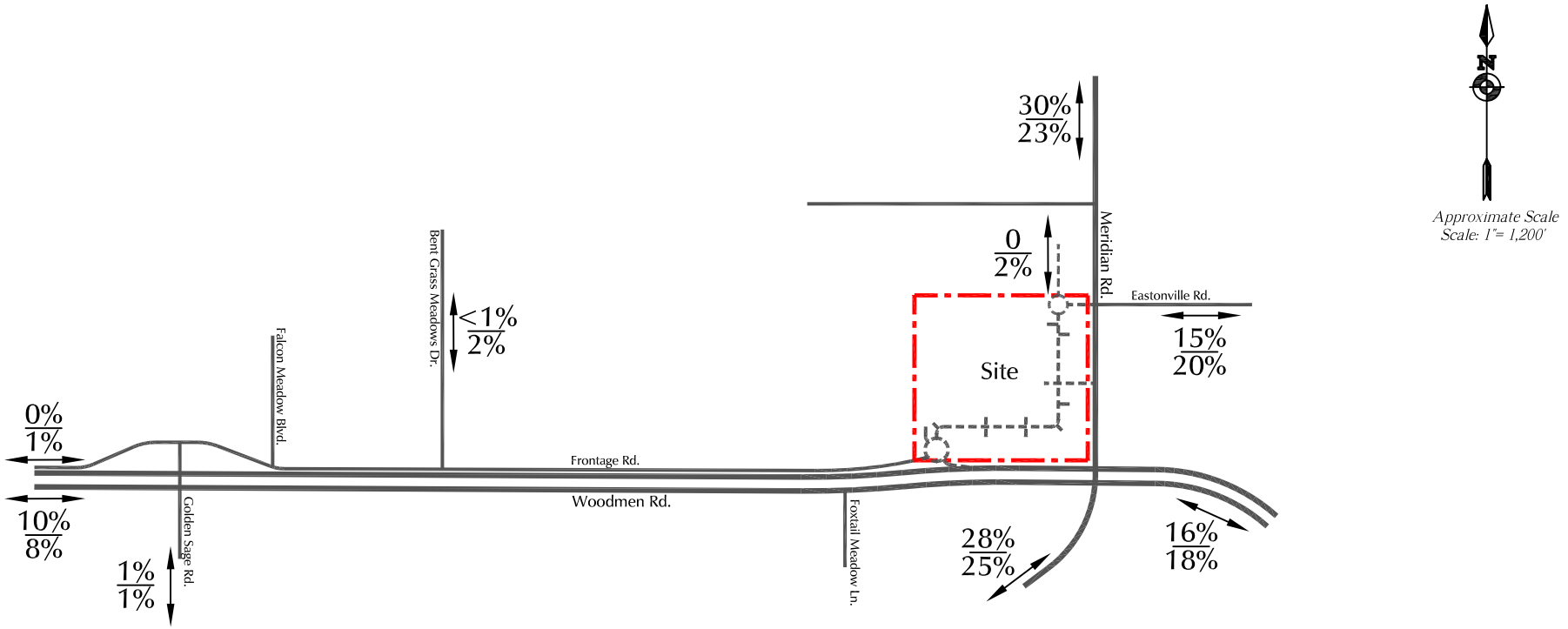
During the morning peak hour, which generally occurs for one hour between 6:30 and 8:30 a.m., about 495 vehicles would enter and 370 vehicles would exit the site.

During the afternoon peak hour, which generally occurs for one hour between 4:15 and 6:15 p.m., about 716 vehicles would enter and 701 vehicles would exit the site.

TRIP DISTRIBUTION AND ASSIGNMENT

The estimated directional distribution of the site-generated traffic volumes on the adjacent roadways is an important factor in determining the site's traffic impacts. Figure 10 shows the directional distribution estimates for the primary site-generated traffic. The estimates have been based on the following factors: the site's location with respect to the Falcon area's residential, employment, and commercial areas; the balance of the northeast Colorado Springs metropolitan area and the rural areas of the county to the east; the site's proposed land uses; the site's proposed access and circulation system; and the roadway system serving the site. The short-term distribution estimate assumes the existing street network plus the Meridian Road project, and the long-term estimate assumes the future Stapleton extension to the west and additional east-west potential connections west of US 24 through Banning Lewis Ranch such as Dublin Boulevard. The pass-by trips and diverted trips were assigned based in large part on the magnitude and direction of the existing and projected background traffic volumes on the adjacent roadways.

When the distribution percentages (from Figure 10) were applied to the trip generation estimates (from Table 2), the site-generated traffic volumes on the area roadways were determined. Figures 11 and 12 show the short-term site-generated traffic volumes without and with the proposed right-in-only access from Woodmen Road, respectively. Figures 13 and 14 show the long-term site-generated traffic volumes with no access to Woodmen Road and with the proposed right-in-only access from Woodmen Road, respectively.



LEGEND:

35% / 35% = Short–Term Percent Primary Trip Directional Distribution / Long–Term Percent Primary Trip Directional Distribution

Figure 10

Directional Distribution of Site-Generated Traffic

Falcon Marketplace (LSC #164350)

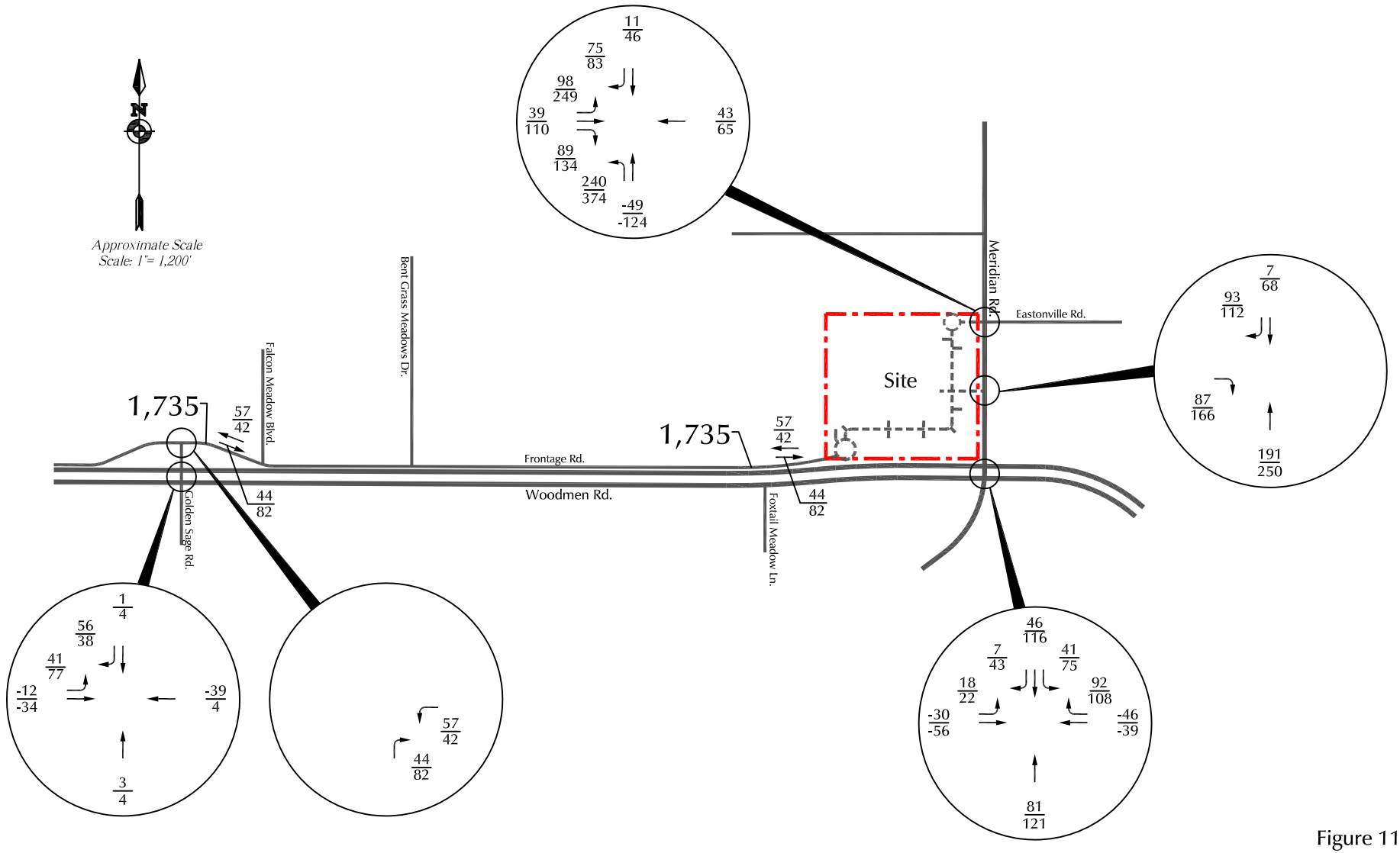


Figure 11

Short-Term Assignment of Site-Generated Traffic Without Proposed Right-In Access

Falcon Marketplace (LSC #164350)

LEGEND:

$\frac{XX}{XX}$ = $\frac{\text{AM Weekday Peak-Hour Traffic (vehicles per hour)}}{\text{PM Weekday Peak-Hour Traffic (vehicles per hour)}}$

XXX = Average Weekday Traffic (vehicles per day) Estimated by LSC

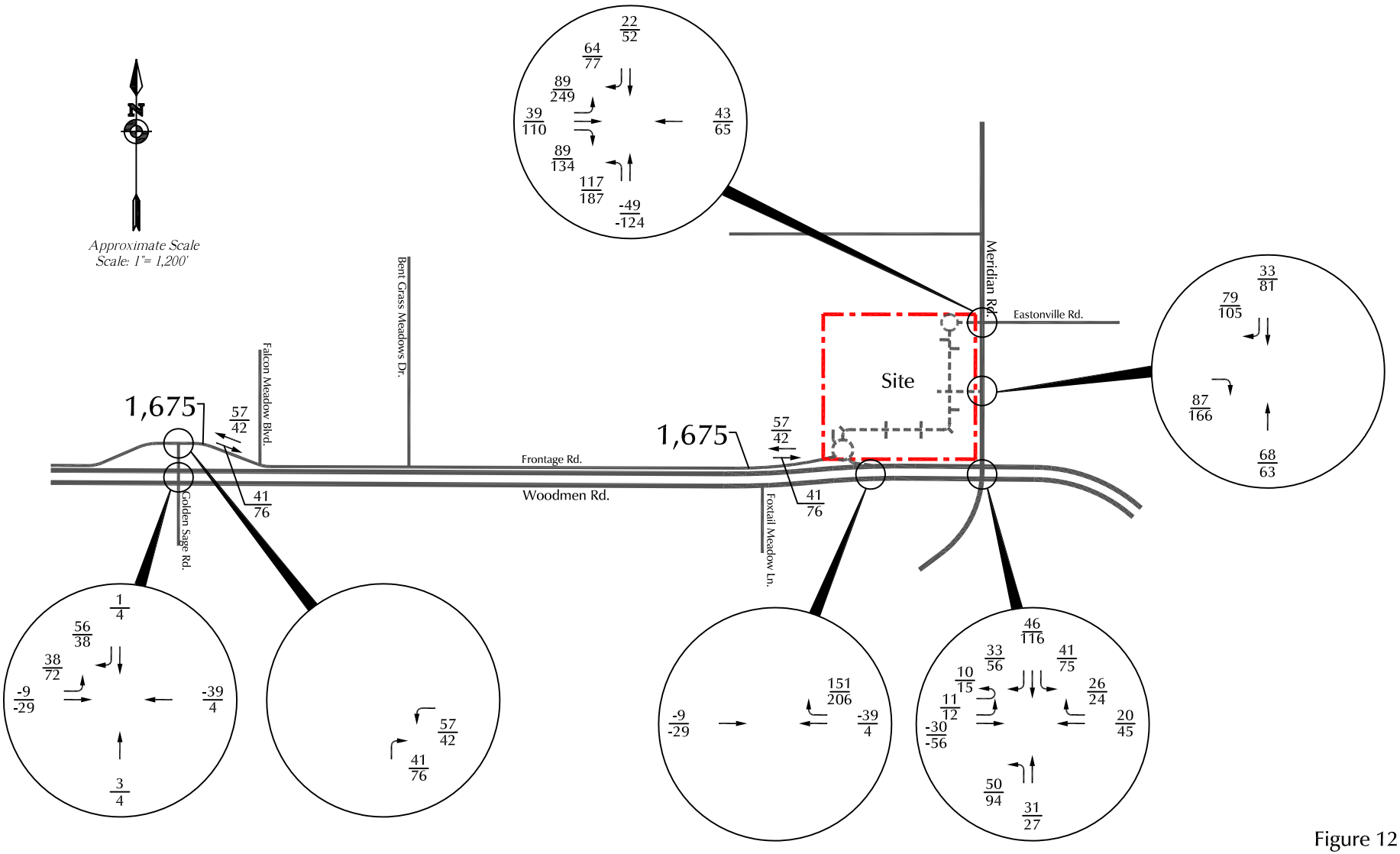


Figure 12

Short-Term Assignment of Site-Generated Traffic With Proposed Right-In Access

Falcon Marketplace (LSC #164350)

LEGEND:

$\frac{XX}{XX}$ = $\frac{\text{AM Weekday Peak-Hour Traffic (vehicles per hour)}}{\text{PM Weekday Peak-Hour Traffic (vehicles per hour)}}$

XXX = Average Weekday Traffic (vehicles per day) Estimated by LSC

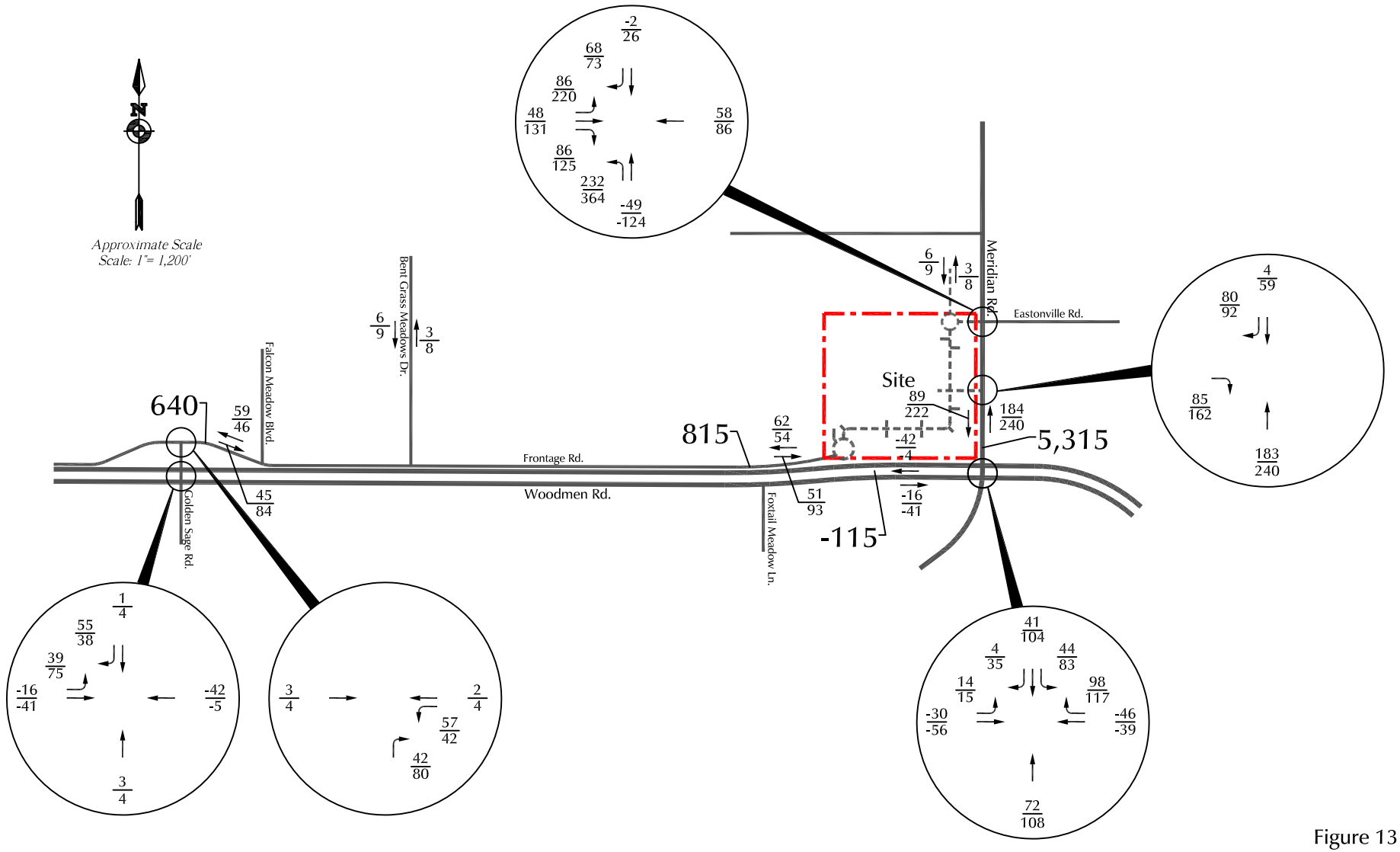


Figure 13

Long-Term Assignment of Site-Generated Traffic Without Proposed Right-In Access

Falcon Marketplace (LSC #164350)

LEGEND:

$\frac{XX}{XX}$ = $\frac{\text{AM Weekday Peak–Hour Traffic (vehicles per hour)}}{\text{PM Weekday Peak–Hour Traffic (vehicles per hour)}}$

XXX = Average Weekday Traffic (vehicles per day) Estimated by LSC

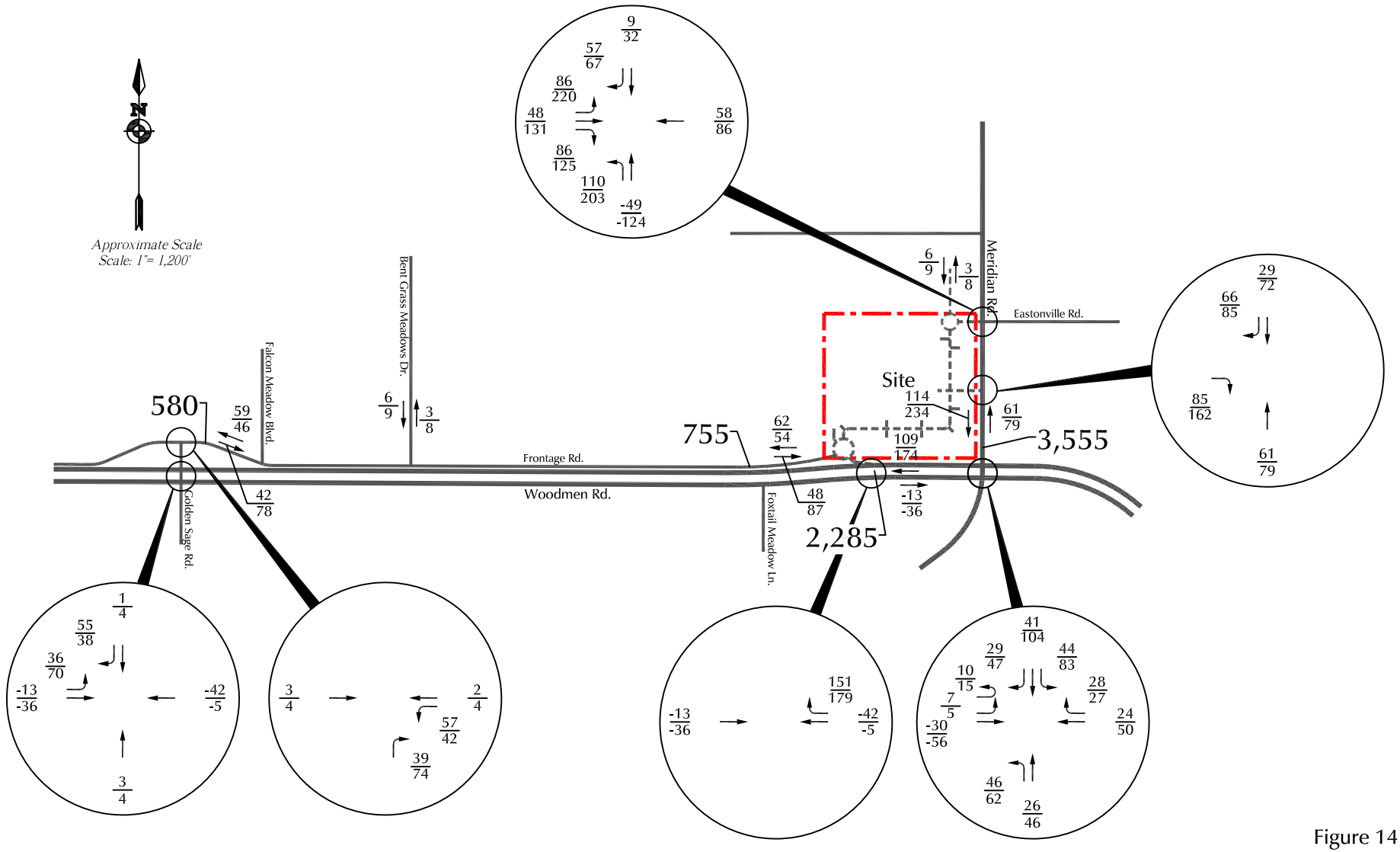


Figure 14

Long-Term Assignment of Site-Generated Traffic With Proposed Right-In Access

Falcon Marketplace (LSC #164350)

LEGEND:

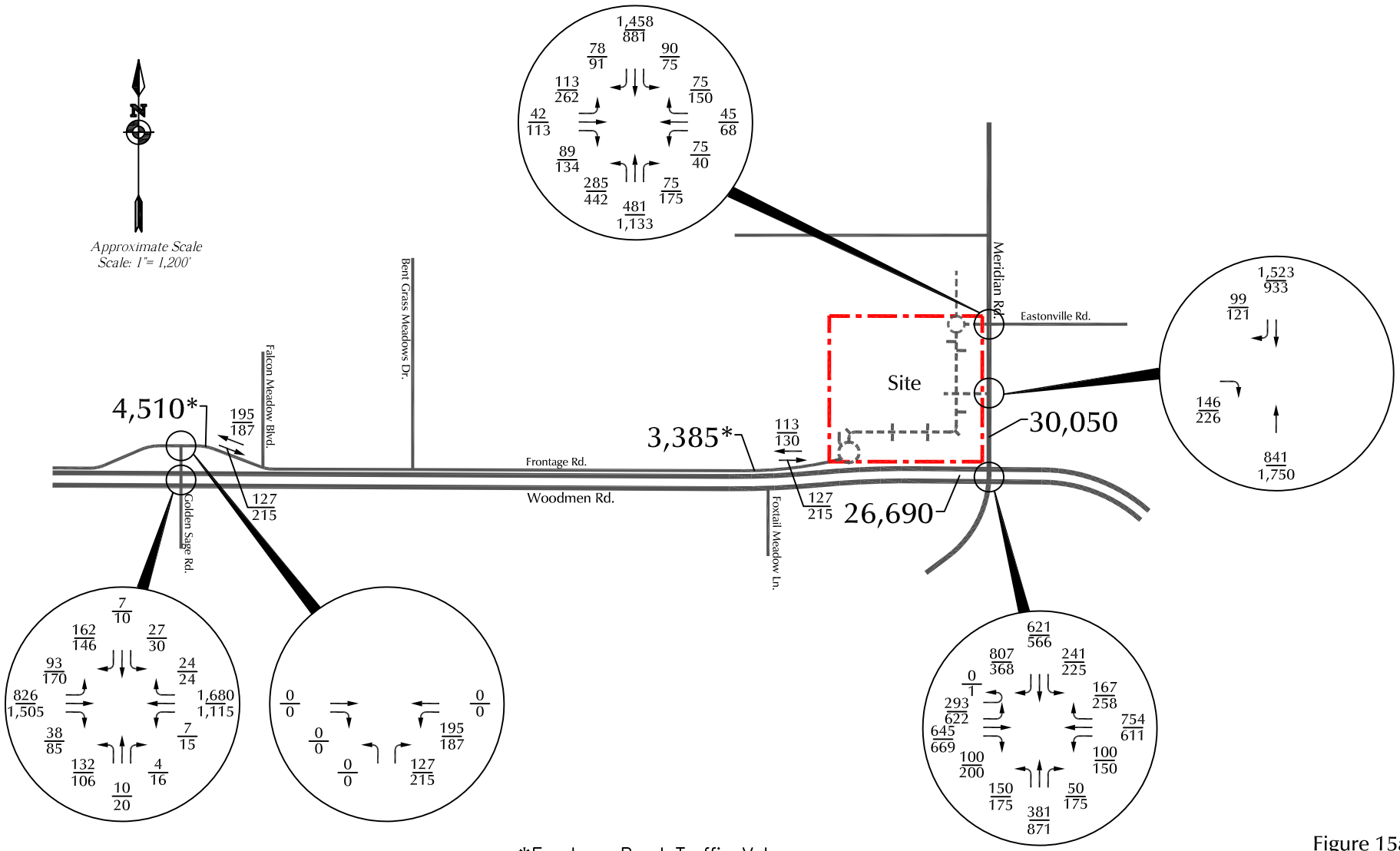
$\frac{XX}{XX}$ = $\frac{\text{AM Weekday Peak-Hour Traffic (vehicles per hour)}}{\text{PM Weekday Peak-Hour Traffic (vehicles per hour)}}$

XXX = Average Weekday Traffic (vehicles per day) Estimated by LSC

SHORT-TERM TOTAL TRAFFIC

Figures 15a and 16a show the short-term total traffic volumes at the access points and key intersections adjacent to the site with no access to Woodmen Road and with the proposed right-in-only access from Woodmen Road, respectively. The volumes are the sum of the short-term background traffic volumes from Figures 6a and 7a, plus the short-term site-generated traffic volumes from Figures 11 and 12. The volumes shown in Figures 15a and 16a represent the short-term impacts of the development.

Figures 15b and 16b show the lane geometry, traffic control, and level of service at the key intersections based on the short-term total volumes.



*Frontage Road Traffic Volumes

Figure 15a

Short-Term Total Traffic Without Proposed Right-In Access

Falcon Marketplace (LSC #164350)

LEGEND:

XX/XX = AM Weekday Peak–Hour Traffic (vehicles per hour) / PM Weekday Peak–Hour Traffic (vehicles per hour)

XXX = Average Weekday Traffic (vehicles per day) Estimated by LSC

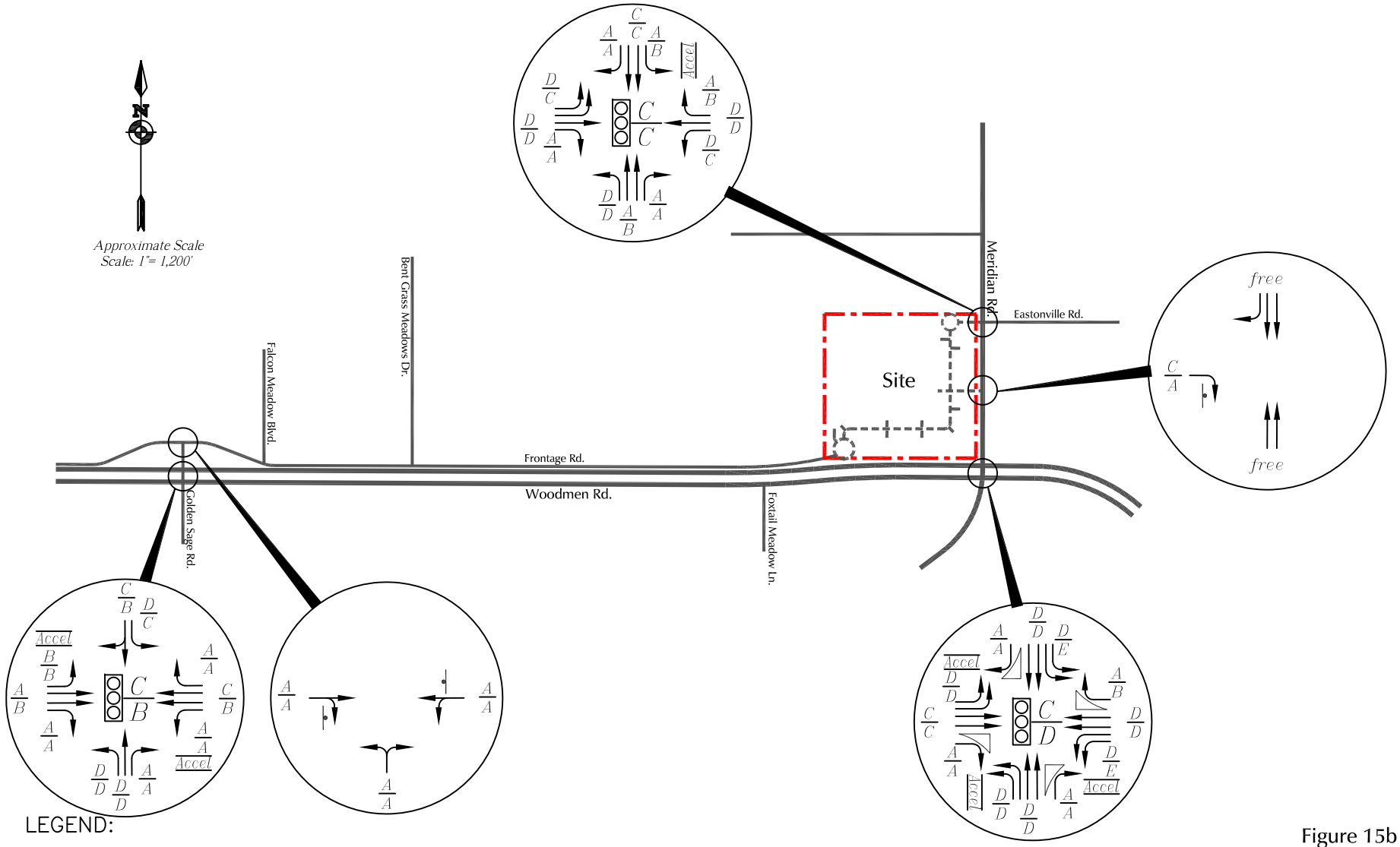
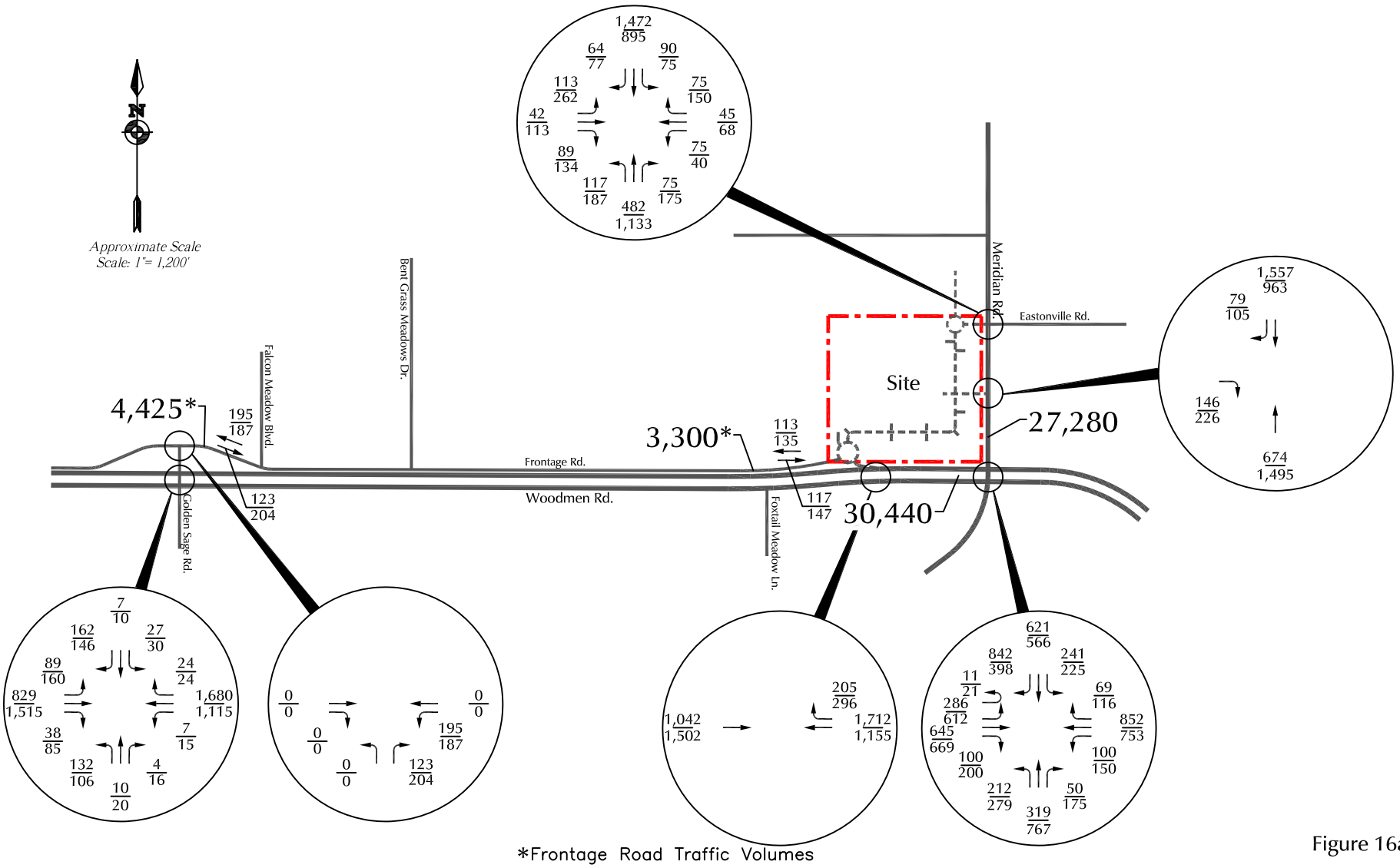


Figure 15b

Short-Term Total Lane Geometry, Traffic Control and Levels of Service Without Proposed Right-In Access

Falcon Marketplace (LSC #164350)



*Frontage Road Traffic Volumes

Figure 16a

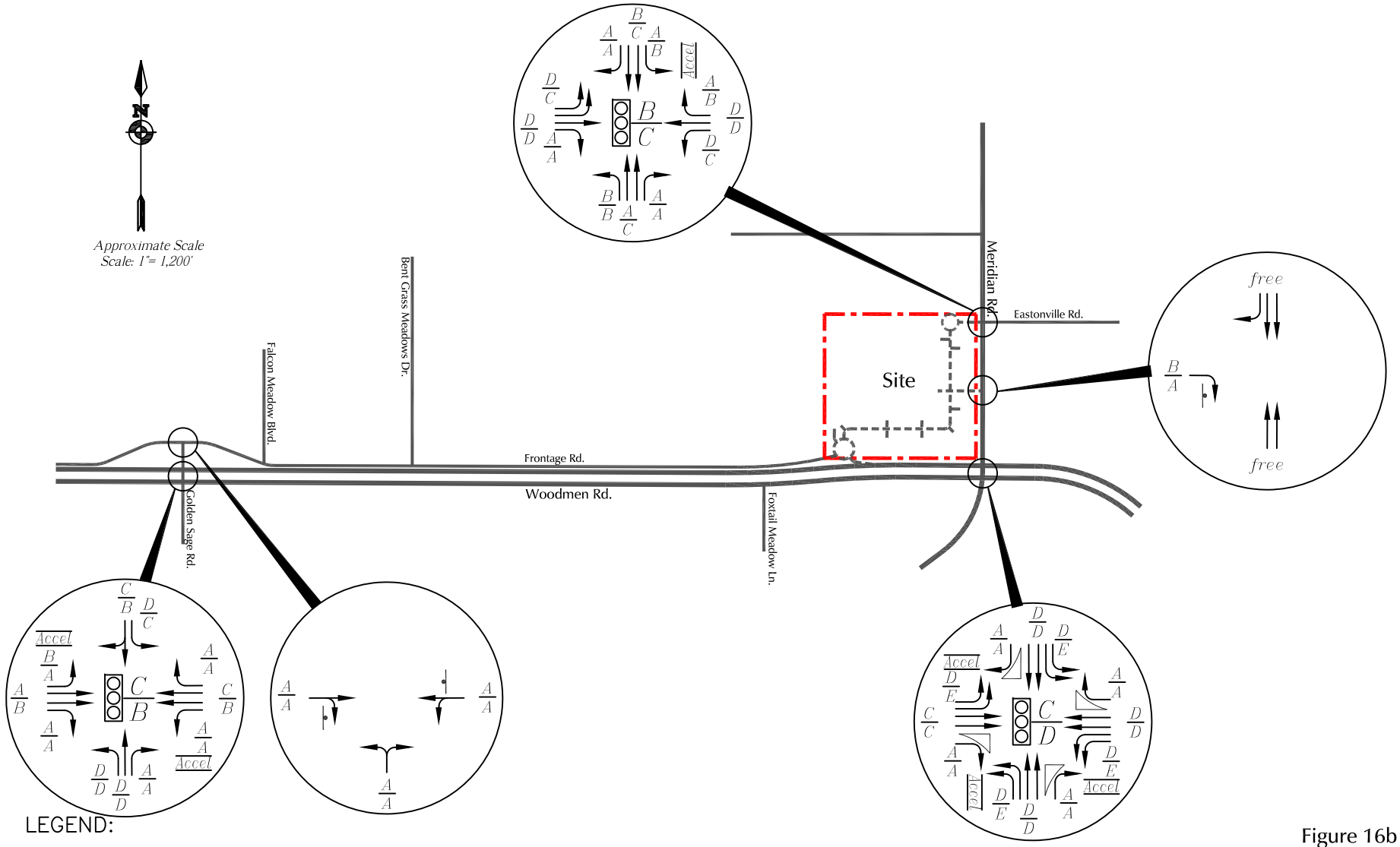
Short-Term Total Traffic With Proposed Right-In Access

Falcon Marketplace (LSC #164350)

LEGEND:

$\frac{XX}{XX}$ = $\frac{\text{AM Weekday Peak-Hour Traffic (vehicles per hour)}}{\text{PM Weekday Peak-Hour Traffic (vehicles per hour)}}$

XXX = Average Weekday Traffic (vehicles per day) Estimated by LSC



LEGEND:

= Stop Sign

= Traffic Signal

$\frac{A}{B}$ = AM Individual Movement Peak–Hour Level of Service / PM Individual Movement Peak–Hour Level of Service

$\frac{C}{D}$ = AM Entire Intersection Peak–Hour Level of Service / PM Entire Intersection Peak–Hour Level of Service

Figure 16b

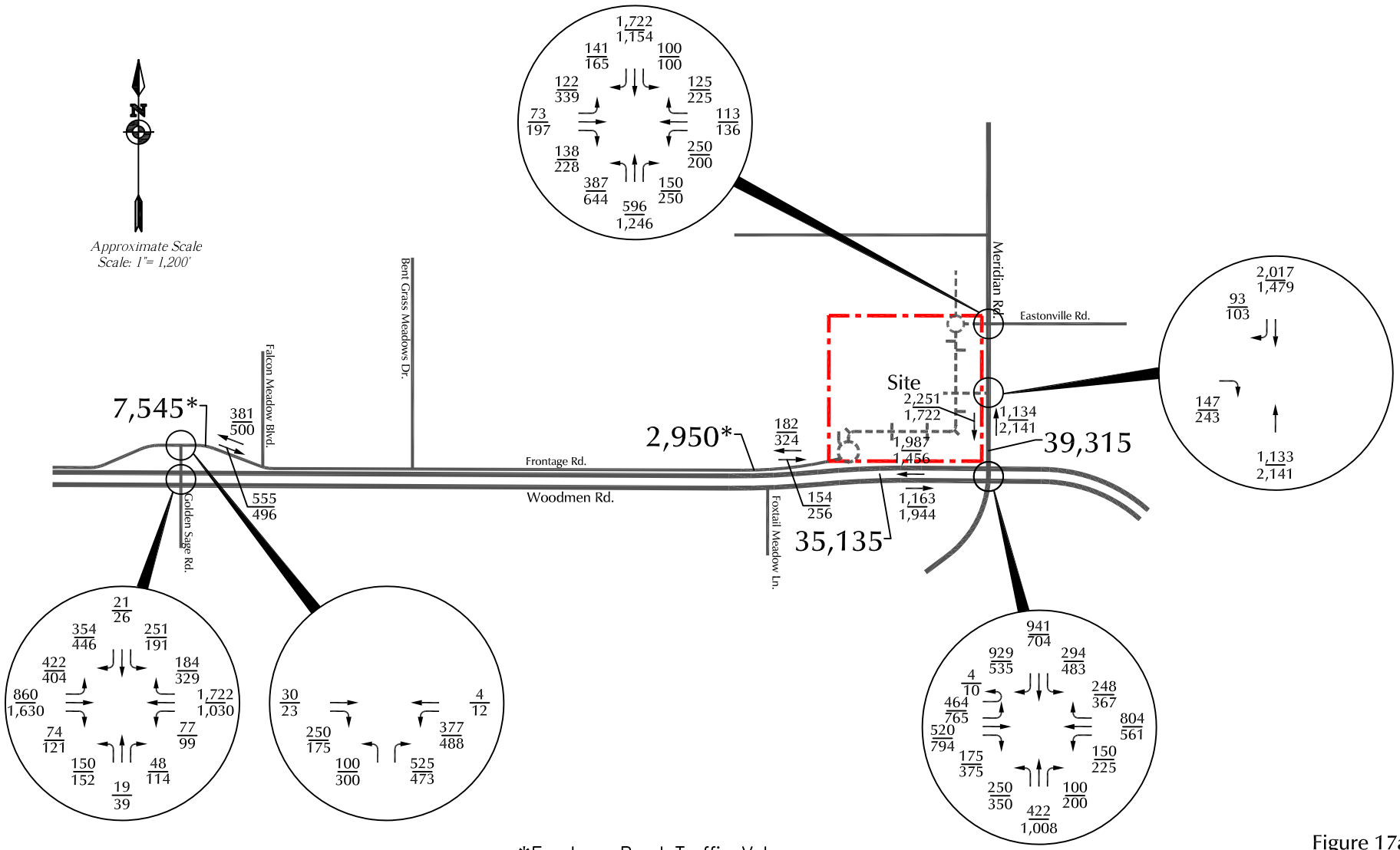
Short-Term Total Lane Geometry, Traffic Control and Levels of Service With Proposed Right-In Access

Falcon Marketplace (LSC #164350)

2040 TOTAL TRAFFIC

Figures 17a and 18a show the 2040 total traffic volumes at the site access points and key intersections adjacent to the site with no access to Woodmen Road and with the proposed right-in-only access from Woodmen Road, respectively. The volumes are the sum of the 2040 background traffic volumes from Figures 8a and 9a, plus the long-term site-generated traffic volumes from Figures 13 and 14. Figures 17b and 18b show the 2040 total traffic volumes at all of the proposed access points to the public internal road, which extends from the terminus of the Woodmen Frontage Road to Eastonville Road.

Figures 17c and 18c show the lane geometry, traffic control, and level of service at the site access points and key intersections adjacent to the site based on the 2040 total volumes. Figures 17d and 18d show the lane geometry, traffic control, and level of service at the site access points and key intersections adjacent to the site based on the 2040 total volumes. Figures 17d and 18d show the lane geometry, traffic control, and level of service at all of the proposed access points to the public internal road, which extends from the terminus of the Woodmen Frontage Road to Eastonville Road.



*Frontage Road Traffic Volumes

Figure 17a

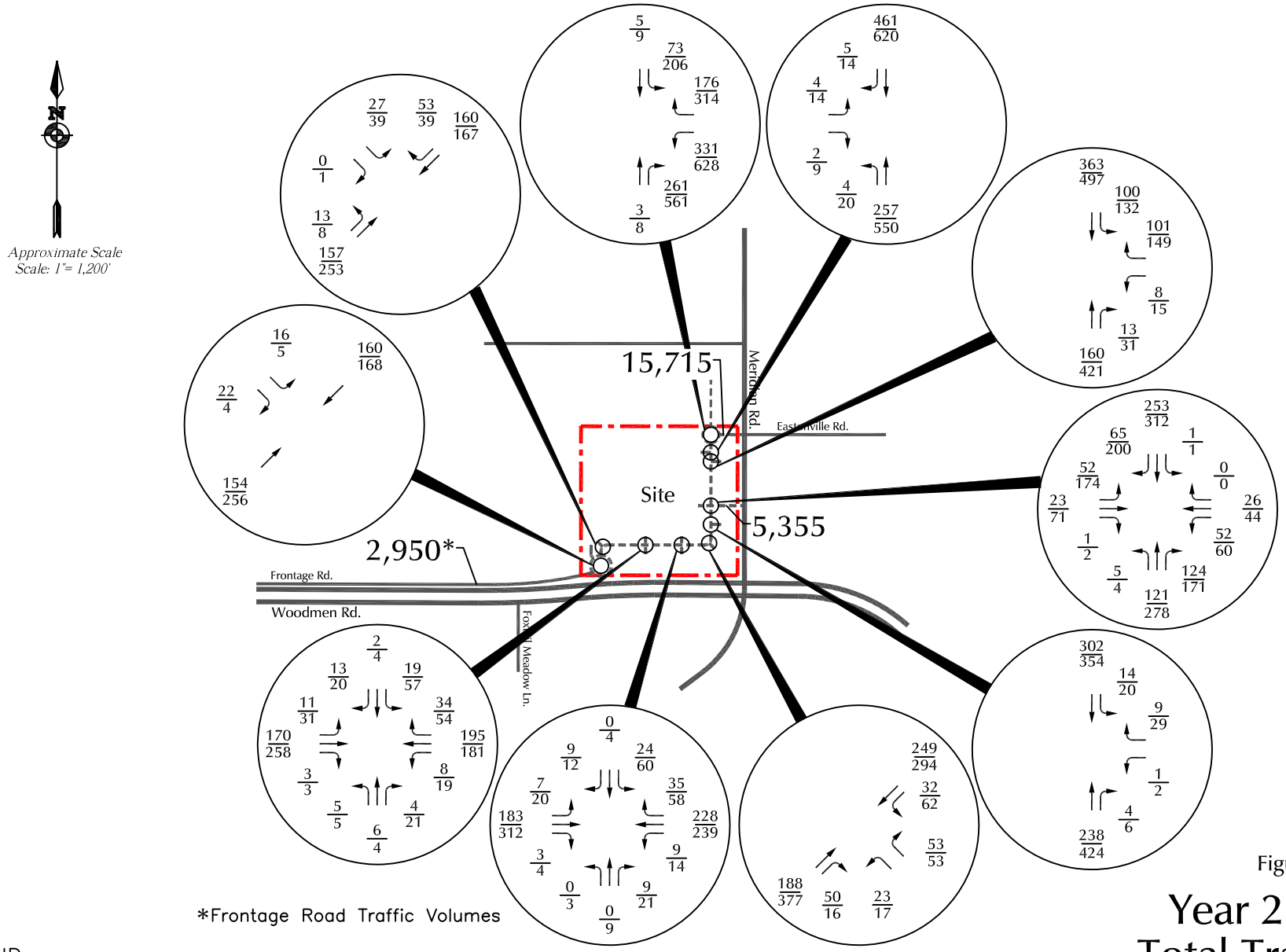
Year 2040 Total Traffic Without Proposed Right-In Access

Falcon Marketplace (LSC #164350)

LEGEND:

$\frac{XX}{XX}$ = $\frac{\text{AM Weekday Peak-Hour Traffic (vehicles per hour)}}{\text{PM Weekday Peak-Hour Traffic (vehicles per hour)}}$

XXX = Average Weekday Traffic (vehicles per day) Estimated by LSC



LEGEND:

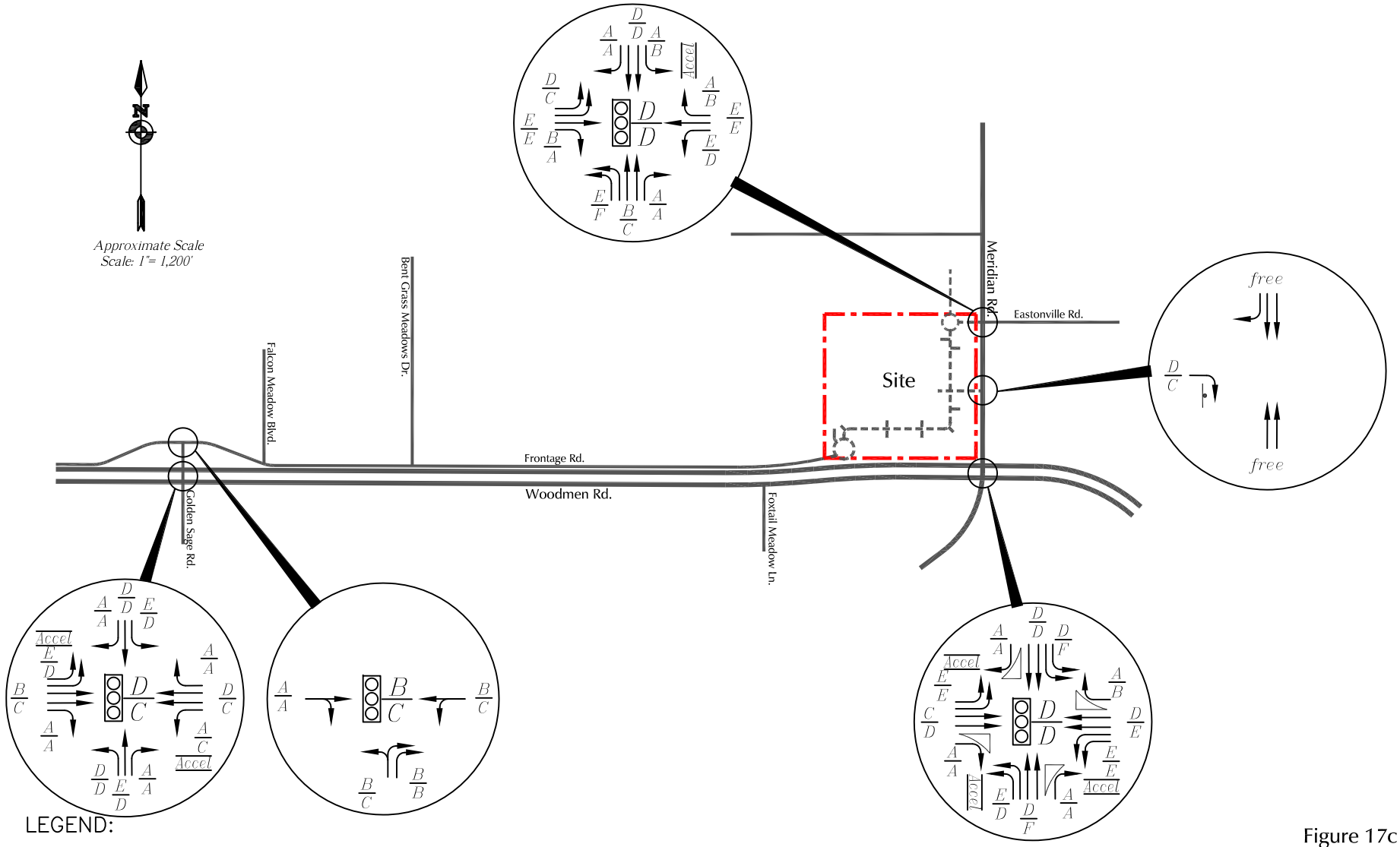
$\frac{XX}{XX}$ = $\frac{\text{AM Weekday Peak–Hour Traffic (vehicles per hour)}}{\text{PM Weekday Peak–Hour Traffic (vehicles per hour)}}$

XXX = Average Weekday Traffic (vehicles per day) Estimated by LSC

Figure 17b

Year 2040 Total Traffic Without Proposed Right-In Access

Falcon Marketplace (LSC #164350)



LEGEND:

= Stop Sign

= Traffic Signal

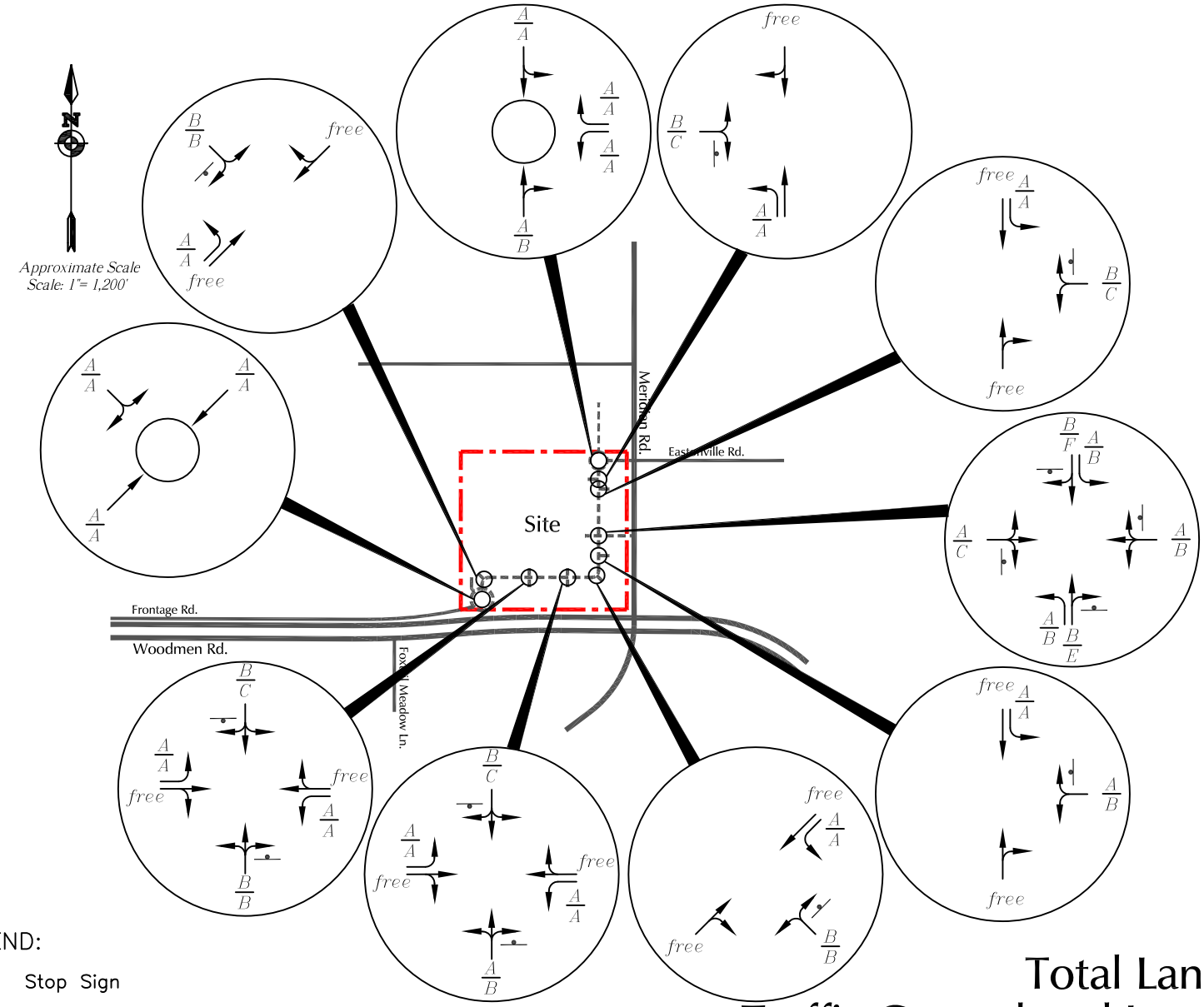
$\frac{A}{B}$ = AM Individual Movement Peak–Hour Level of Service / PM Individual Movement Peak–Hour Level of Service

$\frac{C}{D}$ = AM Entire Intersection Peak–Hour Level of Service / PM Entire Intersection Peak–Hour Level of Service

Figure 17c

Year 2040 Total Lane Geometry, Traffic Control and Levels of Service Without Proposed Right-In Access

Falcon Marketplace (LSC #164350)



LEGEND:

= Stop Sign

= Modern Roundabout

$\frac{A}{B}$ = AM Individual Movement Peak-Hour Level of Service / PM Individual Movement Peak-Hour Level of Service

Figure 17d

Year 2040 Total Lane Geometry, Traffic Control and Levels of Service Without Proposed Right-In Access

Falcon Marketplace (LSC #164350)

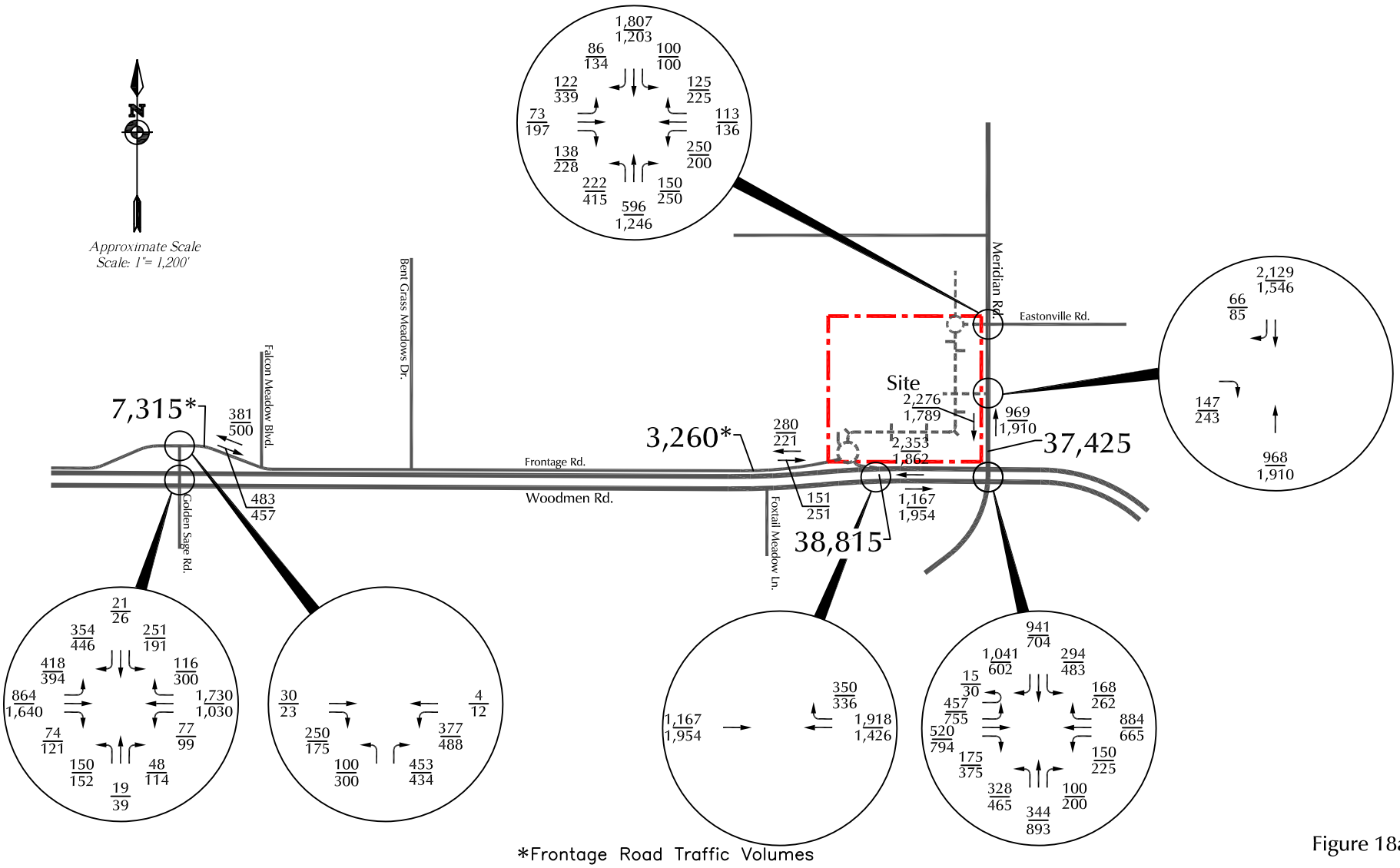


Figure 18a

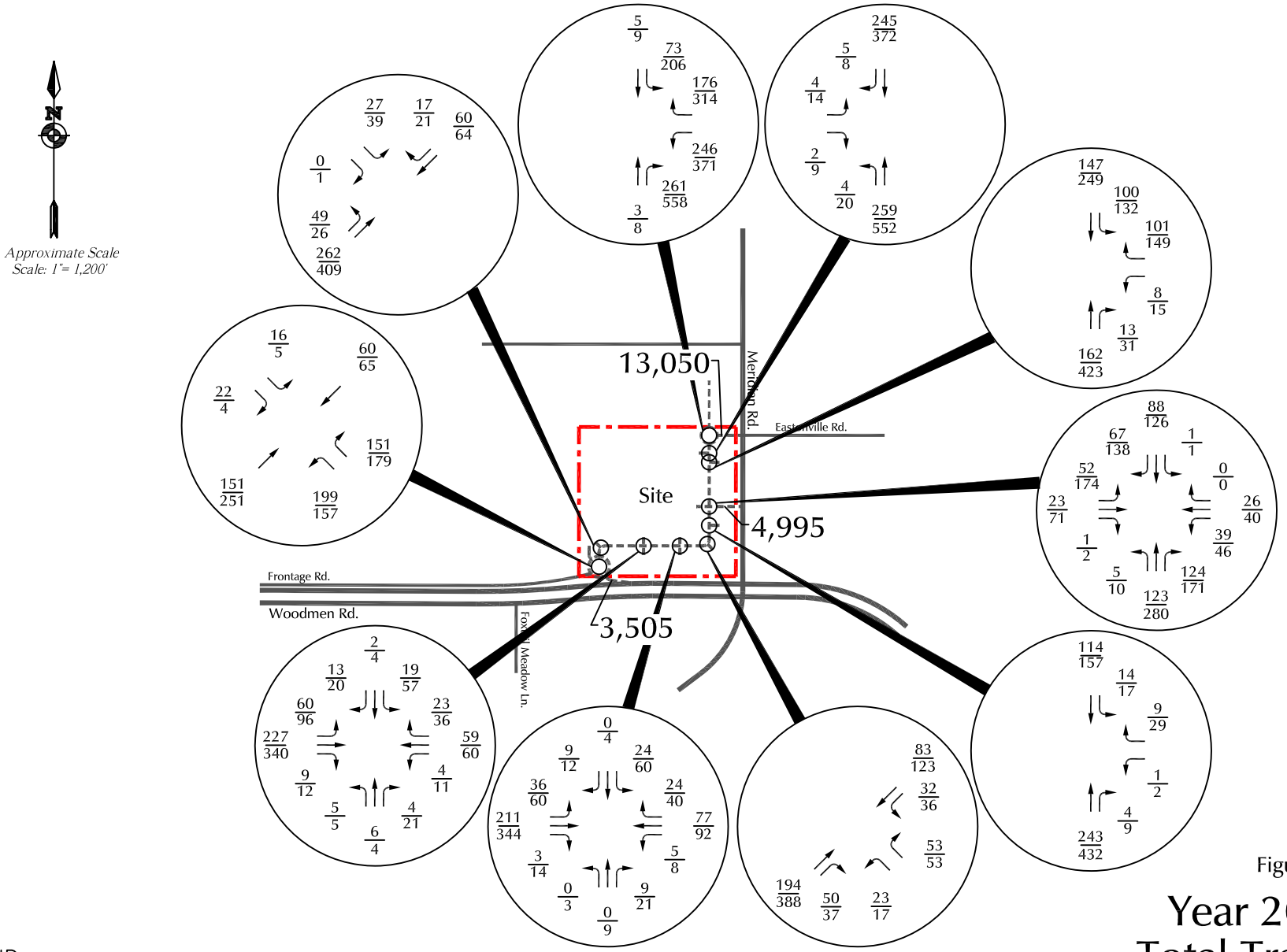
Year 2040 Total Traffic With Proposed Right-In Access

Falcon Marketplace (LSC #164350)

LEGEND:

$\frac{XX}{XX}$ = $\frac{\text{AM Weekday Peak-Hour Traffic (vehicles per hour)}}{\text{PM Weekday Peak-Hour Traffic (vehicles per hour)}}$

XXX = Average Weekday Traffic (vehicles per day) Estimated by LSC



LEGEND:

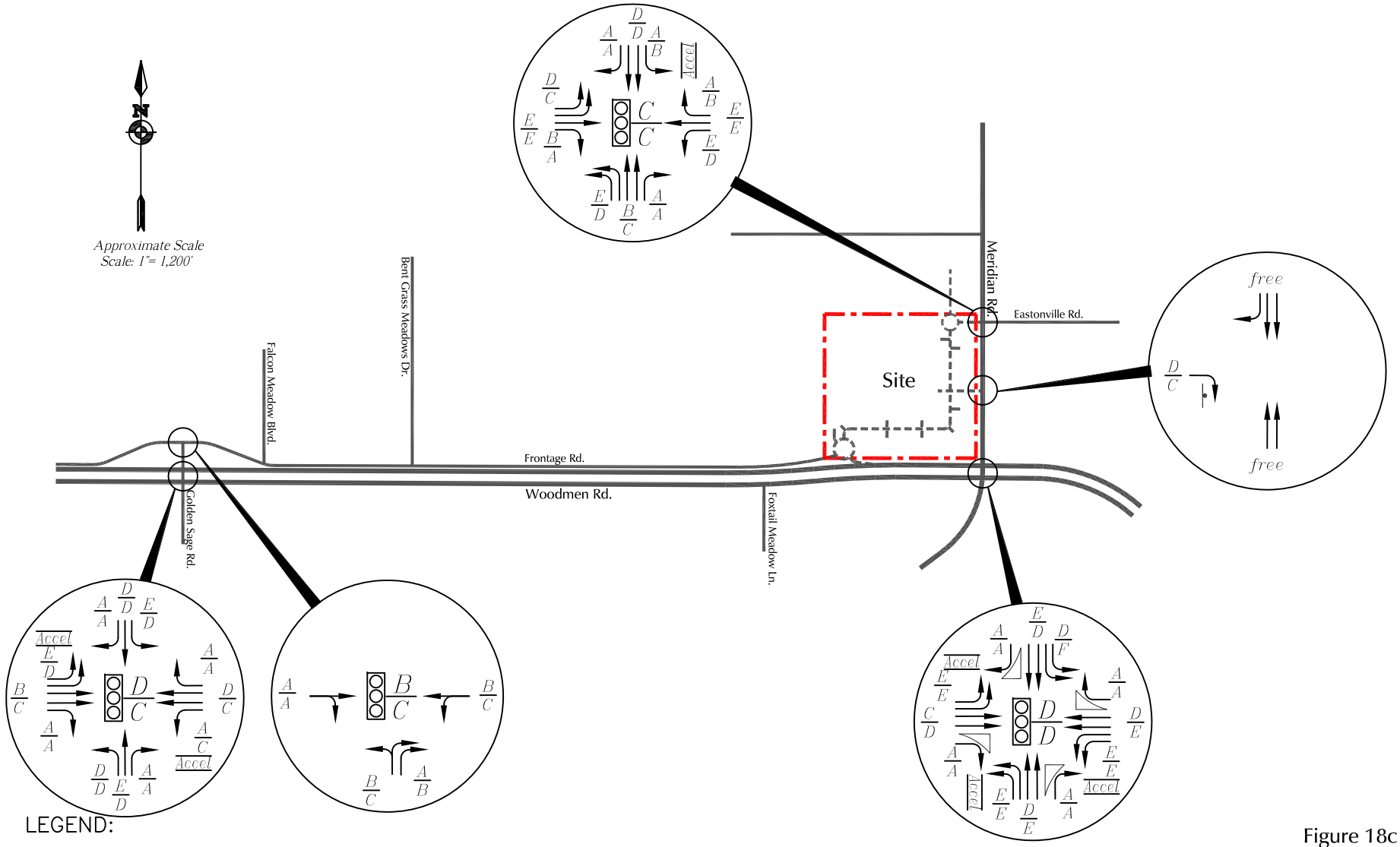
$\frac{XX}{XX}$ = AM Weekday Peak–Hour Traffic (vehicles per hour) / PM Weekday Peak–Hour Traffic (vehicles per hour)

XXX = Average Weekday Traffic (vehicles per day) Estimated by LSC

Figure 18b

Year 2040 Total Traffic With Proposed Right-In Access

Falcon Marketplace (LSC #164350)



LEGEND:

= Stop Sign

= Traffic Signal

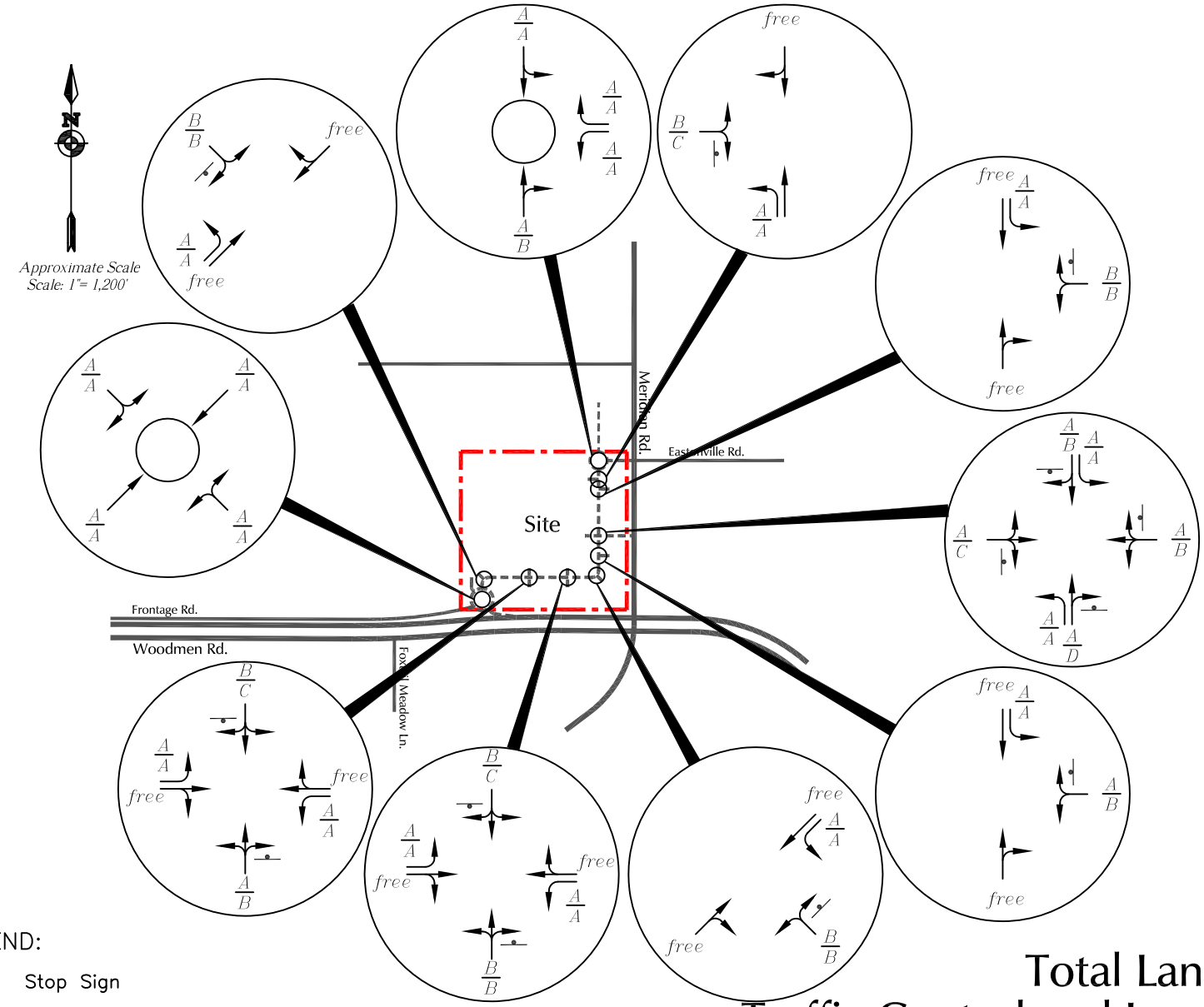
$\frac{A}{B}$ = AM Individual Movement Peak–Hour Level of Service / PM Individual Movement Peak–Hour Level of Service

$\frac{C}{D}$ = AM Entire Intersection Peak–Hour Level of Service / PM Entire Intersection Peak–Hour Level of Service

Figure 18c

Year 2040 Total Lane Geometry, Traffic Control and Levels of Service With Proposed Right-In Access

Falcon Marketplace (LSC #164350)



LEGEND:

= Stop Sign

= Modern Roundabout

$\frac{A}{B}$ = AM Individual Movement Peak–Hour Level of Service / PM Individual Movement Peak–Hour Level of Service

Figure 18d

Year 2040 Total Lane Geometry, Traffic Control and Levels of Service With Proposed Right-In Access

Falcon Marketplace (LSC #164350)

CHAPTER 6

Traffic Operations Analysis

PROJECTED LEVELS OF SERVICE

Intersection Levels of Service

The key area intersections were analyzed to determine the projected levels of service for the short-term and 2040 total traffic volumes with and without the proposed right-in-only access from Woodmen Road. Figures 6b, 7b, 8b, 9b, 15b, 16b, 17c, 17d, 18c, and 18d show the level of service analysis results. The signalized intersections were analyzed using Synchro. The right-in/right-out-only access point to Meridian Road was analyzed using SimTraffic simulations to better analyze the operational effects of adjacent signal-controlled intersections. The proposed access points to the internal public road were analyzed based on the unsignalized method of analysis procedures found in the *Highway Capacity Manual, 6th Edition* by the Transportation Research Board. The level of service (LOS) reports are attached. Tables 3 and 4 show the projected level of service, delay, and volume-to-capacity ratio for movements projected to operate below a LOS D based on the short-term and 2040 total traffic volumes, respectively.

Table 3
Short-Term Total Traffic Level of Service E Movements
Falcon Marketplace

Intersection Movement	AM Volume	AM LOS	AM Delay	AM V/C	PM Volume	PM LOS	PM Delay	PM V/C
Without Proposed Right-in Access to Woodmen Road								
Woodmen Road/Meridian Road								
Eastbound Left	293	D	47.4	0.59	623	D	54.3	0.85
Westbound Left	100	D	52.4	0.37	150	E	57.1	0.52
Northbound Left	150	D	48.9	0.42	175	D	54.0	0.51
Southbound Left	241	D	49.0	0.56	225	E	66.9	0.75
Overall	**- - -**	**C**	**28.4**	**- - -**	**- - -**	**D**	**38.2**	**- - -**
With Proposed Right-in Access to Woodmen Road								
Woodmen Road/Meridian Road								
Eastbound Left	297	D	50.1	0.62	633	E	56.8	0.86
Westbound Left	100	D	54.8	0.39	150	E	58.6	0.53
Northbound Left	212	D	53.6	0.57	279	E	63.2	0.75
Southbound Left	241	D	51.8	0.58	225	E	69.2	0.76
Overall	**- - -**	**C**	**30.6**	**- - -**	**- - -**	**D**	**39.9**	**- - -**

Source: LSC Transportation Consultants, Inc.

Table 4
2040 Projected Total Traffic Level of Service E and F Movements
Falcon Marketplace

Intersection Movement	AM Volume	AM LOS	AM Delay	AM V/C	PM Volume	PM LOS	PM Delay	PM V/C
Scenario: Without Proposed Right-in Access to Woodmen Road								
Woodmen Road/Meridian Road								
Eastbound Left	468	E	70.1	0.90	775	E	73.7	0.98
Westbound Left	150	E	55.1	0.46	225	E	60.2	0.64
Westbound Through	804	D	48.1	0.83	561	E	58.8	0.84
Northbound Left	250	E	61.4	0.69	350	D	54.9	0.69
Northbound Through	422	D	38.6	0.46	1008	F(1)	103.4	1.10
Southbound Left	294	D	54.1	0.63	483	F	80.5	0.96
Southbound Through	941	D	54.4	0.92	704	D	48.1	0.77
Overall	**- - -**	**D**	**37.4**	**- - -**	**- - -**	**D**	**53.2**	**- - -**
Eastonville Road/Meridian Road								
Eastbound Through	73	E	54.9	0.45	197	E	56.1	0.68
Westbound Left	250	E	61.8	0.82	200	D	47.0	0.72
Westbound Through	113	E	55.9	0.50	136	E	55.7	0.57
Northbound Left	387	E	70.3	0.87	644	F(2)	106.7	1.09
Overall	**- - -**	**D**	**38.2**	**- - -**	**- - -**	**D**	**40.0**	**- - -**
Woodmen Road/Golden Sage Rd								
Eastbound Left	422	E	79.2	0.94	404	D	50.3	0.72
Northbound Through	19	E	56.4	0.17	39	D	52.8	0.26
Southbound Left	251	E	63.9	0.73	191	D	53.2	0.69
Southbound Through	21	D	52.7	0.15	26	D	53.1	0.19
Overall	**- - -**	**D**	**38.6**	**- - -**	**- - -**	**C**	**24.6**	**- - -**
Scenario: With Proposed Right-in Access to Woodmen Road								
Woodmen Road/Meridian Road								
Eastbound Left	472	E	74.5	0.92	785	E	78.0	1.00
Westbound Left	150	E	55.7	0.47	225	E	60.4	0.64
Westbound Through	884	D	53.5	0.90	665	E	77.9	0.98
Northbound Left	328	E	78.3	0.89	465	E	60.4	0.82
Northbound Through	344	D	37.5	0.37	893	E	69.7	0.98
Southbound Left	294	D	54.9	0.64	483	F	81.7	0.96
Southbound Through	941	E	55.9	0.93	704	D	53.0	0.83
Overall	**- - -**	**D**	**40.3**	**- - -**	**- - -**	**D**	**50.8**	**- - -**
Eastonville Road/Meridian Road								
Eastbound Through	73	E	59.3	0.45	197	E	55.6	0.67
Westbound Left	250	E	61.4	0.82	200	D	46.3	0.71
Westbound Through	113	E	55.8	0.50	136	E	55.6	0.56
Northbound Left	222	E	62.5	0.69	415	D	54.5	0.76
Overall	**- - -**	**C**	**33.9**	**- - -**	**- - -**	**C**	**32.4**	**- - -**
Woodmen Road/Golden Sage Rd								
Eastbound Left	418	E	77.7	0.93	394	D	50.1	0.71
Northbound Through	19	E	56.4	0.17	39	D	52.9	0.26
Southbound Left	251	E	63.9	0.73	191	D	53.5	0.70
Southbound Through	21	D	52.7	0.15	26	D	53.2	0.19
Overall	**- - -**	**D**	**39.4**	**- - -**	**- - -**	**C**	**24.7**	**- - -**

Notes:

(1) Volume exceeds capacity. Staff requested a comparison with three northbound through lanes. Assuming three through lanes, the projected delay for the northbound through movement is 46.5 s (LOS D).

(2) Volume exceeds capacity - queuing analysis indicates queues will overspill the left turn lane into the adjacent through lane.

Source: LSC Transportation Consultants, Inc.

Woodmen/Meridian

The intersection of Woodmen/Meridian is projected to operate at an overall level of service (LOS) D or better based on the short-term and 2040 total traffic volumes with and without the proposed right-in-only access from Woodmen Road.

The eastbound left-turn movement at the Woodmen Road/Meridian Road intersection currently operates at LOS D. Given the high existing and projected background traffic demand for this turning movement, it is projected to operate at LOS E during the afternoon peak hour by 2040. Important note: This condition has little to do with this site, rather it is primarily due to the background traffic demand. The northbound left-turn movement is projected to operate at LOS E during the morning and LOS D during the afternoon peak hour assuming no access to Woodmen. The northbound left-turn movement is projected to operate at LOS E during both the morning and afternoon peak hours assuming the right-in access. The northbound through movement is projected to operate at LOS F during the 2040 afternoon peak hour assuming no site access to Woodmen (with the current two northbound through lanes). The northbound through movement is projected to operate at LOS E during the afternoon peak hour based on the projected 2040 total traffic volumes **with** the proposed right-in-only access. A comparison with **three** northbound through lanes (instead of two) on this intersection approach has also been included in this report for the without-the-right-in-off-of-Woodmen scenario as required by staff. Analysis results with an additional northbound through lane indicate improvement from LOS F to LOS E for this approach. However, the implementation of three through lanes at this one intersection in advance of an overall project to convert Meridian Road from a four to six-lane arterial would involve significant cost for improvements at this intersection and to the north to create three-northbound "receiving" lanes and a merge lane back to two northbound through lanes. Moreover, from an operational standpoint, although a third through lane would add capacity at the intersection, this would introduce a potentially confusing and awkward "lane-add" followed by a lane reduction/merge just downstream to the north.

Meridian/Eastonville

The intersection of Meridian/Eastonville was assumed to be signalized once the site is built out. As a signalized intersection, it is projected to operate at an overall LOS C or better based on the short-term volumes with or without the proposed right-in-only access from Woodmen Road. By 2040, the northbound left-turn movement is projected to operate at LOS E during the morning peak hour and LOS F during the afternoon peak hour without the proposed right-in-only access from Woodmen Road. This movement is projected to operate at LOS E during the morning peak hour and LOS D during the afternoon peak hour based on the projected 2040 total traffic volumes with the proposed right-in-only access.

Meridian/Right-In/Right-Out-Only Site Access

The exiting (eastbound) right-turn movement at the proposed right-in/right-out access to Meridian Road is projected to operate at LOS D or better during the morning peak hour based on the projected short-term and 2040 total traffic volumes with and without access to Woodmen Road. The afternoon peak-hour projected LOS is C under either scenario.

Woodmen Frontage Road Intersections

The southbound (exiting) approaches to the access point intersections for Mountain View Electric and the Courtyards at Woodmen Hills to the Woodmen Frontage Road are projected to operate at LOS A or B based on projected total 2040 traffic.

Roundabout Level of Service

The **southwest roundabout** has been analyzed for level of service using three different methods—HCM, Rodel, and SimTraffic. All methods indicate level of service A for all approaches during the peak hours based on 2040 volumes. The southwest roundabout has been analyzed in more detail in this Woodmen Road Driveway Permit report to address the comments on the August 7, 2017 version of the report.

The **Eastonville roundabout** in the northeast part of the site has been analyzed using the HCM method of analysis and the results are shown in the figures. A second analysis using Rodel will be included with the resubmittal of the Preliminary Plan or with the Plat.

Internal Public Road Intersections

All of the access points to the internal public road (which is planned to extend from the proposed roundabout at the existing terminus of the Woodmen Frontage Road to the proposed roundabout at Eastonville Road) are planned to be two-way stop-sign-controlled intersections. The exception is the intersection that will align with the proposed right-in/right-out intersection to Meridian Road. This intersection is shown as all-way, stop-sign-controlled. All movements at the two-way, stop-sign-controlled intersections are projected to operate at LOS C or better based on the 2040 total traffic volumes with or without the proposed right-in access to Woodmen Road. The northbound and southbound through movements at the proposed all-way, stop-sign-controlled intersection are projected to operate at LOS D or better based on the 2040 total traffic volumes **with** the proposed right-in-only access. The northbound through movement is projected to operate at LOS E and the southbound through movement is projected to operate at **LOS F** based on the 2040 afternoon peak hour **without the proposed right-in access** to Woodmen Road.

All movements at the proposed roundabouts at the terminus of the Woodmen Frontage Road and at the intersection of the internal public road and Eastonville Road are projected to operate at LOS B or better during the peak hours based on the projected 2040 total traffic volumes with and without the proposed right-in-only access to Woodmen Road.

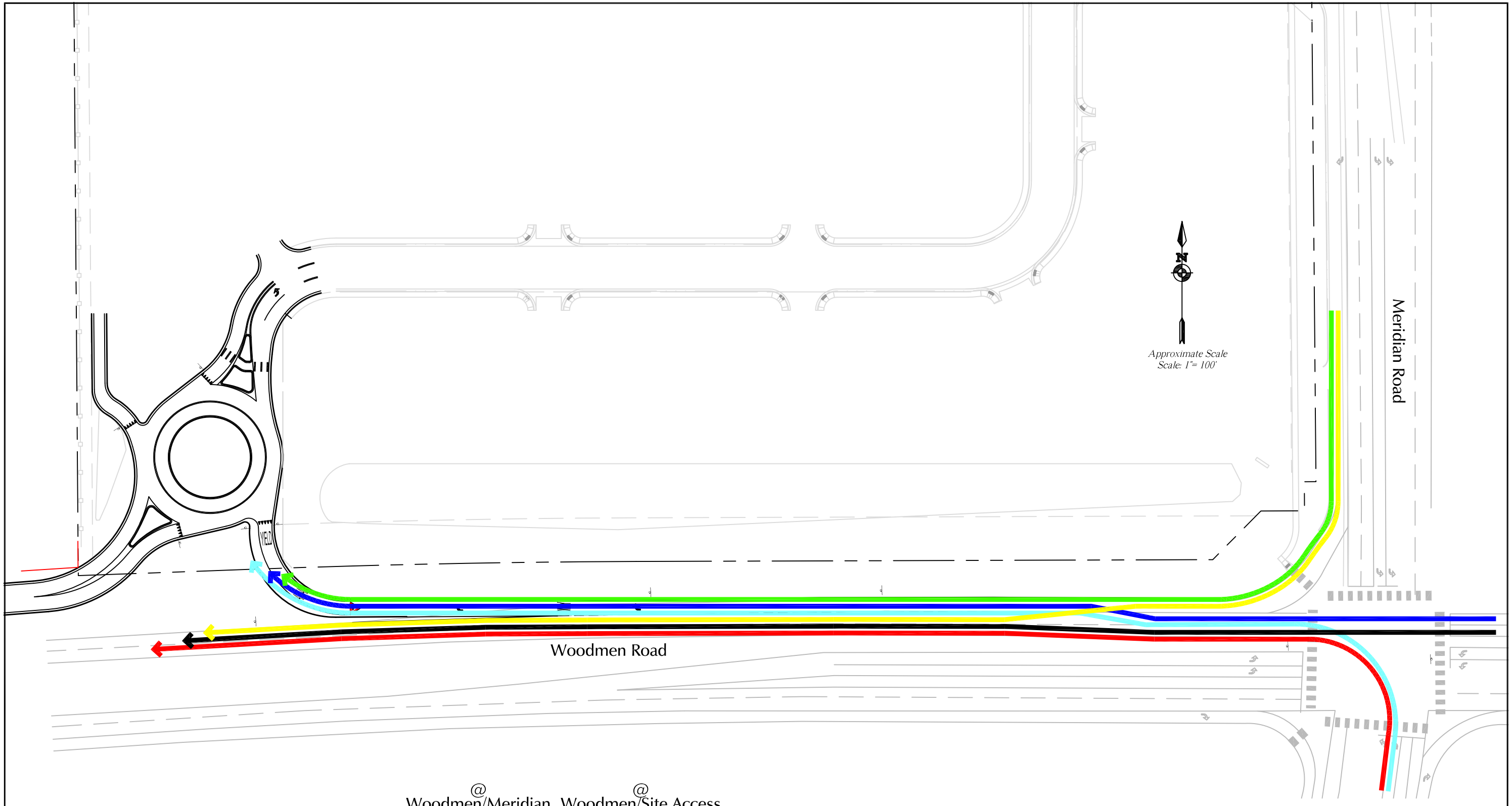
Weaving Section Level of Service

A weaving level of service analysis has been completed for the section of westbound Woodmen Road between the Meridian Road intersection and the proposed right-in-only site access. This section has been analyzed as a Type A weaving segment in order to determine the projected weaving area levels of service based on the freeway weaving operational method of analysis procedures from the *Highway Capacity Manual, 2010 Edition*. Table 5 shows a summary of the weaving movement volumes by zone and Figure 19 shows the path for each weaving movement. The weaving LOS reports are attached.

This weaving segment is projected to operate at LOS C during the morning peak hour and LOS B during the afternoon peak hour based on the projected future total traffic volumes. Note: This weaving segment would not operate as bona fide freeway weaving areas per the *Highway Capacity Manual, 2010 Edition* due to several operational and geometric differences between an urbanized corridor with intersections and traffic signals and a true freeway weaving section.

The following has been added since the previous version of the report to address staff comments regarding "*any potential real-world issues not anticipated by the modeling*."

Replace Table 5?



		@ Woodmen/Meridian	@ Woodmen/Site Access
R-R	=	SB RT	WB RT
F-R (LT)	=	NB LT	WB RT
F-R (TH)	=	WB TH	WB RT
R-F	=	SB RT	WB TH
F-F (TH)	=	WB TH	WB TH
F-F (LT)	=	NB LT	WB TH

Note: Please refer to Table 5 for peak hour volumes.

Figure 19

Weaving and Non-Weaving Movements

Falcon Marketplace (LSC #164350)

LSC TRANSPORTATION CONSULTANTS, INC.

The southbound right turn at the Woodmen/Meridian intersection is currently a channelized "free" right turn. There is no signal control or Stop/Yield control for this movement as vehicles are channelized into the westbound acceleration lane on Woodmen Road. The configuration of this free-right into the acceleration/deceleration lane (with the addition of the right-in access) has been simulated using SimTraffic in addition to the weaving section on Woodmen Road, which has been modeled using the HCM weaving procedures. This is because there is no traffic control (Yield, Stop, or signal control) for this movement and the plan does propose to change this condition. There will be future pedestrian ramps from the raised island to the inside curb radius to allow pedestrians to cross. There will likely be occasional pedestrians at this location, but the pedestrian volume will likely be low. Pedestrians have the potential to momentarily stop the flow of southbound right-turning traffic. The modeling of the "free right" in SimTraffic does not allow for the modeling of crossing pedestrians. However, observations at similar free-right conditions at other intersections in the Pikes Peak region indicate that pedestrians typically must wait for a gap in the right-turning traffic stream to cross because motorists using free right turns will most often not yield to pedestrians.

The simulation does not indicate that drivers will likely stop at the corner at the entry to the acceleration lane when there is a platoon of westbound traffic entering the weaving area on Woodmen Road (once the signal releases westbound through traffic). The phenomenon of right-turning motorists stopping to wait even when there is an acceleration lane is often the case at intersections on urban arterial streets at signalized intersections. That said, field observations at this particular location indicate a low relative percentage of motorists stopping to wait in this situation. This is likely because of several factors unique to this location—the relatively large radius, a raised/curbed right-turn island, and relatively long acceleration lane. Also, unlike many locations in the Pikes Peak region, there is not another intersection a short distance downstream west on Woodmen Road. The next intersection with a westbound left turn is Golden Sage, which is 1.3 miles to the west.

Should southbound right-turning motorists pause at the entry to the acceleration/deceleration lane for either an occasional pedestrian or to allow passage of a platoon of vehicles on westbound Woodmen Road, there is the potential for a queue to form to the north in the southbound right-turn deceleration lane. Such a queue is not reflected in the SimTraffic simulation as this was appropriately modeled as a free right. Should the occasional queue form, it would most likely occur when southbound through traffic at the Meridian/Woodmen intersection is stopped at the red signal, arriving vehicles from the north will be slowing, and queues will be forming in the southbound through lanes of Meridian Road as well. Once the westbound Woodmen platoon of traffic clears the merge area, any southbound right-turn queue will begin to clear and will clear completely with the southbound through green signal at Woodmen/Meridian (if not before).

The weaving analysis was completed using the HCM weaving analysis procedures. These do not assume upstream traffic signals as is commonly the case of weaving areas on urban arterials. In this particular situation,

- No weaving will occur during the north/south green signal phase for Meridian Road as no vehicles will enter the weaving section.

- During the eastbound left-turn phase (which is a relatively long phase), there will be very minimal weaving as only the occasional U-turning vehicle from the eastbound Woodmen left-turn lanes will

enter the weaving area. These U-turning vehicles will also be entering the weaving area at a slow speed after having executed a U-turn.

- During the northbound left-turn phase, vehicles will enter the weaving area from northbound Meridian Road. These vehicles will enter the weaving area at a speed comparable to the southbound right-turning traffic rather than 45 to 50 mph. This will allow for acceptance of shorter gaps for weaving and merging.

- Shortly after the start of the westbound through green phase, a platoon of westbound Woodmen traffic will enter the weaving area. The first part of this platoon will not be traveling 45 or 50 mph as these vehicles will be accelerating from a stop condition. Once westbound traffic reaches saturation flow, the remainder of the vehicles released by the signal from the westbound approach will enter the merge area at higher-than-startup speeds.

VEHICLE QUEUING ANALYSIS

A queuing analysis was performed using Synchro/SimTraffic for the key approach turning movements at the study area intersections to determine the projected queue lengths based on the projected total traffic volumes. The short-term and 2040 total peak-hour traffic volumes with and without the proposed right-in-only access were entered into the Synchro model. The simulation was run five times. The queuing reports are attached. These queuing results have been used to develop auxiliary turn lane recommendations. The results of the analysis are shown in Table 6.

Roundabout Queuing Analysis

The **southwest roundabout** has been analyzed for queuing using three different methods—HCM, Rodel, and SimTraffic. The southwest roundabout has been analyzed in more detail in this report for the Woodmen Road Driveway Permit to address the comments on the May 15, 2017 version of the report. All methods indicate short queues for all approaches during the peak hours based on 2040 volumes. The most important queue length is the one on Approach 2—the right-in from Woodmen Road. The HCM analysis reports indicate 95th percentile queue length of one vehicle during the morning peak hour and two vehicles during the afternoon peak hour. The Rodel analysis reports indicate queue lengths of 1.31 vehicles during the morning peak hour and 1.34 vehicles during the afternoon peak hour. The SimTraffic analysis indicates a maximum queue of 102 feet during the morning peak hour and 119 feet during the afternoon peak hour. The simulation shows this to be more of a "rolling" queue that quickly shortens from the maximum reported length.

The **Eastonville roundabout** in the northeast part of the site has been analyzed for queuing using the HCM method of analysis and the results are shown in the HCM analysis printouts. Analysis using Rodel will be included with the resubmittal of the Preliminary Plan or with the Plat.

Table 6
Projected Queue Lengths
Falcon Marketplace

Intersection Movement	Lane Length	Projected Queue Lengths Short-Term Background Traffic Without Right-In AM	PM	Total Traffic Without Right-In AM	PM	With Right-In AM	PM	Lane Length	Projected Queue Lengths 2040 Total Traffic Without Right-In AM	PM	With Right-In AM	PM
Eastonville Road/Meridian Road												
Northbound Left	425'	58	59	357	415	128	174	425'	259	430[1]	148	236
Woodmen Road/Meridian Road												
Eastbound Left	500' dual section + 215' (single)	168	361	193	368	173	443	Modeled with sufficient length to determine needed length	382	865[2]	358	840
Westbound Left	435'	108	160	112	150	120	146	435'	129	177	217	318
Northbound Left	Modeled with sufficient length to determine needed length	142	140	139	163	162	220	Modeled with sufficient length to determine needed length	217	392	281	346
	315' dual section +145' Single	161	176	167	176	196	275	(400' dual section + 360' single)	243	929	307	391
Southbound Left	475'	147	137	151	152	184	202	475'	171	407	170	440
Woodmen Road/Golden Sage Road												
Eastbound Left	465'	90	107	122	149	108	145	465'	421	297	437	238

Notes:
(1) Projected queue exceeds future available storage length/capacity. The queue is projected to extend beyond the storage length about 21% of the time.
(2) Queue length shown assumes the queue for the northbound left-turn at Eastonville/Meridian does not impede eastbound left-turning vehicles from turning onto Meridian Road from Woodmen Road.

Source: LSC Transportation Consultants, Inc.

ROUNDABOUT DESIGN VEHICLE AND FASTEST PATH ANALYSIS

This report includes a detailed analysis of the truck turning movements, fastest-path, and geometry at the proposed southwest roundabout. This roundabout has been redesigned since the previous submittal to address staff comments. The roundabout geometric and operational analysis exhibits are attached. Complete roundabout analysis of the northeast/Eastonville roundabout will be included with the resubmittal of the Preliminary Plan or with the Plat.

The fastest-path analysis of the southwest roundabout indicates acceptable fastest-path speed on each of the four approaches at the proposed southwest roundabout.

TRAFFIC SIGNAL WARRANT ANALYSIS

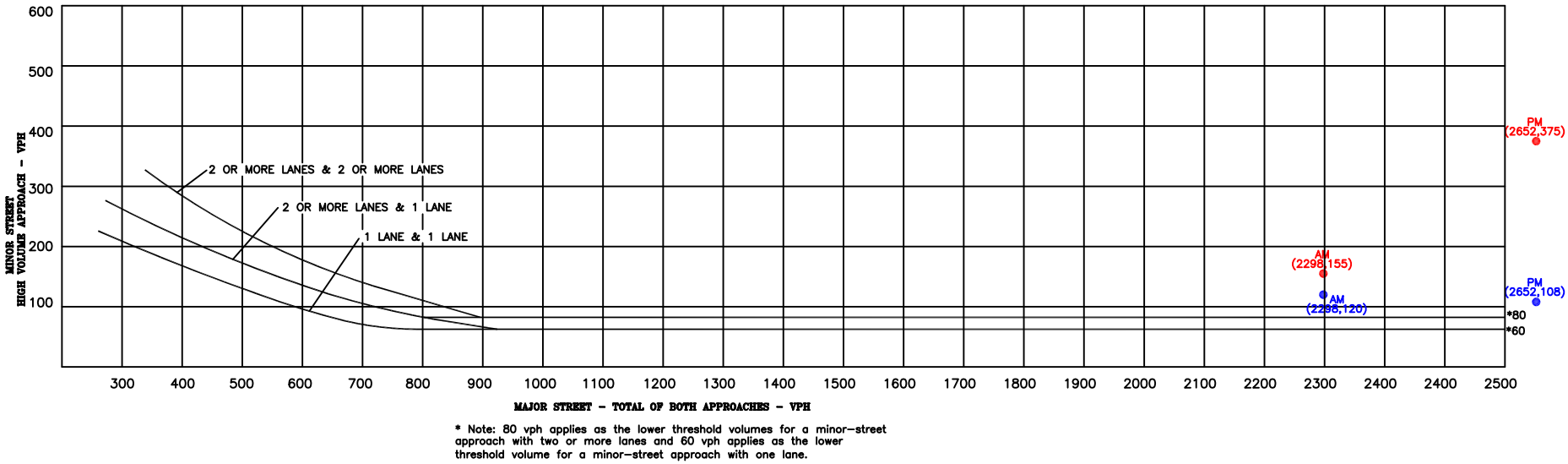
It is expected that a traffic signal would be warranted at the intersection of Eastonville Road and Meridian Road with the addition of the west leg of the intersection and traffic from this proposed development. Furthermore, the traffic signal was a condition to the 2008 BOCC rezoning of the property to Commercial Regional.

The intersection has been analyzed to determine if a Four-Hour Vehicular Volume Traffic Signal Warrant threshold would be reached or exceeded based on the projected short-term morning and afternoon peak-hour total traffic volumes. The results of the analysis are shown in Figure 20. The traffic volumes shown are based on the short-term total traffic volumes with the proposed right-in-only access to Woodmen Road shown in Figure 16a. As shown in Figure 20, the thresholds for a Four-Hour Vehicular Volume Traffic Signal Warrant are projected to be exceeded based on the morning and afternoon peak hours. This analysis using the peak hours is intended to provide an indication that a warrant may be met or is close to being met. For a Four-Hour Traffic Signal Warrant to be satisfied, the volume threshold would need to be met for two additional hours of the day. For example, the four-hour warrant would be satisfied with the volume thresholds met for one hour in the morning, two hours (instead of the one-hour peak) during the afternoon peak period, and an hour during the mid-afternoon. Based on this analysis and our experience, it is likely that the volume thresholds would be met or exceeded for at least two additional hours of the day.

Eastonville Rd./Meridian Rd. Short-Term Total Traffic (with proposed right-in access)

Figure 4C-2. Warrant 2, Four-Hour (70% Factor)

(Community Less than 10,000 population or above 40 mph on Major Street)



* Note: 80 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

LEGEND:

- = East Leg (left-turn and through vehicles only) without proposed right-in access
- = West Leg (left-turn and through vehicles only) without proposed right-in access

Figure 20

Traffic Signal Warrant Analysis

Falcon Marketplace (LSC #164350)

CHAPTER 7

Comparison of Analysis Scenarios

MERIDIAN/EASTONVILLE INTERSECTION OPERATIONS

The comparison between the two analysis scenarios (with and without the proposed site access from Woodmen) with respect to operations at the Meridian/Eastonville intersection shows significantly better operations with the scenario that includes the proposed Woodmen access in combination with the proposed roundabout. This is because without the Woodmen access and the ability to enter the site from a second adjacent roadway (Woodmen Road), the northbound left-turn volume at Eastonville/Meridian would be significantly higher. **The northbound left turn at this intersection is projected to operate at LOS F during the afternoon peak hour without the right-in from Woodmen and LOS D during the afternoon peak hour with the right-in from Woodmen with the roundabout.** Another point is that the roundabout is projected to reduce the northbound left-turn delay by about five seconds per vehicle at the Meridian/Eastonville intersection during the afternoon peak hour over the previous configuration without the roundabout. This difference is significant. Without the right-in, additional northbound left-turn green signal phase time would be needed to adequately serve this left-turn demand and prevent queues from overflowing the northbound left-turn lane. This would negatively impact the intersection overall by reducing the allocation of southbound through green signal time. Creating this situation is unnecessary because with the addition of the proposed Woodmen access, motorists arriving from the east on Woodmen Road and from the south from Meridian Road (including the significant component of traffic arriving from eastbound US Highway 24 in the afternoon peak hour) would have the additional option of entering using the proposed Woodmen access instead of the single option of the access at Meridian/Eastonville via the northbound left turn at this intersection. The addition of the right-in-only with the roundabout would remove **background** traffic volumes of about 40 morning peak-hour trips and 70 afternoon peak-hour trips from the Meridian/Eastonville intersection (specifically the projected heavy northbound left-turn movement). In addition to these background traffic reductions, the site traffic component of this northbound left turn would be reduced by 112 morning peak-hour trips and 160 afternoon peak-hour trips.

The northbound left-turn queue would be significantly longer under the no-Woodmen-access scenario. The projected maximum 2040 afternoon peak-hour northbound left-turn queue is projected to be 236 feet under the with-right-in from Woodmen scenario. Without the right-in from Woodmen the projected maximum queue would fill the dual left-turn lanes (457-foot queue within the lanes) and would overspill into the adjacent northbound through lane during the peak analysis interval) unless the lanes are lengthened. Any significant lengthening would reduce the storage length of the southbound left turn lane for the Woodmen/Meridian intersection to the south as this northbound left turn lane is "back-to-back" with the southbound left turn lane at the Woodmen/Meridian intersection. There is a shared transition taper for both lanes and any lengthening would require either shortening the shared taper and/or shortening of that southbound left turn lane at Woodmen/Meridian (likely both).

The lower northbound left-turn movement volume at Meridian/Eastonville under the proposed access-to-Woodmen scenario would likely allow the option to operate the northbound left-turn movement as a protected-permissive phase single left-turn movement for a significantly longer period, if not in perpetuity. This type of left-turn movement can often operate more efficiently and with less delay than

protected-only dual left-turn lanes, especially when considering off-peak hours or most hours in a day and on weekends. The specific phasing and operation of the turn movement would be up to El Paso County, but a northbound left turn with a significantly reduced volume will likely allow for greater flexibility for better traffic operations.

MERIDIAN/WOODMEN INTERSECTION OPERATIONS

The eastbound left-turn movement at this intersection is projected to operate at LOS E during the 2040 peak hours with or without this development (due to background traffic). **However, the addition of the access from westbound Woodmen Road would improve overall operations at this intersection. This is because the addition of the proposed Woodmen access would allow the option for use of the existing dual left-turn lanes and a shift in approaching traffic from the adjacent high (critical) volume northbound through lanes into the adjacent dual left-turn lanes**. This will be especially helpful during the afternoon peak hour. Although the overall intersection delays shown in the table are comparable, the analysis shows failure of the northbound through movement.

A comparison with **three** northbound through lanes (instead of the current two through lanes) on this intersection approach has also been included in this report as required by staff. Analysis results with an additional northbound through lane indicate improvement from LOS F to LOS E for this approach. However, the implementation of three through lanes at this one intersection in advance of an overall project to convert Meridian Road from a four to six-lane arterial would involve significant cost for improvements at this intersection and to the north to create three-northbound "receiving" lanes and a merge lane back to two northbound through lanes. Moreover, from an operational standpoint, although a third through lane would add capacity at the intersection, this would introduce a potentially confusing and awkward "lane-add" followed by a lane reduction/merge just downstream to the north.

Although the overall intersection delays are comparable at Meridian/Woodmen, consideration also needs to be given to the significantly higher travel time for site and background motorists that would use the right-in access, if provided (see paragraph below entitled "Woodmen Frontage Road Access." The right-in will significantly reduce travel times for motorists who would use it.

The afternoon peak-hour northbound through movement level of service would improve to LOS E (with a non-failing volume-to-capacity ratio) with the addition of the right-in-only from Woodmen and the roundabout. This is significant as a heavy afternoon northbound through volume is projected with the Meridian connection to US 24.

WOODMEN ROAD OPERATIONS

The proposed Woodmen access will have little effect on the operation of Woodmen Road as the turning movements will be right-turn in-only from westbound Woodmen Road with a continuous acceleration/ deceleration lane between Meridian and the point of right-turn entry into the site. This site is within the commercial "node" of Falcon and an access at the proposed location would not be unexpected.

WOODMEN FRONTAGE ROAD ACCESS

The right-in-only access with the proposed roundabout intersection with the Woodmen Frontage Road would also significantly improve access to the properties to the west along the Woodmen Frontage Road. This represents a **significant change** from the previous right-in-only access configuration. The prior right-in-only access would have essentially served only this site due to its configuration as there was no public access from the previously proposed right-in-only to the Woodmen Frontage Road. The previously proposed right-in-only was configured to direct traffic from westbound Woodmen north into the site only with no option for access for westbound travel to residential and non-residential properties along the Woodmen Frontage Road.

The addition of the roundabout intersection in the southwest corner of the site within to-be-dedicated public right-of-way is a significant change as it now allows for public access from westbound Woodmen Road to the Woodmen Frontage Road and properties along the North Frontage Road. The proposed roundabout allows for this access to the west for passenger vehicles, trucks, buses, and fire and emergency response vehicles. This accommodation will significantly improve the access to the Courtyards, MVEA (and other properties), which currently have poor access. With this proposed right-in-only access, residents, employees and other motorists traveling to these properties from westbound Woodmen or northbound Meridian (many traveling from eastbound US Highway 24) will no longer need to travel west for more than a mile along Woodmen Road to the Golden Sage/Woodmen intersection and backtrack along the Woodmen Frontage Road (or travel north to Eastonville/Meridian to turn left at this intersection and travel through the Falcon Marketplace site) to access their destinations. **This would significantly reduce travel times and emergency response times.**

The proposed right-in-only with the roundabout would also benefit operations at the Woodmen/Golden Sage and Woodmen Frontage Road/Golden Sage intersection by removing existing and future traffic turning movements from these closely spaced intersections. The addition of the right-in-only combined with the roundabout would remove **background** traffic volumes of about 70 morning peak-hour trips and 30 afternoon peak-hour trips from **both** the Woodmen/Golden Sage and Woodmen Frontage Road/ Golden Sage intersections

CHAPTER 8

Recommended Improvements

The following highlights the anticipated study area roadway and intersection improvement due to a combination of existing deficiencies, future background traffic and projected site traffic. A list of all improvements in the vicinity and assessment of responsibility is presented in Tables 7a and 7b. Table 7a shows improvements assuming no access to Woodmen Road (improvement locations are shown in Figures 21a and 21b). Table 7b shows the improvements assuming the proposed right-in access to Woodmen Road (improvement locations are shown in Figures 22a and 22b).

Table 7a
Falcon Marketplace
Roadway Improvements Without Proposed Right-In Access to Woodmen Road

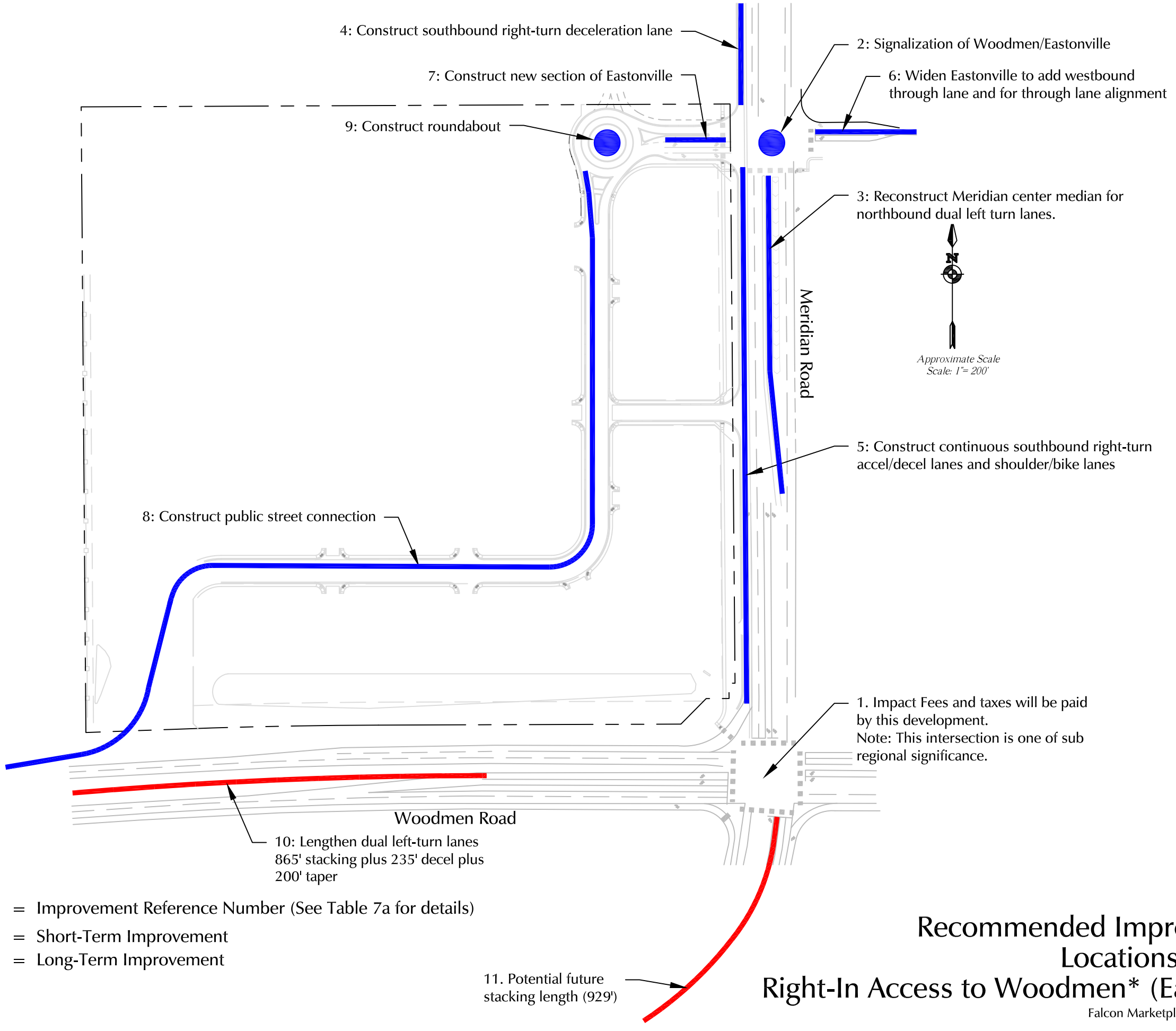
Item #	Improvement	Timing	Responsibility
	Countywide Road Impact Fee Program Fees and Taxes		
1	Woodmen Road Metropolitan District fees and taxes to be paid in lieu of Countywide Road Impact Fee Program fees and taxes. Woodmen Road has already been completed, but this project iss joining the district.	District fees payable at platting	Falcon Marketplace
	Meridian/Eastonville and Merician Right-In/Right-Out Intersections		
2	Signalization of Meridian Road/Eastonville Road intersection.	Design and installation with the development of Falcon Marketplace once allowed by El Paso County.	Falcon Marketplace
3	Reconstruction of the Meridian center median south of Eastonville Road to achieve major street left-turn sight distance for the option of northbound/southbound interim protected/permissive left-turn signal phasing with interim single left-turn lanes northbound and southbound and to accommodate northbound dual left-turn lanes through restriping once needed. This lane should be 425 feet long plus a 200-foot taper. The taper would be back-to-back with the southbound dual left-turn taper.	Design and installation with the development of Falcon Marketplace.	Falcon Marketplace
4	Southbound right-turn deceleration lane on Meridian Road approaching Eastonville Road. This lane should be 235 feet long plus a 200-foot taper.	Design and installation with the develoment of Falcon Marketplace.	Falcon Marketplace
5	Design and construction of continuous southbound right-turn lanes and shoulder/bike lane on Meridian Road from Eastonville Road south to the proposed right-in/right-out and from the right-in/right-out south to Woodmen Road.	Design and installation with the develoment of Falcon Marketplace.	Falcon Marketplace
6	Widening of Eastonville Road east of Meridian Road to add a westbound through lane. Width would also be added as feasible between the westbound left-turn lane and the westbound through lane due to the proposed dual left-turn lanes on the west side of the intersection. This added width would allow for through lane alignment (with an acceptable offset across the intersection).	Design and installation with the development of Falcon Marketplace. Extent of this off-site improvement may be limited by available right-of-way and/or other existing constraints.	Falcon Marketplace
7	Design and construction of the proposed extension of Eastonville Road between Meridian and the proposed roundabout.	Design and installation with the develoment of Falcon Marketplace.	Falcon Marketplace
	On-Site Improvements		
8	Design and construction of the public street connection through the site (Falcon Market Place).	Design and installation with the development of Falcon Marketplace.	Falcon Marketplace
9	Design and construction of the proposed roundabout on-site west of the Meridian/Eastonville intersection. This would include a “stub” to the north for the anticipated future street connection north to Bent Grass Meadows Drive.	Design and installation with the develoment of Falcon Marketplace.	Falcon Marketplace
	Woodmen/Meridian Intersection		
10	**Woodmen eastbound dual left-turn lanes**. This lane should be extended to provide a total of 865 feet of storage plus 235' deceleration length and a 200' taper.	Future extension of existing dual left-turn lanes once traffic queues regularly extend beyond the 480-foot stacking distance.	Falcon Marketplace will consent to inclusion in a special improvement district comprising properties benefited by this improvement and will pay its pro-rata share (based on total traffic volumes) of the cost of the improvements.
11	**Meridian northbound dual left-turn lanes** LONG TERM: Potentially additional growth in the Falcon Area and east along Falcon Highway will add left turning traffic demand. Long term estimated queue would be up to about 475 feet in the inside left turn lane. Therefore the potential long term need may be 475' of stacking distance plus the 235 feet of deceleration distance and the 200-foot taper.	Future (if necessary -- Add additional lane length to provide additional stacking if/when needed (as shown in Figure 28).	By other future developments impacting this turn lane. Potential for fee program credit for improvements completed as this is a regional intersection.
	Golden Sage Intersections		
12	Directional wayfinding sign(s) on eastbound Woodmen Road upstream of Golden Sage - notifying/reminding eastbound motorists of the option to enter Falcon Marketplace via the Woodmen Frontage Road.	Design and installation with the development of Falcon Marketplace.	Falcon Marketplace
13	Lengthening of the current eastbound single left-turn deceleration lane on Woodmen approaching Golden Sage Road to provide a 240-foot transition taper (20:1 taper ratio), 290 feet of deceleration distance plus sufficient vehicle stacking distance. CURRENT: 175-foot taper plus a 465-foot left-turn lane which translates to a 175-foot taper, 290-foot deceleration distance, and 175 feet of stacking distance. SHORT TERM: Adequate stacking is available in the current turn lane - calculated queue length 141'. LONG TERM: lengthen single left-turn lane and/or future implementation of dual left-turn lanes (if capacity needs dictate) to maintain 290 feet of deceleration length, a 240-foot lane taper (20:1 taper ratio) plus provide sufficient vehicle stacking length - model indicates 497 feet of dual left stacking distance based on morning peak hour projected volumes. If a dual left is implemented in the future, consideration will need to be given to the configuration on Golden Sage and at the Golden Sage/Woodmen Frontage Road intersection to receive the dual left-turn movement.	Short Term: The existing lane is adequate based on the short term analysis. Long Term: Future with additional development served by the north frontage road - extension of existing single left-turn lane and potentially widening in the median to provide dual left turn lanes to provide additional vehicle stacking distance as described in the column to the left.	Falcon Marketplace will consent to inclusion in a special improvement district comprising properties benefited by this improvement and will pay its pro-rata share (based on total traffic volumes) of the cost of the improvements.
14	Southbound exclusive right-turn lane on Golden Sage Road approaching Woodmen Road (a continuous right-turn lane within the 150 feet between the Woodmen Frontage Road and Woodmen Road).	If/when needed to maintain acceptable level of service/traffic operations and/or to control vehicle queues.	Falcon Marketplace will consent to inclusion in a special improvement district comprising properties benefited by this improvement and will pay its pro-rata share (based on total traffic volumes) of the cost of the improvements.
15	Signalization of Golden Sage Road/Woodmen Frontage Road or reconstruction as a modern roundabout; Future additional laneage may be necessary at this intersection to accommodate vehicle queues and for traffic operations.	If/when needed to maintain acceptable level of service/traffic operations and/or to control vehicle queues.	Falcon Marketplace will consent to inclusion in a special improvement district comprising properties benefited by this improvement and will pay its pro-rata share (based on total traffic volumes) of the cost of the improvements.

Source: LSC Transportation Consultants, Inc.

Table 7b
Falcon Marketplace
Roadway Improvements With Proposed Right-In Access to Woodmen Road

Item #	Improvement	Timing	Responsibility
	Countywide Road Impact Fee Program Fees and Taxes		
1	Woodmen Road Metropolitan District fees and taxes to be paid in lieu of Countywide Road Impact Fee Program fees and taxes. Woodmen Road has already been completed, but this project is joining the district.	District fees payable at platting	Falcon Marketplace
	Meridian/Eastonville and Meridian Right-In/Right-Out Intersections		
2	Signalization of Meridian Road/Eastonville Road intersection.	Design and installation with the development of Falcon Marketplace once allowed by El Paso County.	Falcon Marketplace
3	Reconstruction of the Meridian center median south of Eastonville Road to achieve major street left-turn sight distance for the option of northbound/southbound protected/permissive left-turn signal phasing with interim single left-turn lanes northbound and southbound and to accommodate future northbound dual left-turn lanes if needed in the future. This lane should be 425 feet long plus a 200-foot taper. The taper would be back-to-back with the southbound dual left-turn taper.	Design and installation with the development of Falcon Marketplace.	Falcon Marketplace
4	Southbound right-turn deceleration lane on Meridian Road approaching Eastonville Road. This lane should be 235 feet long plus a 200-foot taper.	Design and installation with the develoment of Falcon Marketplace.	Falcon Marketplace
5	Design and construction of continuous southbound right-turn lanes and shoulder/bike lane on Meridian Road from Eastonville Road south to the proposed right-in/right-out and from the right-in/right-out south to Woodmen Road. (Note: Also please refer to related item #16 below.)	Design and installation with the develoment of Falcon Marketplace.	Falcon Marketplace
6	Widening of Eastonville Road east of Meridian Road to add a westbound through lane and add width as feasible between the westbound left-turn lane and the westbound through lane due to the proposed dual left-turn lanes on the west side of the intersection. This added width would allow for through lane alignment (with an acceptable offset across the intersection).	Design and installation with the development of Falcon Marketplace. Extent of this off-site improvement may be limited by available right-of-way and/or other existing constraints.	Falcon Marketplace
7	Design and construction of the proposed extension of Eastonville Road between Meridian and the proposed roundabout.	Design and installation with the develoment of Falcon Marketplace.	Falcon Marketplace
	On-Site Improvements		
8	Design and construction of the public street connection through the site (Falcon Market Place).	Design and installation with the development of Falcon Marketplace.	Falcon Marketplace
9	Design and construction of the proposed roundabout on-site west of the Meridian/Eastonville intersection. This would include a “stub” to the north for the anticipated future street connection north to Bent Grass Meadows Drive.	Design and installation with the develoment of Falcon Marketplace.	Falcon Marketplace
10	Design and construction of the proposed roundabout on-site at the east terminus of the Woodmen Frontage Road.	Design and installation with the develoment of Falcon Marketplace.	Falcon Marketplace
	Woodmen/Meridian Intersection		
11	Extend existing westbound right-turn acceleration lane on Woodmen Road at Meridian Road to provide a continuous right-turn lane between Meridian Road and the proposed right-in-only access.	Design and installation with the develoment of Falcon Marketplace.	Falcon Marketplace
12	Lengthening of **Woodmen eastbound dual left-turn lanes**. Lengthening of eastbound left-turn lanes and potential further future lengthening to provide a 240-foot lane transition taper, 290 feet of deceleration distance plus sufficient vehicle stacking distance. **CURRENT** lane length: 500 feet of dual left-turn lane and 425-foot taper. Of this taper, 215 feet is full-width "decel" distance. Remaining 20 feet of the required 235-foot decel distance occurs in the first 20 feet of the 500-foot dual left-turn lanes. The remainder of the dual left-turn lanes is stacking distance - 480 feet. **SHORT TERM**: Based on the short-term analysis, the existing lane provides sufficient stacking distance. **LONG TERM**: This lane will likely need to be extended to provide a total of 840 feet of dual left storage distance plus 235 feet of deceleration length plus a 200-foot taper.	Future extension of existing dual left-turn lanes once traffic queues regularly extend beyond the 480-foot stacking distance.	Falcon Marketplace will pay its pro-rata share by (based on total traffic volumes) of the cost of the improvements. **The payment amount will be determined on an individual-lot basis in the form of an escrow amount payable at the time of site development plan for each individual lot.**
13	**Meridian northbound dual left-turn lanes:** Lengthening of northbound left-turn lanes and potential further future lengthening to provide a 200-foot lane transition taper, 235 feet of deceleration distance plus sufficient vehicle stacking distance. **CURRENT** lane configuration: 315 feet of dual left-turn lane length, 145 feet of single left-turn lane length and a 150-foot lane transition taper from the through lane to the single left-turn lane. This provides a 150-foot taper, 235 feet of deceleration distance, and 225 feet of dual left stacking. **SHORT TERM**: The 315-foot dual left-turn lanes would accommodate the projected short-term queues. The deceleration distance (235 feet) plus a 200-foot taper will need to be provided south of the end of the existing 315-foot dual left stacking lanes. For the deceleration distance, 235 feet of at least single-lane width for deceleration length would flare to the north to connect to the existing dual lane width to the north. South of the deceleration portion of the lane, a standard 200-foot taper will need to be added in the median. These modifications will involve median reconstruction and restrping south of the existing dual left-turn lanes. This would result in a 200-foot taper, 235-foot deceleration distance, and 315 feet of dual left-turn stacking.	With the development of Falcon Marketplace, extend the northbound left-turn lane as described in the column to the left and as shown in Figure 25.	Short Term - Falcon Marketplace
14	**Meridian northbound dual left-turn lanes**. **LONG TERM:** Potentially, additional growth in the Falcon Area and east along Falcon Highway will add left-turning traffic demand. Long-term analysis indicates the potential future need for 400 feet of stacking distance plus the 235 feet of deceleration distance and the 200-foot taper.	Future (if necessary -- Add additional lane length beyond #13 to provide additional stacking if/when needed (as shown in Figure 26).	By other future developments impacting this turn lane. Potential for fee program credit for improvements completed as this is a regional intersection.
	Golden Sage Intersections		
15	Directional wayfinding sign(s) on eastbound Woodmen Road upstream of Golden Sage - notifying/reminding eastbound motorists of the option to enter Falcon Marketplace via the Woodmen Frontage Road.	Design and installation with the development of Falcon Marketplace.	Falcon Marketplace
16	Lengthening of the current eastbound single left-turn deceleration lane on Woodmen approaching Golden Sage Road to provide a 240-foot transition taper (20:1 taper ratio), 290 feet of deceleration distance plus sufficient vehicle stacking distance. **CURRENT**: 175-foot taper plus a 465-foot left-turn lane which translates to a 175-foot taper, 290-foot deceleration distance, and 175 feet of stacking distance. **SHORT TERM:** Adequate stacking is available in the current turn lane - calculated queue length 141 feet. **LONG TERM: L**engthen single left-turn lane and/or future implementation of dual left-turn lanes (if capacity needs dictate) to maintain 290 feet of deceleration length, a 240-foot lane taper (20:1 taper ratio) plus provide sufficient vehicle stacking length - model indicates 471 feet of dual left stacking distance based on morning peak-hour projected volumes. If a dual left is implemented in the future, consideration will need to be given to the configuration on Golden Sage and at the Golden Sage/Woodmen Frontage Road intersection to receive the dual left-turn movement.	Short Term: The existing lane is adequate based on the short-term analysis. Long Term: Future with additional development served by the north frontage road - extension of existing single left-turn lane and potentially widening in the median to provide dual left-turn lanes to provide additional vehicle stacking distance as described in the column to the left.	Falcon Marketplace will pay its pro-rata share by (based on total traffic volumes) of the cost of the improvements. **The payment amount will be determined on an individual-lot basis in the form of an escrow amount payable at the time of site development plan for each individual lot.**
17	Southbound exclusive right-turn lane on Golden Sage Road approaching Woodmen Road (a continuous right-turn lane within the 150 feet between the Woodmen Frontage Road and Woodmen Road).	If/when needed to maintain acceptable level of service/traffic operations and/or to control vehicle queues.	Falcon Marketplace will pay its pro-rata share by (based on total traffic volumes) of the cost of the improvements. **The payment amount will be determined on an individual-lot basis in the form of an escrow amount payable at the time of site development plan for each individual lot.**
18	Signalization of Golden Sage Road/Woodmen Frontage Road or reconstruction as a modern roundabout; Future additional laneage may be necessary at this intersection to accommodate vehicle queues and for traffic operations.	If/when needed to maintain acceptable level of service/traffic operations and/or to control vehicle queues.	Falcon Marketplace will pay its pro-rata share by (based on total traffic volumes) of the cost of the improvements. **The payment amount will be determined on an individual-lot basis in the form of an escrow amount payable at the time of site development plan for each individual lot.**

Source: LSC Transportation Consultants, Inc.



LEGEND:

XX = Improvement Reference Number (See Table 7a for details)

= Short-Term Improvement

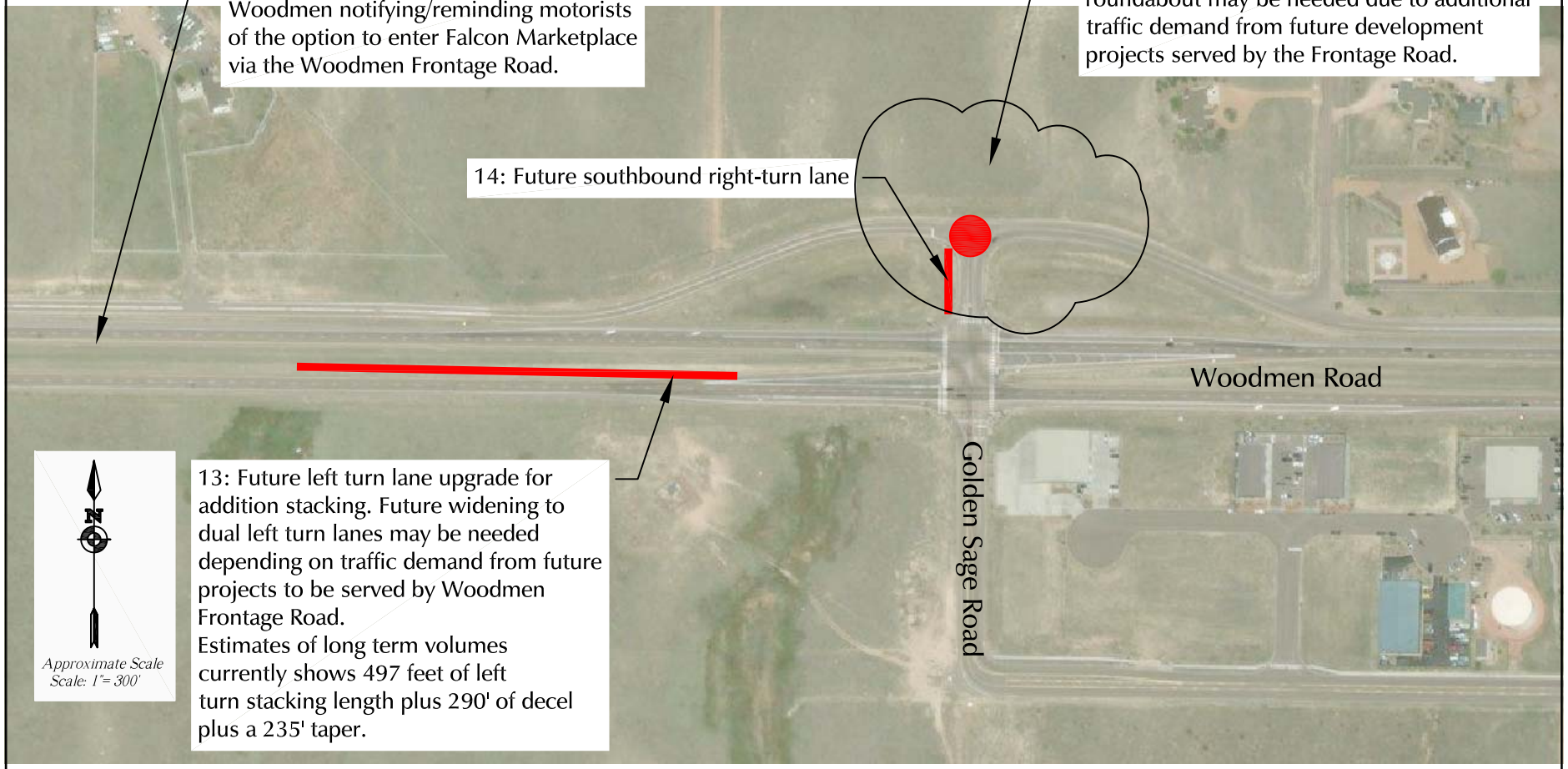
= Long-Term Improvement

TRANSPORTATION CONSULTANTS, INC.

Figure 21a

Recommended Improvement Locations without Right-In Access to Woodmen* (East Area)

Falcon Marketplace (LSC #164350)

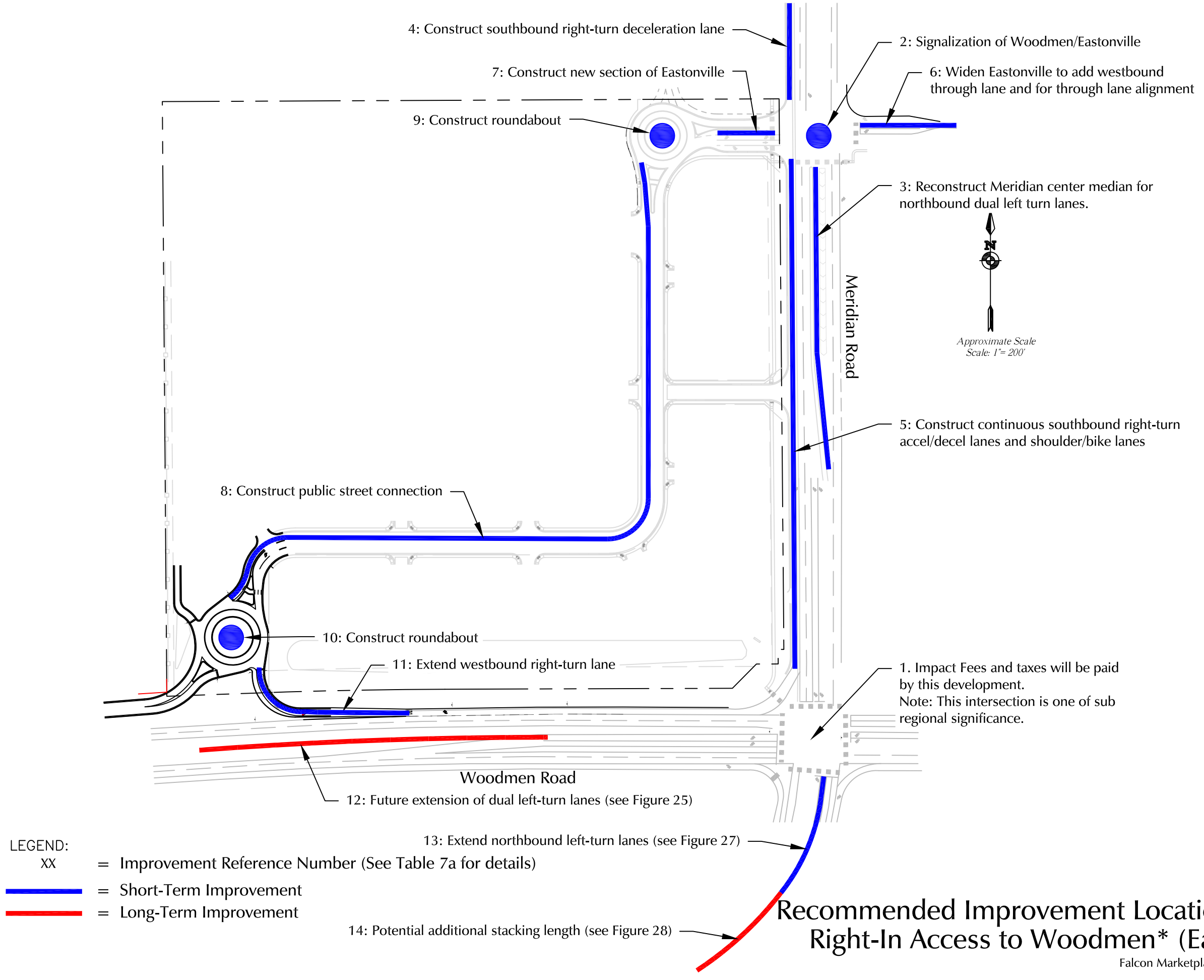


∗See Table 7a for details.

Figure 21b

Recommended Improvement Locations without Right-In Access to Woodmen* (West Area)

Falcon Marketplace (LSC #164350)



LEGEND:

XX = Improvement Reference Number (See Table 7a for details)

= Short-Term Improvement

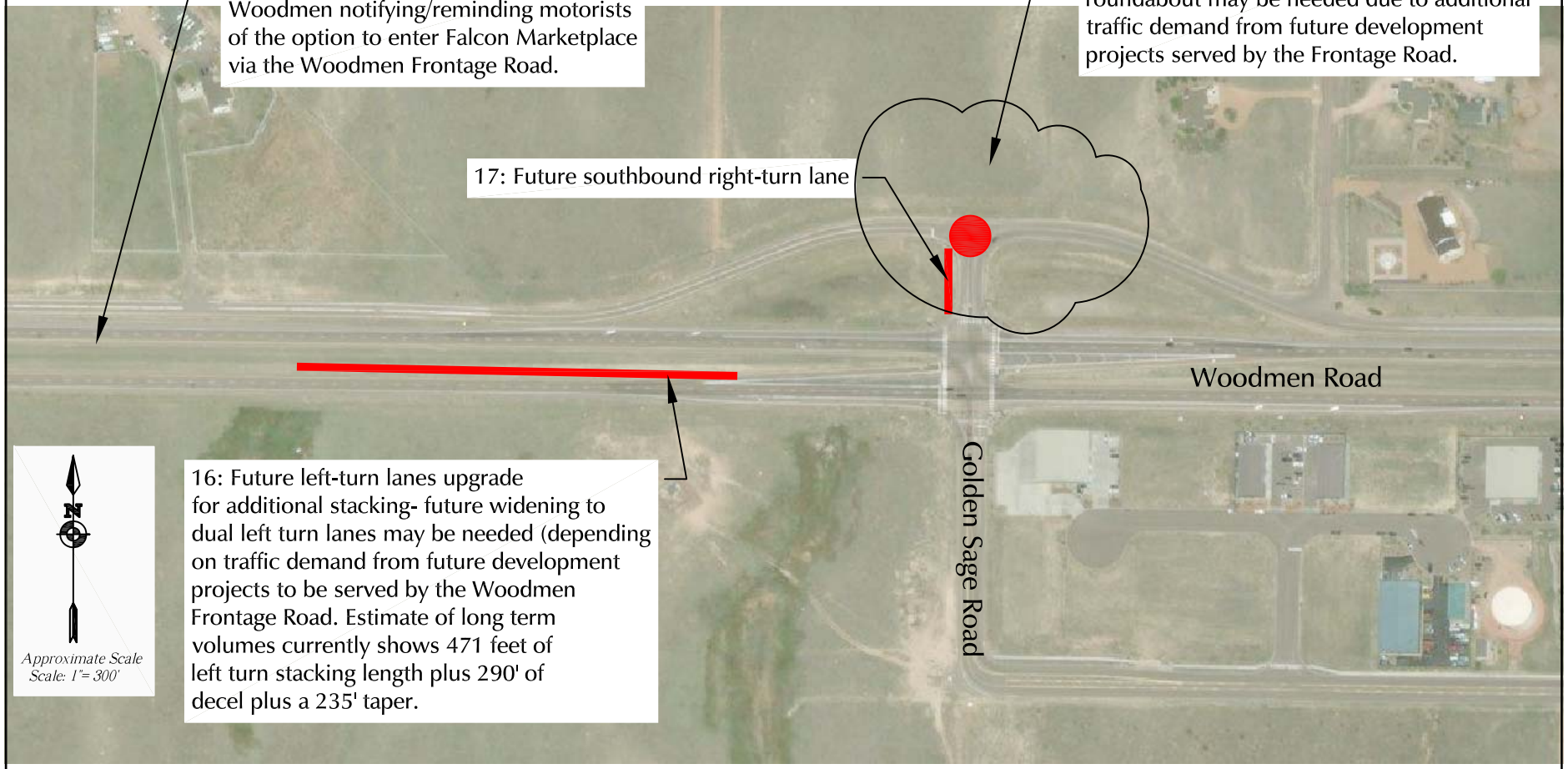
= Long-Term Improvement

TRANSPORTATION CONSULTANTS, INC.

Figure 22a

Recommended Improvement Locations with Right-In Access to Woodmen* (East Area)

Falcon Marketplace (LSC #164350)



∗See Table 7b for details.

Figure 22b

Recommended Improvement Locations with Right-In Access to Woodmen* (West Area)

Falcon Marketplace (LSC #164350)

- Figure 23 shows the existing, proposed, and *Engineering Criteria Manual*-prescribed acceleration and deceleration lane lengths along Meridian Road between Eastonville and Woodmen Road, respectively. Figure 24 shows the existing, proposed and *Engineering Criteria Manual*-prescribed acceleration and deceleration lane lengths along Woodmen Road west of Meridian Road. Figure 25 shows additional detail for the continuous acceleration and deceleration lane based on the roundabout queuing analysis. The figure also addresses the Woodmen Road dual eastbound left-turn lanes—stacking lengths from the queueing analysis plus deceleration and taper distances. The existing dual-width portion of eastbound left-turn lanes on Woodmen Road approaching Meridian Road is about 500 feet long. These lanes will likely need to be lengthened as shown in the figure to accommodate the projected 2040 eastbound left-turn queue.

- The existing westbound right-turn acceleration lane extending west from the intersection of Woodmen/Meridian should be extended west to the proposed right-in-only site access and restriped as a continuous acceleration/deceleration lane. Figure 26 shows the recommended signing and striping for the proposed acceleration/deceleration lane.

- Figure 27 shows the recommended short-term improvement to the northbound left-turn deceleration lane on Meridian Road approaching the Woodmen Road intersection. These are based on the short-term total traffic queuing analysis results and criteria in the ECM.

- Figure 28 shows the future stacking distances for the northbound left-turn lane at the Woodmen/ Meridian intersection from the queueing analysis plus the deceleration length and taper lengths prescribed by the ECM. These are based on long-term projected volumes. These included projected traffic from future commercial developments along Meridian Road south of Woodmen as well as potential future development within areas east southeast of the Falcon area using Falcon Highway to the new Meridian Road connection. The growth patterns in this area are subject to change. Also, the future Dublin Boulevard connection to Falcon Highway may alter some of these projections.

- A southbound right-turn deceleration lane should be provided on Meridian Road approaching the Meridian Road/Eastonville Road intersection. This lane should be 235 feet long plus a 200-foot taper (based on the anticipated post-development posted speed limit of 45 mph on the southbound approach to this intersection).

- Continuous southbound right-turn acceleration/deceleration lanes should be provided on Meridian Road between Eastonville and the proposed right-in/right-out access and between this proposed access and Woodmen Road.

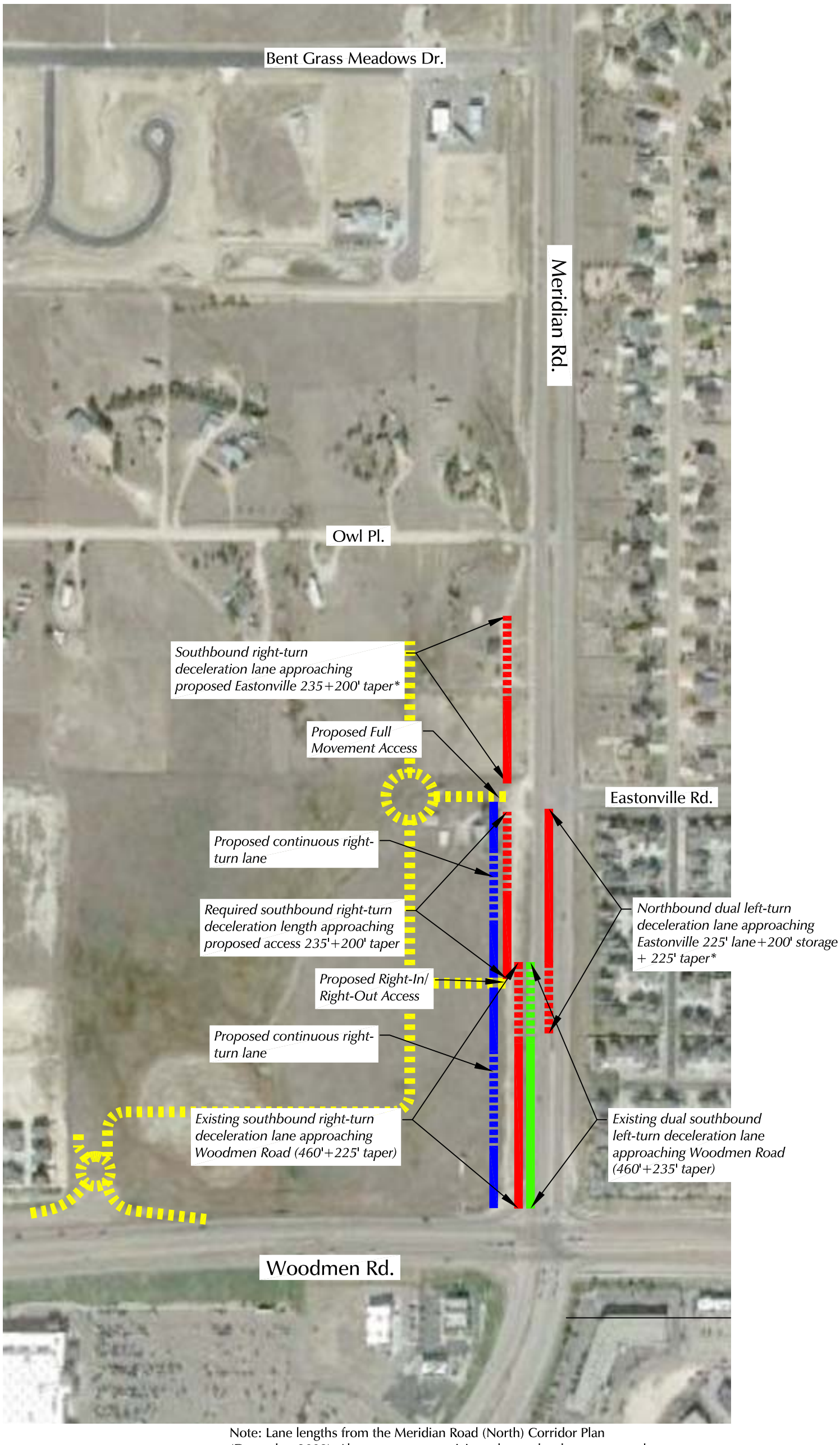
- A northbound left-turn lane should be constructed within the existing center median on Meridian Road approaching the Meridian Road/Eastonville Road intersection. This lane should be 425 feet long plus a 200-foot taper. The median south of Eastonville should be reconstructed with a narrow six-foot-wide raised median nose with pavement for the remainder of the space between this new median nose and the northbound Meridian through lanes. This design is recommended for two reasons. The first is because of the current position of the southbound left-turn lane (immediately adjacent to the southbound through lanes). The second is that this design of the median modification would allow for conversion to a dual left-turn lane accomplished by restriping when needed in the future. Also, modification to the southbound left-turn lane on the north side of the intersection may

be needed to maintain sight distance depending on the signal phasing and/or to avoid conflicting left-turning vehicle paths. This will be evaluated further with the Preliminary Plan.

- The site plan shows the proposed connection to the frontage road, and the internal public street connection through the site between the east end of the frontage road and Meridian Road.

- The applicant will likely be required to widen Eastonville Road east of Meridian Road to add a westbound through lane and add width as feasible between the westbound left-turn lane and the westbound through lane due to the proposed dual left-turn lanes on the west side of the intersection. This added width would allow for through lane alignment (with an acceptable offset across the intersection). The extent of this offsite improvement may be limited by available right-of-way and/or other existing constraints.

- The development will be required to install a traffic signal (or escrow funds) for a traffic signal at the Meridian/Eastonville intersection. This project is planned to be developed in one phase, therefore the signal is planned to be installed once allowed by the County.



N

Approximate Scale
Scale: 1"=300'

Note: Lane lengths from the Meridian Road (North) Corridor Plan (December 2009). Also assumes an anticipated post-development speed limit of 45mph (50mph design speed).

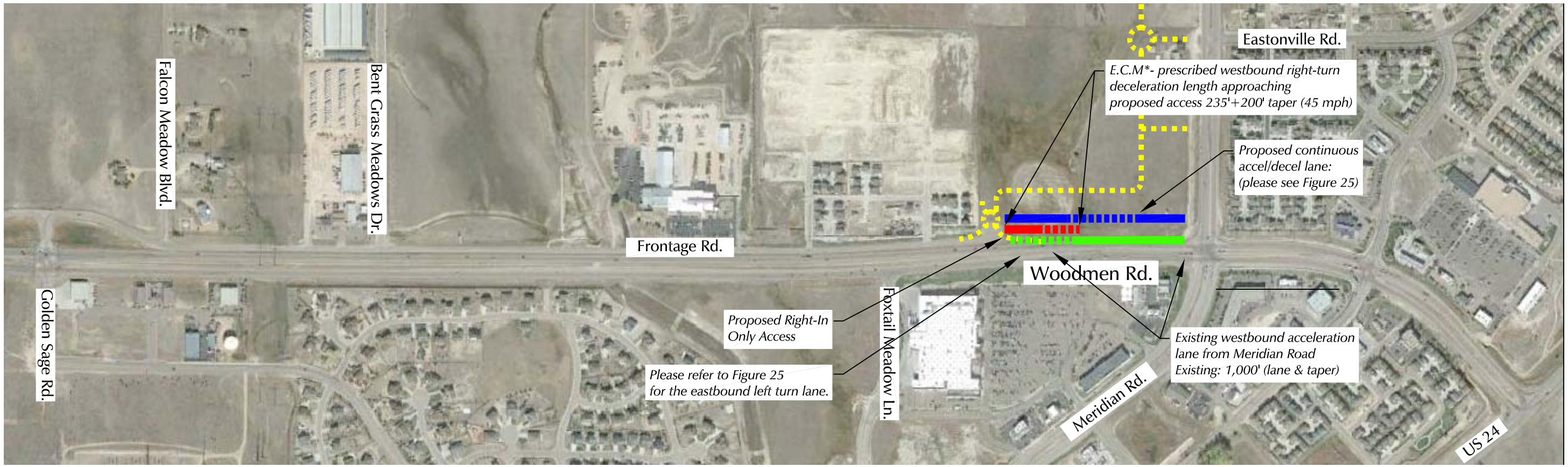
Figure 23

Accel/Decel Distances for Meridian Road North of Woodmen Road

Falcon Marketplace (LSC #164350)

LSC TRANSPORTATION CONSULTANTS, INC.

Approximate Scale
Scale: 1"=600'



* E.C.M.= County Engineering Criteria Manual

TRANSPORTATION CONSULTANTS, INC.

Figure 24

Existing & ECM*- Prescribed Accel/Decel Lane Lengths for Woodmen Road

Falcon Marketplace (LSC #164350)

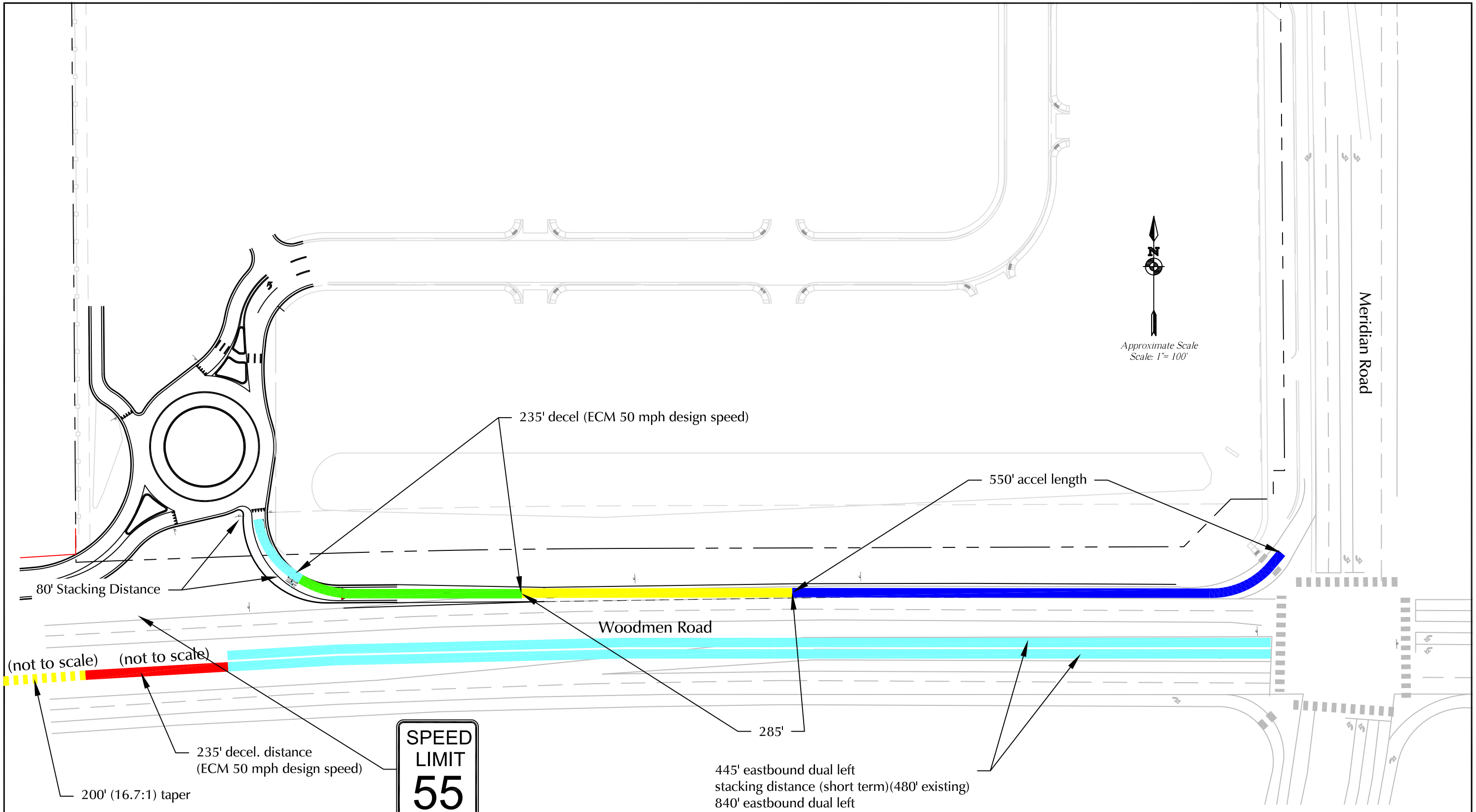


Figure 25

Woodmen Rd. Acceleration, Deceleration and Stacking Lengths

Falcon Marketplace (LSC #164350)

LSC TRANSPORTATION CONSULTANTS, INC.

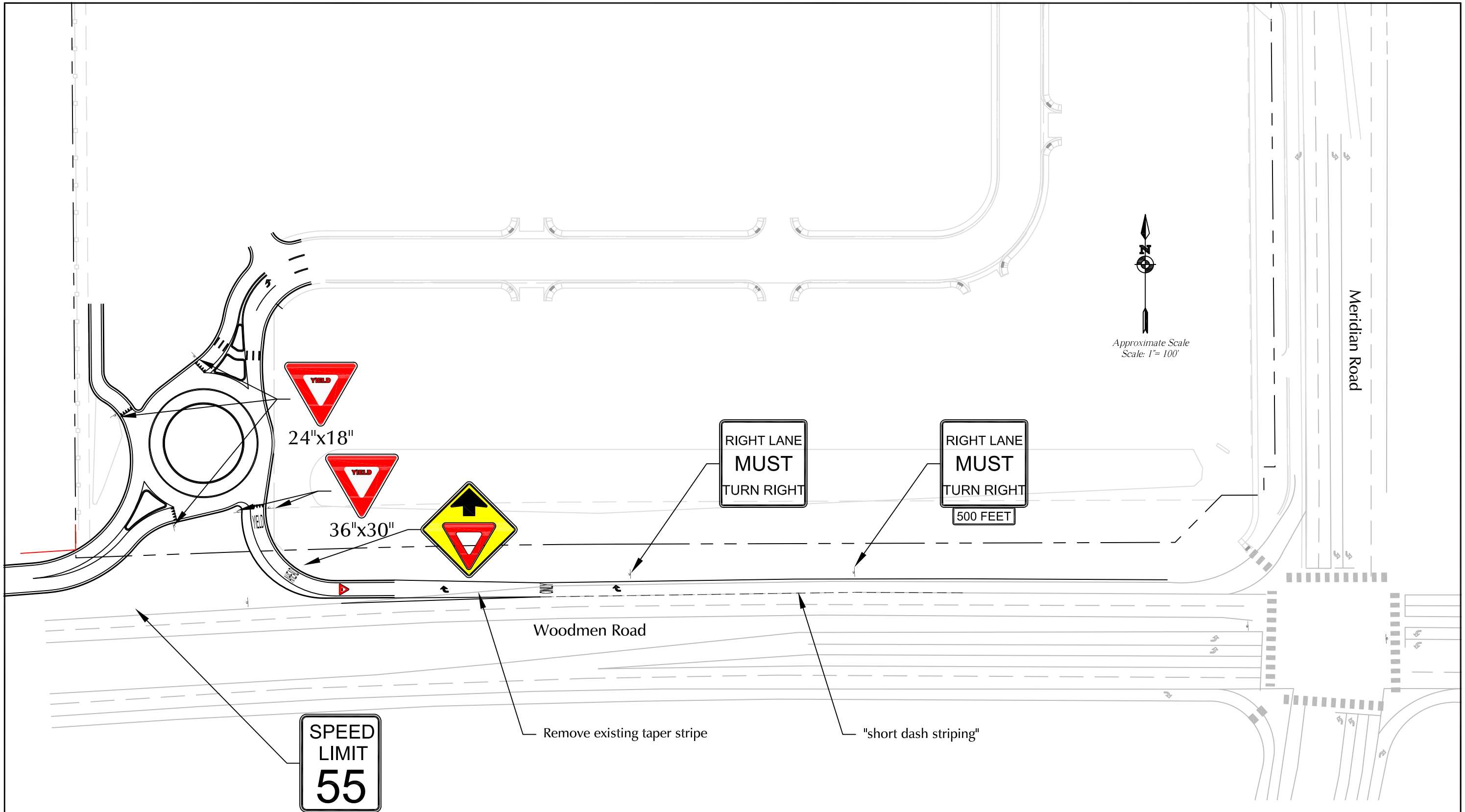


Figure 26

Woodmen Rd.
Acceleration/Deceleration Lane
Signing & Striping

Falcon Marketplace (LSC #164350)

LSC TRANSPORTATION CONSULTANTS, INC.

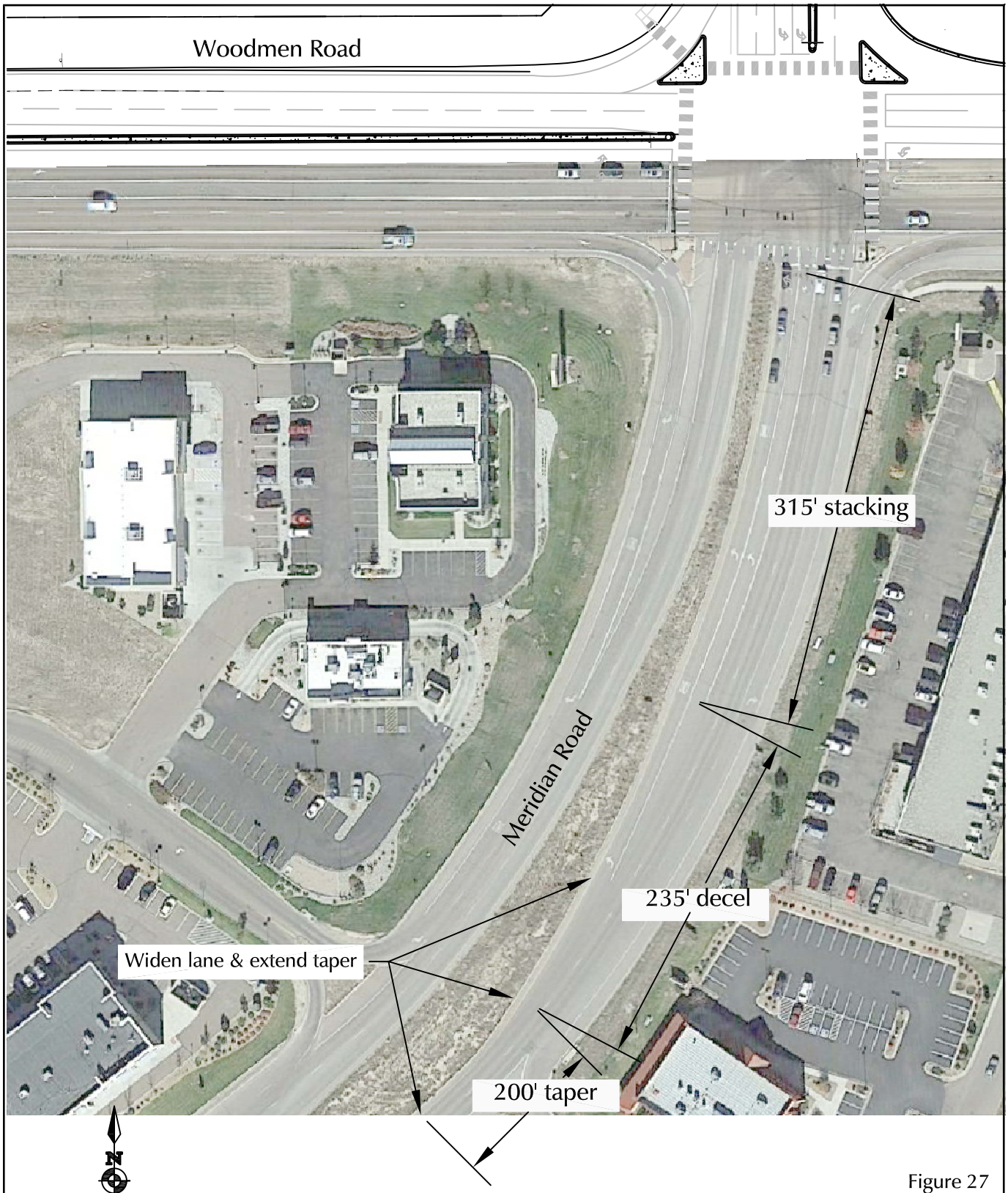


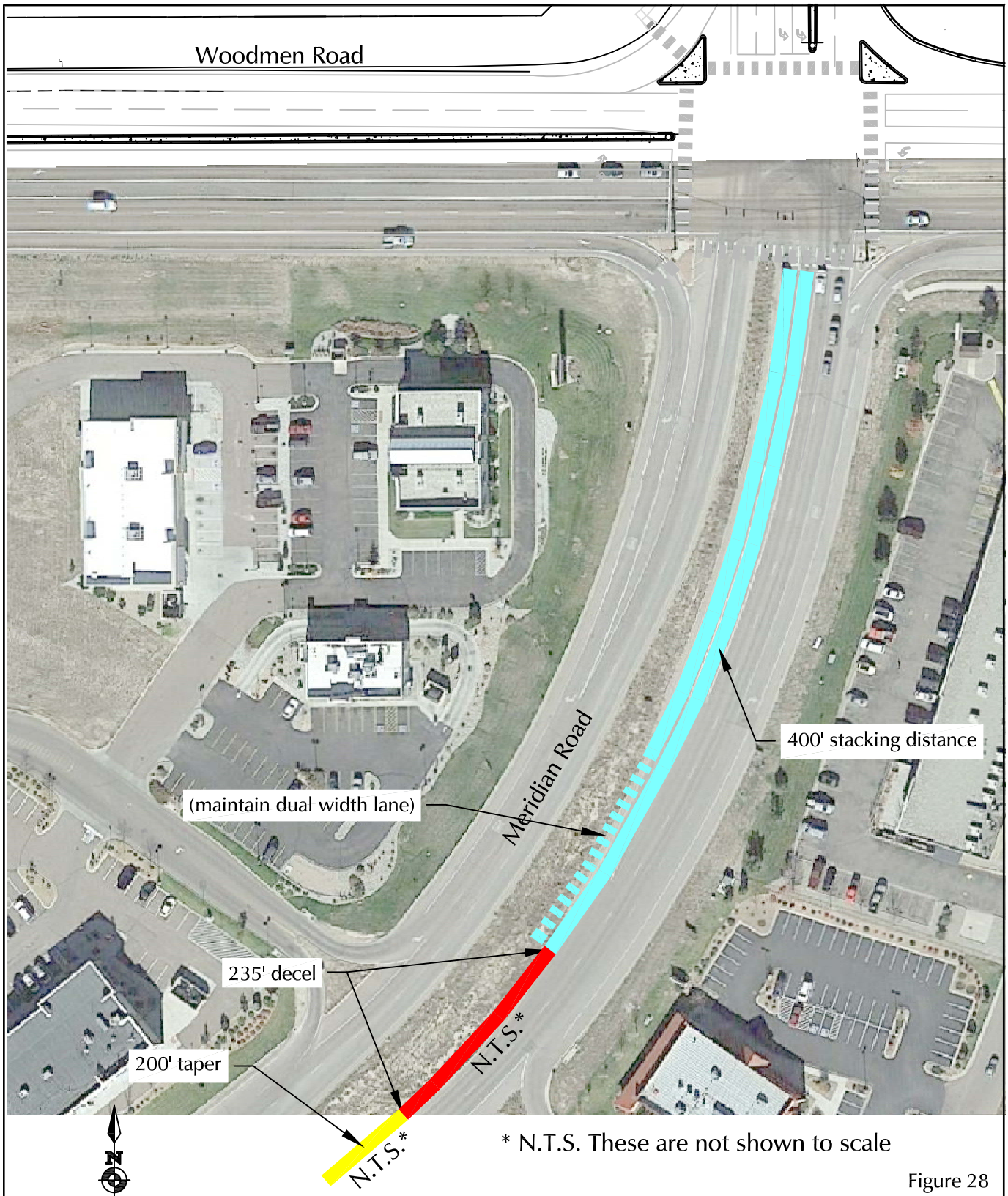
Figure 27

Short-Term Meridian Rd. South of Woodmen Rd. NB Left-Turn Deceleration Lane, Taper and Stacking Lengths

Falcon Marketplace (LSC #164350)

Approximate Scale
Scale: 1"= 100'

LSC TRANSPORTATION CONSULTANTS, INC.



* N.T.S. These are not shown to scale

Figure 28

Potential Future Long-Term Meridian Rd. South of Woodmen Rd. NB Left-Turn Deceleration Lane, Taper and Stacking Lengths

Falcon Marketplace (LSC #164350)

Approximate Scale
Scale: 1"= 100'

LSC TRANSPORTATION CONSULTANTS, INC.

CHAPTER 9

Summary and Conclusions

WOODMEN RIGHT-IN-ONLY ACCESS WITH ROUNDABOUT

The purpose of this updated traffic report is to analyze the currently proposed right-in-only access **combined with** a proposed roundabout intersection with the Woodmen Frontage Road, which would significantly improve access not only to the site, but also to the properties to the west along the Woodmen Frontage Road. This new provision for public access from westbound Woodmen Road to the westbound Woodmen Frontage Road is a **significant change** from the previously proposed right-in-only access configuration that essentially only served the proposed Falcon Marketplace. Please refer to the report section above for details.

TRIP GENERATION

- The site is projected to generate about 9,558 new external vehicle-trips on the average week-day, with about half entering and half exiting the site during a 24-hour period. During the morning peak hour, about 495 vehicles would enter and 370 vehicles would exit the site. During the afternoon peak hour, about 716 vehicles would enter and 701 vehicles would exit the site.

PROJECTED LEVELS OF SERVICE

- The eastbound left-turn movement at the Woodmen Road/Meridian Road intersection currently operates at LOS D. Given the high existing and projected background traffic demand for this turning movement, the LOS is projected to operate at LOS E during the afternoon peak hour by 2040 with or without the proposed right-in access to Woodmen Road. Important note: This condition has little to do with this site, rather it is primarily due to the background traffic demand. The northbound left-turn movement is projected to operate at LOS D during the morning peak hour and LOS E during the afternoon peak hour based on the projected 2040 total traffic volumes without the proposed right-in access. The northbound left-turn movement is projected to operate at LOS E during both the morning and afternoon peak hours based on the projected 2040 total traffic volumes with the right-in access. The northbound through movement is projected to operate at LOS F during the afternoon peak hour assuming no Woodmen access and LOS E assuming the proposed right-in access. The northbound through volume is projected to be about 115 vehicles per hour higher (afternoon peak hour) with the "no-right-in" scenario.

- The intersection of Meridian/Eastonville was assumed to be signalized once the site is built out. As a signalized intersection, it is projected to operate at an overall LOS C or better based on the short-term total traffic volumes.

  By 2040 the overall intersection is projected to operate at LOS D during the afternoon peak hour. The northbound left-turn movement is projected to operate at **LOS F** during the afternoon peak hour assuming no Woodmen access and **LOS D during the afternoon peak hour assuming the proposed right-in access.** The northbound left-turn volume is projected to be about 230 vehicles per hour higher (afternoon peak hour) with the "no-right-in" scenario.

- Based on the projected short-term and 2040 total traffic volumes, all movements at the proposed right-in/right-out-only access to Meridian Road are projected to operate at LOS D or better during the peak hours as a **stop-sign-controlled intersection**.

- The proposed two-way stop-sign-controlled access points to the public internal road are projected to operate at LOS C or better for all movements during the peak hours based on the 2040 total traffic volumes with or without the proposed right-in-only access to Woodmen Road.

- The northbound and southbound through movements at the proposed all-way, stop-sign-controlled intersection are projected to operate at **LOS D** or better based on the 2040 total traffic volumes **with** the proposed right-in-only access. These movements are projected to operate at **LOS E and F**, respectively based on the 2040 afternoon peak hour **without** the proposed right-in access to Woodmen Road.

- All movements at the proposed roundabouts at the terminus of the Woodmen Frontage Road and at the intersection of the internal public road and Eastonville Road are projected to operate at LOS B or better based on the projected 2040 total traffic volumes with and without the proposed right-in-only access to Woodmen Road.

- This report also includes a weaving section level of service for westbound Woodmen Road between the Meridian Road intersection and the proposed right-in to the west. Please refer to the Level of Service section of this report for details.

COMPARISON OF ANALYSIS SCENARIOS

- The analysis of the scenarios with and without the proposed Woodmen Road access clearly indicates better area intersection operations for the traveling public, including the portion of the traveling public that will shop/dine, etc. at this site, if the proposed Woodmen Road access is constructed. The access with the proposed roundabout would also significantly improve emergency vehicle and public access for the properties to the west along the Woodmen North Frontage Road. Please refer to the section above for details.

RECOMMENDED IMPROVEMENTS

- Please refer to Chapter 8 which presents detailed recommendations for the access scenarios.

Summary of Crash History

TRANSPORTATION
CONSULTANTS, INC.

2014 – YTD 2017 Crash Data: Woodmen Rd, Meridian Rd, and Highway 67

Woodmen Rd Crashes 2014 – YTD 2017

Road	2014	2015	2016	2017	Total
Woodmen Rd	**16**	**12**	**14**	**7**	**49**
Golden Sage Rd	7	2	7	6	22
Meridian Rd	9	10	7	1	27
Total	**16**	**12**	**14**	**7**	**49**

Woodmen Rd Fatal & Injury Crashes 2014 – YTD 2017

Road	2014	2015	2016	2017	Total
Woodmen Rd	**2**	**2**	**3**	**1**	**8**
Golden Sage Rd	1		2	1	4
Meridian Rd	1	2	1		4
Total	**2**	**2**	**3**	**1**	**8**

Meridian Rd Crashes 2014 – YTD 2017*

Road	2014	2016	2017	Total
Meridian Road	**4**	**2**	**1**	**7**
Eastonville Rd	3	2	1	6
Owl Pl	1			1
Total	**4**	**2**	**1**	**7**

*No crashes in these areas in 2015

Meridian Rd Fatal & Injury Crashes 2014 – YTD 2017*

Road	2014	2016	2017	Total
Meridian Road	**1**	**1**	**1**	**3**
Eastonville Rd		1	1	2
Owl Pl	1			1
Total	**1**	**1**	**1**	**3**

*No crashes in these areas in 2015

Highway 67 Crashes 2014 – YTD 2017*

Road	2016	Total
H67	**1**	**1**
FAIRFIELD LN	1	1
Total	**1**	**1**

*No fatal and/or injury crashes at this area during this time period

MERIDIAN/WOODMEN

Year	Month	Accident Time	Number Killed	Number Injured	FIP	Road Description Code	Road Condition Code	Lighting Condition Code	Adverse Weather Condition Code	Direction Of Travel Code	Vehicle Movement Code	Roadway Speed Limit	Estimated Vehicle Speed	Ejection	Suspected Alcohol	Suspected Drugs	Injury Severity	Accident Narrative
2014	2	3:09:00 PM	0	0	Property	At Intersection	Dry	Daylight	None	East	Going Straight	55	5	No	No	No	No Injury	Vehicle #1 was stopped at the red light of Woodmen Rd and Meridian Rd. Vehicle #2 was stopped at the red light of Woodmen Rd and Meridian Rd. Vehicle #1's began to roll forward and its front bumper impacted the rear of Vehicle #2. Both vehicles moved prior to investigation.
2014	4	5:45:00 PM	0	0	Property	At Intersection	Dry	Daylight	None	East	Going Straight	45	30	No	No	Yes	No Injury	Vehicle #2 was stopped in the right, left turn lane on eastbound Woodmen Rd to Meridian Rd. Vehicle #1 was traveling eastbound on Woodmen Rd in the right, left turn lane approaching the intersection. Vehicle #1 failed to stop and collided its front into the rear of Vehicle #2. Both vehicle's were driven to rest.
2014	6	4:00:00 PM	0	0	Property	At Intersection	Dry	Daylight	None	West	Going Straight	45	45	No	No	No	No Injury	Vehicle # 1 was traveling westbound Woodmen Rd approaching the intersection with Meridian Rd; Vehicle # 2 was northbound Meridian Rd, in the right lane, at the intersection with Woodmen Rd; Vehicle # 3 was northbound Meridian Rd, in the left lane, at the intersection with Woodmen Rd. The driver of vehicle # 1 failed to observe the red traffic light and collided its right front with the right rear of vehicle # 2. Vehicle # 1 continued southwest and collided its front with the right side of vehicle # 3. Vehicle # 2 rotated clockwise approximately 48' and came to final rest, on all wheels, facing southeast. Vehicles # 1 and # 3 came to final rest, on all wheels, facing north.
2014	6	5:10:00 PM	0	0	Property	At Intersection	Dry	Daylight	None	West	Going Straight	35	15	No	No	No	No Injury	Vehicle #1 was westbound on Woodmen Road in the right lane. Vehicle #1 failed to stop for a red light and struck vehicle #2 with left front of vehicle #1. Vehicle #1 was driven to final rest. Vehicle #2 was eastbound on Woodmen Road turning left to northbound Meridian Road and was struck in the right front by vehicle #1. Vehicle #2 was driven to final rest.
2014	6	1:10:00 PM	0	0	Property	At Intersection	Wet	Daylight	Fog	West	Going Straight	45	40	No	No	No	Complaint of Injury	Vehicle # 1 was westbound Woodmen Road, in the left lane, approaching the intersection with Meridian Road; Vehicle # 2 was westbound Woodmen Road, in the left lane, and stopped at the red light at Meridian Road behind vehicle # 3. Vehicle # 1 failed to observe stopped traffic and collided its front with the rear of vehicle # 2; vehicle # 2 then collided its front with the rear of vehicle # 3. All vehicles were moved from final rest prior to my arrival.
2014	6	11:25:00 AM	0	2	Injury	At Intersection	Dry	Dawn or Dusk	Wind	West	Going Straight	45	45	No	No	No	Evident - incapacitating	Vehicle # 1 was westbound Woodmen Road, in the right lane, approaching the intersection with Meridian Road; Vehicle # 2 was southbound Meridian Road, in the right lane, approaching the intersection with Woodmen Road. The driver of vehicle # 1 failed to observe its red traffic signal, entered the intersection, and collided its right front with the left side of vehicle # 2; the right rear side of vehicle # 1 then collided with the left rear side of vehicle # 2. Vehicle # 1 traveled southwest through the intersection for approximately 159'7" before traveling off the southwest side of the roadway. Vehicle # 1 traveled approximately 18'3" off road before coming to final rest, on all wheels, facing southwest. Vehicle # 2 traveled approximately 132' before coming to final rest in the westbound Woodmen Road acceleration lane, on all wheels, facing northwest.
2014	8	10:17:00 PM	0	0	Property	At Intersection	Dry	Daylight	None	East	Going Straight	45	10	No	No	No	No Injury	Vehicle #1 was eastbound on Woodmen Rd. Vehicle #2 was eastbound on Woodmen Rd, stopped at the traffic light. Vehicle #1's front bumper impacted the rear bumper of Vehicle #2, approximately 6' from the right side of the right turn lane. Both vehicles moved prior to investigation.
2014	8	2:55:00 PM	0	0	Property	Intersection Related	Dry	Daylight	None	East	Going Straight	45	20	No	No	No	No Injury	Vehicle 1 was eastbound on Woodmen approaching Meridian in the right side left turn lane for northbound Meridian. Vehicle 2 was eastbound on Woodmen approaching Meridian in the right side left turn lane for northbound Meridian in front of vehicle 1 and stopped for a red signal light. Vehicle 1 struck vehicle 2 on the rear with its front. Both vehicles moved from rest onto the northbound shoulder of Meridian prior to arrival on scene.
2014	11	7:00:00 PM	0	0	Property	At Intersection	Dry	Daylight	None	North	Slowing	45	20	No	No	No	No Injury	Vehicle #1 and Vehicle #2 where in the right turn lane from E. Woodmen Rd to N. Meridian Rd. Vehicle #2 was stopped yielding to an on coming vehicle. Vehicle #1 failed to stop and collided its right front into the left rear of Vehicle #2. Both vehicle's were driven to rest.
2015	2	2:00:00 AM	0	0	Property	At Intersection	Dry	Dark - Lighted	None	East	Going Straight	45	10	No	No	No	No Injury	Vehicle #1 was traveling eastbound on Woodmen Road and was approaching the stop light, which was red. Vehicle #2 was stopped at the westbound stop light on Woodmen Road, waiting to make a left turn. The green turn arrow changed and vehicle #2 began to make a left turn. Vehicle #1 ran the stop light and collided its front with the right side of vehicle #2. After impact, vehicle #1 and vehicle #2 came to final rest in the intersection. Both vehicles were moved prior to arrival and point of impact could not be determined.
2015	2	10:20:00 PM	0	0	Property	Intersection Related	Dry	Daylight	None	West	Slowing	45	5	No	No	No	No Injury	Vehicle 1 was westbound on Woodmen Road in the right turn lane. Vehicle 2 was westbound on Woodmen Road, in the right turn lane, ahead of Vehicle 1. Vehicle 2 stopped for traffic. Vehicle 1 slowed and struck Vehicle 2 in the rear with its front. Both vehicles were moved from the scene prior to officer arrival.
2015	4	2:20:00 AM	0	0	Property	Intersection Related	Dry	Dark - Unlighted	None	East	Going Straight	45	5	No	No	No	No Injury	Vehicle's 1 and 2 were eastbound on Woodmen Rd waiting to make a left turn onto northbound Meridian Rd. Vehicle 1 moved prior to vehicle 2 and collided its front with the rear of vehicle 2. Both vehicles were moved prior to investigation.
2015	7	10:55:00 PM	0	0	Property	Intersection Related	Dry	Daylight	None	East	Going Straight	45	5	No	No	No	No Injury	Vehicles 1 and 2 were eastbound on Woodmen Rd approaching Meridian Rd in the left lane. Both vehicles were stopped for traffic ahead. Vehicle 1 began to move before vehicle 2. Vehicle 1 collided its front with the rear of vehicle 2. Both vehicles were moved prior to investigation.
2015	7	6:45:00 PM	0	0	Property	At Intersection	Dry	Daylight	None	West	Making Left Turn	45	15	No	No	No	No Injury	Vehicle #1 was in the left, left turn lane on Woodmen Rd at Meridian Rd. Vehicle #2 was in the right, left turn lane on Woodmen Rd and Meridian Rd. Both vehicle's were making a left turn and Vehicle #1 failed to drive within its lane and traveled into the right lane colliding its right front with the left rear of Vehicle #2. Both vehicle's were moved prior to my investigation.
2015	7	11:50:00 PM	0	1	Injury	At Intersection	Dry	Daylight	None	South	Going Straight	55	15	No	No	No	Evident - non-incapacitating	The traffic lights at the intersection at Woodmen Rd and Meridian Rd were not working (No lights were illuminated). Vehicle #1 was southbound on Meridian Rd in the left through lane. Vehicle #2 was stopped on westbound Woodmen Rd in the left through lane. Vehicle #2 started forward in the intersection. Vehicle #1 did not stop and vehicle #2 collided its front with the driver's side of vehicle #1. Vehicle #1 rotated counter-clockwise and then clockwise, traveling up onto a raised median. Both vehicles moved prior to investigation.
2015	9	12:55:00 PM	0	1	Injury	Non-Intersection	Dry	Daylight	None	East	Changing Lanes	55	20	Yes - Full	No	No	Evident - non-incapacitating	Vehicle 1, a bicycle, was eastbound Woodmen Rd, on the right paved shoulder. Vehicle 2 was eastbound Woodmen Rd, in the right through lane, approaching Vehicle 1. As Vehicle 2 neared Vehicle 1, Vehicle 1 moved from the shoulder into the right through lane and in the path of Vehicle 2. Vehicle 2 struck its driver's side front with the bicycle and its rider. The point of impact occurred 14'3" to the left of the right road edge and 1013.84' west of Meridian Rd. The bicycle and rider fell onto the hood of Vehicle 2 and were carried. Vehicle 2 came to rest 120'7" east of the point of impact, 8'6" to the left of the road edge. The bicycle came to rest 28'9" to the left of the right road edge and 136'3" east of the point of impact. The rider came to rest 160'9" east of the point of impact and 17'1" to the left of the right road edge. One tire from the bicycle became lodged under Vehicle 2 at some point during the collision. The rider and bicycle were moved prior to investigation.
2015	9	2:05:00 AM	0	0	Property	At Intersection	Dry	Dark - Lighted	None	West	Going Straight	45	25	No	No	No	No Injury	Vehicle #1 was traveling westbound on Woodmen Road in the number three lane and was approaching a red light at the intersection with Meridian Road. Vehicle #2 was stopped in the number one lane on eastbound Woodmen Road at the intersection with Meridian Road. Vehicle #2 had a green turn arrow and proceeded to turn left onto Meridian Road. Vehicle #1 disregarded the red light and continued to travel through the intersection and collided its right front with the right side of vehicle #2, 44.2 feet west and 29.8 feet south of the reference point. Both vehicles then moved from final rest to a safe location. The reference point was the northeast traffic control signal pole. Both vehicles were moved from final rest prior to arrival.
2015	10	7:30:00 PM	0	0	Property	Intersection Related	Dry	Daylight	None	East	Drove Wrong Way	45	55					Vehicle 1 was traveling eastbound in the westbound lanes on Woodmen approaching Meridian. Vehicle 2 was southbound on Meridian preparing to take a merge lane onto westbound Woodmen. Vehicle 1 went off the north side of the roadway and traveled for 360 feet leaving rolling tire marks on the shoulder, and then went northbound in the southbound merge lane of Meridian to westbound Woodmen. Vehicle 1 then struck vehicle 2 on the right side with its right front. Vehicle 1 continued north 25 feet and came to rest facing northeast on its wheels in the southbound merge lane of Meridian. Both occupants of vehicle 1, which later was confirmed as stolen, fled the scene. Vehicle 2 continued southwest for 15 feet and came to rest facin southwest on the left gore of southbound Meridian to westbound Woodmen lane.
2015	12	9:45:00 PM	0	0	Property	At Intersection	Dry	Daylight	None	Northwest	Going Straight	45	5	No	No	No	No Injury	Vehicle # 1 was westbound E. Woodmen Road, in the right turn lane, approaching the intersection with Meridian Road; vehicle # 2 was in front of vehicle # 1. The driver of vehicle # 1 failed to observe that vehicle # 2 was stopped and collided its front with the rear of vehicle # 2. Both vehicle's were moved from final rest prior to my arrival.
2016	4	4:30:00 PM	0	1	Injury	Non-Intersection	Icy	Daylight	Snow/Sleet/Hai	West	Slowing	50	35	No	No	No	No Injury	VEHICLES 1 AND 2 WERE WESTBOUND ON WOODMEN RD, IN THE RIGHT LANE. VEHICLE 2 STOPPED IN TRAFFIC. THE FRONT OF VEHICLE 1 IMPACTED THE REAR OF VEHICLE 2, APPROXIMATELY .1 MILE WEST OF MERIDIAN RD. BOTH VEHICLES WERE DRIVEN TO REST ON THE RIGHT SHOULDER PRIOR TO ARRIVAL. EXACT POINT OF IMPACT UNKNOWN.
2016	6	7:10:00 PM	0	0	Property	At Intersection	Dry	Daylight	None	West	Slowing	45	20	No	No	No	No Injury	Vehicle 2 was westbound Woodmen Rd, in the right most though lane, stopped in traffic, at the red light, at the intersection of Meridian Rd. Vehicle 1 was westbound Woodmen Rd, in the right most through lane, approaching Meridian Rd and Vehicle 2. Vehicle 1 failed to safely stop behind Vehicle 2. Vehicle 1 struck its front with the rear of Vehicle 2. The point of impact occurred in the right most through lane of westbound Woodmen Rd, just east of Meridian Rd. After the impact, both vehicles were driven to final rest.
2016	6	12:49:00 AM	0	0	Property	Intersection Related	Dry	Dark - Lighted	None	East	Going Straight	45	30	No	Yes	No	No Injury	Vehicle 1 was traveling east in the westbound merge lane from the intersection of Meridian road. Vehicle 1 did not turn or stop and collided with the raised curb of the pedestrian island on the northwest corner of the intersection. Vehicle 1 continued and struck the utility pole with the right front fender. Vehicle 1 continued, making a left turn and stopping in the south bound turn lane of Meridian Road to eastbound Woodmen Road. Vehicle 1 came to rest in it's wheels facing north.
2016	8	6:45:00 PM	0	0	Property	At Intersection	Dry	Daylight	None	West	Going Straight	45	5	No	No	No	No Injury	VEHICLES 1 AND 2 WERE WESTBOUND ON WOODMEN RD. VEHICLE 2 WAS STOPPED IN TRAFFIC. THE FRONT OF VEHICLE 1 IMPACTED THE REAR OF VEHICLE 2, APPROXIMATELY 15' EAST OF MERIDIAN RD, IN THE LEFT THRU LANE. BOTH VEHICLES WERE MOVED OUT OF TRAFFIC PRIOR TO ARRIVAL. EXACT POINT OF IMPACT UNKNOWN.
2016	10	1:45:00 PM	0	0	Property	At Intersection	Dry	Daylight	None	West	Going Straight	45	45	No	No	No	Complaint of Injury	Vehicle #1 was in the right through lane westbound Woodmen Rd approaching Meridian Rd. Vehicle #2 was in the right through lane northbound Meridian Rd at Woodmen Rd. Vehicle #2 had green light and entered the intersection. Vehicle #1 failed to stop for the red light and collided its front with the right side of Vehicle #2. Both vehicles were driven to rest.
2016	11	3:35:00 PM	0	0	Property	Intersection Related	Dry	Daylight	None	West	Going Straight	45	10	No	No	No	Complaint of Injury	Vehicle 1 was southbound on Meridian Road, in the right turn lane. Vehicle 2 was southbound on Meridian Road, in the right turn lane ahead of Vehicle 1. Vehicle 2 turned right onto Woodmen Road and traveled westbound in the acceleration lane. Vehicle 1 followed Vehicle 2. Vehicle 1 stopped for traffic. Vehicle 1 struck Vehicle 2, in the rear, with its front. Both vehicles were moved from the scene prior to officer arrival.
2017	5	7:30:00 AM	0	0	Property	Intersection Related	Dry	Dark - Lighted	None	East	Making Left Turn	45	15	No	Yes	Unknown	No Injury	Vehicle 1 and vehicle 2 were both stopped on eastbound E Woodmen Rd in the #2 left turn lane to N Meridian Rd with vehicle 1 behind vehicle 2. Vehicle 1 suddenly drove forward and struck the rear of vehicle 2 with its front. Vehicles 1 and 2 both came to final rest on their wheels facing east.

GOLDEN SAGE/WOODMEN

Year	Month	Accident Time	Number Killed	Number Injured	FIP	Road Description Code	Road Condition Code	Lighting Condition Code	Adverse Weather Condition Code	Direction Of Travel Code	Vehicle Movement Code	Roadway Speed Limit	Estimated Vehicle Speed	Ejection	Suspected Alcohol	Suspected Drugs	Injury Severity	Accident Narrative
2014	1	11:58:00 PM	0	1	Injury	Non-Intersection	Dry	Dark - Unlighted	None	East	Going Straight	55	75	No	Yes	No	No Injury	Vehicles 1 and 2 were eastbound on Woodmen Road in the number two lane approaching the intersection of Golden Sage Road. Vehicle 2 was ahead of vehicle 1. Vehicle 1 struck the left rear of vehicle 2 with its right front. Vehicle 2 began to rotate clockwise approximately 90 degrees across the right shoulder due to the impact before exiting the right side of the roadway while in a broadside skid. Vehicle 2 continued off road broadside for approximately 18 feet before hitting a trip point. Vehicle 2 then began to roll while colliding with a barb wire fence with its top. Vehicle 2 continued southeast through a field for approximately 208 feet where it rolled an additional 2.5 times before coming to rest on its wheels facing south. Vehicle 1 was driven to a controlled stop onto the right shoulder approximately 460 feet from the initial point of impact.
2014	1	7:15:00 PM	0	0	Property	Intersection Related	Dry	Dark - Lighted	None	East	Going Straight	55	50	No	No	No	No Injury	VEHICLE #1 WAS TRAVELING EAST ON WOODMEN ROAD, APPROACHING GOLDEN SAGE ROAD, IN THE RIGHT LANE. VEHICLE #2 WAS STOPPED ON WOODMEN ROAD AT GOLDEN SAGE, IN THE RIGHT LANE, AT A RED LIGHT. VEHICLE #1'S BRAKES FAILED IT AND COULD NOT STOP. VEHICLE #1 SWERVED TO THE RIGHT AND COLLIDED ITS DRIVER'S SIDE FRONT TO THE PASSENGER SIDE REAR OF VEHICLE #2. BOTH VEHICLE MOVED PRIOR TO MY ARRIVAL.
2014	1	2:30:00 AM	0	0	Property	Intersection Related	Dry	Dark - Lighted	None	East	Going Straight	55	40	No	No	No	Complaint of Injury	Vehicle 1 was traveling east on Woodmen Road. Vehicle 2 was stopped behind several vehicles in the left turn lane to Golden Sage on Woodmen Road eastbound. Vehicle 1 collided with the rear of vehicle 2 with its front. Both vehicles were driven partially off road and into the median when I arrived on scene.
2014	8	9:31:00 PM	0	0	Property	Non-Intersection	Dry	Daylight	None	West	Going Straight	55	55	No	No	No	No Injury	Vehicle 1 was westbound on Woodmen Road. The driver of Vehicle 1 fell asleep at the wheel and drove off the right side of the road. The front end of Vehicle 1 collided with a barbed wire fence. Vehicle 1 traveled back onto the roadway and drove to a controlled stop, on its wheels, and stopped facing west.
2014	9	9:40:00 PM	0	0	Property	Intersection Related	Dry	Daylight	None	East	Going Straight	55	10	No	No	No	No Injury	Vehicles 1 and 2 were eastbound on Woodmen Rd stopped at Golden Sage Rd in the right lane. Vehicle 1 began to move before vehicle 2 and collided its front with the rear of vehicle 2. Both vehicles were moved prior to investigation.
2014	9	1:00:00 PM	0	0	Property	At Intersection	Dry	Daylight	None	East	Going Straight	55	55	No	No	No	Complaint of Injury	Vehicle #1 was traveling eastbound on E Woodmen Rd approaching Golden Sage Rd. Vehicle #2 was northbound on Golden Sage Rd in the left turn lane at E Woodmen Rd. Vehicle #2 had a solid green light to left onto westbound E Woodmen Rd. Vehicle #1 failed to stop for a solid red light and entered into the intersection. Driver #1 stated that the sun was in her eyes and she did not see that the light was red. Vehicle #1 collided its front with the left side of Vehicle #2. Vehicle #2 traveled for approximately 70.5' before coming to rest in the westbound lanes of traffic facing east. Vehicle #1 traveled approximately 19.4' before coming to rest in the intersection facing north. Both driver's and passenger refused medical on scene.
2014	12	1:20:00 PM	0	0	Property	At Intersection	Dry	Dark - Lighted	None	East	Making Left Turn	55	15	No	No	No	Complaint of Injury	Vehicle 1 was eastbound on Woodmen Road in the left turn lane. Vehicle 2 was westbound on Woodmen approaching the intersection of Golden Sage Road. The traffic light was yellow in both directions. Vehicle 1 made a left turn onto northbound Golden Sage Road in front of traffic. The front end of Vehicle 2 collided with the right side of Vehicle 1 in the intersection. Vehicle 1 was moved out of the lane of traffic and drove to final rest on the north side of the intersection. Vehicle 2 traveled west of the intersection where it came to final rest in the eastbound left turn lane facing west, on its wheels.
2015	1	12:15:00 PM	0	0	Property	Intersection Related	Dry	Dark - Lighted	None	South	Making Right Turn	55	25	No	No	No	Complaint of Injury	Vehicle #1 was stopped on Golden Sage Road southbound at Woodmen Road. Vehicle #2 was traveling westbound on Woodmen Road in the right lane approaching Golden Sage Road. Vehicle #1 turned right into the right lane and proceeded west on Woodmen Road. Driver #1 then realized how close Vehicle #2 was to the intersection. Vehicle #1 moved into the left lane to avoid a crash. Vehicle #2 also moved left to avoid a crash. Vehicle #2's front struck Vehicle #1's rear while both vehicles were traveling westbound in the left lane. Both vehicles pulled off the roadway after the crash.
2015	9	6:49:00 PM	0	0	Property	Intersection Related	Dry	Daylight	None	West	Slowing	55	30	No	No	No	Complaint of Injury	Vehicle 1 was westbound on Woodmen Road, in the left traffic lane. Vehicle 2 was westbound on Woodmen Road, in the left traffic lane ahead of Vehicle 1. Vehicle 2 stopped for traffic. Vehicle 1 slowed and struck Vehicle 2 in the rear with its front (Driver 1 stated that he had not allowed for traffic ahead of Vehicle 2 to be stopped).
2016	4	10:35:00 PM	0	0	Property	Non-Intersection	Dry	Daylight	None	East	Going Straight	55	55	No	Yes	Yes	No Injury	Vehicle #1 was traveling eastbound on Woodmen Road. Vehicle #1 traveled off the right side of the roadway for 260.0 feet. Vehicle #1 rotated counterclockwise 1/2 time and traveled back on the roadway for 55.0 feet before traveling off the left side of the roadway for 29.5 feet. Vehicle #1 then started to roll clockwise 1 1/2 roll, while traveling for 65.0 feet before coming to final rest on its roof, 53.0 feet from the roadway edge.
2016	6	10:00:00 PM	0	0	Property	Non-Intersection	Dry	Daylight	None	East	Going Straight	55	55	No	No	No	No Injury	Vehicle #1 was traveling eastbound on Woodmen Rd in the left lane approximately .4 miles west of Golden Sage Rd. An antelope ran in front of vehicle #1; vehicle #1 struck the antelope with the front of the vehicle. Vehicle #1 merged to the left shoulder and stopped facing east.
2016	8	11:21:00 PM	0	0	Property	Intersection Related	Wet	Daylight	Rain	East	Going Straight	55	45	No	No	No	No Injury	Vehicle #1 and #2 were eastbound on E Woodmen Rd. The front of vehicle #1 collided with the rear of vehicle #2 approximately 200' west of Golden Sage Rd. Vehicles were moved prior to investigation.
2016	10	6:40:00 AM	0	0	Property	Non-Intersection	Dry	Dark - Unlighted	None	East	Going Straight	55	55	No	No	No	No Injury	Vehicle 1 was traveling east on Woodmen Road in the right lane. Driver 1 fell asleep and vehicle 1 ran off the right side of the roadway. Driver 1 attempted to correct, vehicle 1 returned to the roadway and yawed off the right side of the roadway. Vehicle 1 rotated 1/2 times and struck a fence. Vehicle 1 continued under the fence and came to rest in the field off the south side of the roadway on its wheels facing north.
2016	10	6:45:00 AM	0	1	Injury	Non-Intersection	Dry	Dark - Unlighted	None	West	Going Straight	55	50	Yes - Full	No	No	Evident - non-incapacitating	Vehicle 1 was traveling west on Woodmen Road in the left lane. The animal was crossing the roadway from right to left. Vehicle 1 struck the animal. Vehicle 1 overturned approximately 2 times and came to rest in the left lane. Vehicle 1 was moved to the left shoulder.
2016	12	10:18:00 PM	0	2	Injury	Intersection Related	Dry	Daylight	None	East	Going Straight	55	65	No	No	No	Evident - non-incapacitating	Vehicle 2 was eastbound in the right lane on Woodman Road, Stationary at a red light at the intersection with Golden Sage Road. Vehicle 1 was eastbound in the right lane on Woodman Road approaching the intersection with Golden Sage Road. Vehicle 1 skidded for 35 feet before colliding with Vehicle 2. After impact Vehicle 2 travelled 118 feet coming to final rest within the intersection on all four wheels facing east. After impact Vehicle 1 travelled an additional 140 feet on the roadway before travelling off road to the right for 11 feet before colliding with a lamp pole. Vehicle 1 came to final rest on all four wheels against the light pole, partially on the south side of the road facing southeast.
2016	12	12:40:00 AM	0	0	Property	Non-Intersection	Dry	Dark - Unlighted	Wind	East	Going Straight	55	65	No	No	No	No Injury	Vehicle 2 was eastbound on Woodmen Road in the right lane of traffic. Vehicle 1 was eastbound on Woodmen road in the right lane of traffic, directly behind Vehicle 2. Driver of Vehicle 1 fell asleep and collided with the rear of Vehicle 2. After impact Vehicle 1 continued an additional 140 feet on road before leaving the road to the right. Vehicle 1 drove off road for 35 feet before colliding with a fence. Vehicle 1 came to final rest against the fence on all four wheels facing southeast. Final rest of Vehicle 2 is unknown as it was moved prior to State Patrol arrival.
2017	3	7:15:00 PM	0	0	Property	Non-Intersection	Dry	Daylight	Wind	West	Going Straight	55	50	No	No	No	No Injury	Vehicle 1 was westbound on Woodmen Road, in the right traffic lane. Vehicle 2 was westbound on Woodmen Road, in the left traffic lane. Vehicle 3 was westbound on Woodmen Road, in the left traffic lane behind Vehicle 2. Vehicle 1 continued westbound when a mattress and box spring spilled onto the roadway, into the left traffic lane, from its bed. Vehicle 2 swerved and slowed. Vehicle 3 slowed and struck Vehicle 2, in the rear, with its front. All three vehicles were moved from the scene prior to officer arrival.
2017	4	12:40:00 AM	1	0	Fatal	Intersection Related	Dry	Daylight	None	East	Making Right Turn	55	25	No	Yes	No	No Injury	Vehicle #1 was eastbound on Woodmen Road making a left turn in front of approaching traffic. Vehicle #2 was westbound on Woodmen Road. Vehicle #1 collided its front with the left side of Vehicle #2. Vehicle #1 came to rest facing north. Vehicle #2 traveled off the right side of the road and came to rest facing south.
2017	4	1:45:00 PM	0	0	Property	Intersection Related	Dry	Daylight	None	West	Going Straight	55	35	No	No	No	Complaint of Injury	Vehicle #1 was traveling westbound on Woodmen Road in the right lane approaching Golden Sage Road. Vehicle #2 was stopped on Woodmen Road at Golden Sage Road in the right lane. Vehicle #1 attempted to stop leaving 88 feet of braking tire marks before its front left struck Vehicle #2's right rear. Both vehicles moved from final rest onto Golden Sage Road prior to my arrival on scene.
2017	4	7:35:00 PM	0	0	Property	Intersection Related	Dry	Daylight	Wind	East	Entering/ Leaving Parked Position	55	15	No	No	No	No Injury	VEHICLES 1 AND 2 WERE EASTBOUND ON WOODMEN RD, IN THE LEFT LANE, STARTING FROM A GREEN LIGHT, AT GOLDEN SAGE RD. THE FRONT OF VEHICLE 1 IMPACTED THE REAR OF VEHICLE 2, APPROXIMATELY 20' EAST OF THE INTERSECTION, IN THE LEFT LANE. BOTH VEHICLES WERE DRIVEN TO REST IN THE MEDIAN, OUT OF TRAFFIC, PRIOR TO ARRIVAL. EXACT POINT OF IMPACT UNKNOWN.
2017	6	10:07:00 PM	0	0	Property	At Intersection	Dry	Daylight	None	East	Going Straight	55	35	No	No	No	No Injury	Vehicle #1 was eastbound on Woodmen Rd. Vehicle #2 was stopped at the intersection of Golden Sage Rd and Woodmen Rd. Vehicle #1 failed to stop for the red light. Vehicle #2 began to turn left onto Woodmen Rd. Vehicle #1's passenger front bumper impacted Vehicle #2's driver side. Both vehicles moved prior to investigation.
2017	6	11:45:00 PM	0	0	Property	Non-Intersection	Dry	Daylight	None	East	Going Straight	55	60	No	No	No	No Injury	Vehicle 4 was stopping in traffic on Woodmen Road just west of Golden Sage facing east. Vehicle 1, 2, and 3 were traveling east on Woodmen Road just west of Golden Sage. From west to east, vehicle 1, vehicle 2, vehicle 3 and vehicle 4. Traffic was slowing, vehicle 1 could not stop and collided front to rear with vehicle 2. Vehicle 1 continued and came to rest in the left lane facing east on the roadway. Vehicle 2 collided with the rear of vehicle 3. Vehicle 2 came to rest on it's wheels facing east on the roadway. Vehicle 3 collided with the rear of vehicle 4. Vehicle 3 came to rest on it's wheels facing east on the roadway. Vehicle 4 was driven to the left shoulder.
2017	7	12:25:00 AM	0	0	Property	Intersection Related	Dry	Daylight	None	West	Going Straight	55	15	No	No	No	No Injury	Vehicles 1 and 2 were westbound on Woodmen Rd approaching Golden Sage Rd in the left lane. Vehicle 2 stopped for traffic ahead. Vehicle 1 failed to stop and collided its front with the rear of vehicle 2. Both vehicles were moved prior to investigation.

MERIDIAN/EASTONVILLE

Year	Month	Accident Time	Number Killed	Number Injured	FIP	Road Description Code	Road Condition Code	Lighting Condition Code	Adverse Weather Condition Code	Direction Of Travel Code	Vehicle Movement Code	Roadway Speed Limit	Estimated Vehicle Speed	Ejection	Suspected Alcohol	Suspected Drugs	Injury Severity	Accident Narrative
2014	8	12:20:00 AM	0	0	Property	At Intersection	Dry	Daylight	None	West	Making Left Turn	25	10	No	No	No	No Injury	Vehicle #1 was stopped on Eastonville Rd at Meridian Rd facing west. Vehicle #2 was northbound on Meridian Rd approaching Eastonville Rd in the right lane. Vehicle #1 attempted to turn left onto southbound Meridian Rd. from Eastonville Rd in front of vehicle #2. Vehicle #1's left front was struck by the right front/side of vehicle #2. Both vehicles were moved out of the intersection prior to my arrival.
2014	9	11:15:00 AM	0	0	Property	At Intersection	Dry	Dark - Unlighted	None	South	Making Left Turn	55	15	No	No	No	No Injury	Vehicle #1 was on Eastonville Rd at N Meridian Rd. Vehicle #2 a semi truck and trailer was traveling southbound in the left lane on N Meridian Rd approaching Eastonville Rd. Vehicle #1 was attempting to make a left turn onto N Meridian Rd and failed to yield right-of-way to Vehicle #2. Vehicle #2 attempted to avoid Vehicle #1 and swerved to the right. Vehicle #2's trailer left side collided with Vehicle #1 right front. Both vehicle's where driven to rest.
2014	12	10:55:00 PM	0	0	Property	At Intersection	Dry	Daylight	None	West	Making Left Turn	35	20	No	No	No	No Injury	Vehicle #1 was stopped at the intersection of Eastonville Rd and Meridian Rd. Vehicle #2 was northbound on Meridian Rd. Vehicle #1 failed to yield the right of way and began to make a left turn onto Meridian Rd. Vehicle #1's front bumper impacted the Vehicle #2's passenger side. Both vehicles moved prior to investigation.
2016	5	10:30:00 PM	0	0	Property	At Intersection	Dry	Daylight	None	West	Making Left Turn		15	No	No	No	No Injury	Vehicles #1 and #2 were stopped at a stop sign on Eastonville Road westbound at Meridian Road. Vehicle #2 proceeded from the stop sign to make a left turn onto southbound Meridian Road, stopping in the center of the intersection after crossing the northbound lanes. Vehicle #1 proceeded across the northbound lanes as well, and it's front left struck Vehicle #2's right rear. Vehicle #1 fled the scene. Vehicle #2 followed Vehicle #1 to Woodmen Road and Golden Sage Road where both vehicles stopped.
2016	6	4:45:00 PM	0	1	Injury	At Intersection	Dry	Daylight	None	East	Making Left Turn	30	2	No	No	No	No Injury	Vehicle 1 was stopped at the stop sign on Eastonville Road at the intersection with Meridian Road. Bicycle 1 was northbound on Meridian Road on the shoulder of the right turn lane. Bicycle 1 continued straight through the intersection. Vehicle 1 proceeded into the intersection and collided its front with the bicycle, knocking its rider to the ground at low speed. Both Vehicle 1 and Bicycle 1 were moved prior to investigation.
2017	5	3:15:00 PM	0	2	Injury	At Intersection	Dry	Daylight	None	East	Making Left Turn	55	20	No	No	No	Evident - non-incapacitating	Vehicle #1 was turning eastbound from southbound Meridian Rd. Vehicle #2 was traveling northbound on Meridian Rd. Vehicle #1 turned in front of oncoming traffic and collided with the front of vehicle #2. Vehicle #1 came to rest, facing northeast, in the northbound traffic lane of Meridian Rd. Vehicle #2 came to rest in the dich, facing northeast, off the east side of Meridian Rd. Vehicle #1 vision obstructed by large dump truck.

Internal Trip Calculations

TRANSPORTATION
CONSULTANTS, INC.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Falcon Marketplace	**Organization:**	LSC
Project Location:	El Paso County, CO	**Performed By:**	KDF
Scenario Description:	Buildout	**Date:**	6/2/2017
Analysis Year:	2040	**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				34	17	17
Retail				688	403	285
Restaurant				294	150	144
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses[2]				0		
				1,016	570	446

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		5	11	0	0	0
Retail	1		37	0	0	0
Restaurant	2	20		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	1,016	570	446
Internal Capture Percentage	15%	13%	17%
External Vehicle-Trips[5]	864	494	370
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	18%	94%
Retail	6%	13%
Restaurant	32%	15%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	Falcon Marketplace
Analysis Period:	**AM Street Peak Hour**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	17	17	1.00	17	17
Retail	1.00	403	403	1.00	285	285
Restaurant	1.00	150	150	1.00	144	144
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	0	0	1.00	0	0
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		5	11	0	0	0
Retail	83		37	0	40	0
Restaurant	45	20		0	6	4
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		129	35	0	0	0
Retail	1		75	0	0	0
Restaurant	2	32		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	69	30	0		0
Hotel	1	16	9	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	3	14	17	14	0	0
Retail	25	378	403	378	0	0
Restaurant	48	102	150	102	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	16	1	17	1	0	0
Retail	38	247	285	247	0	0
Restaurant	22	122	144	122	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Falcon Marketplace	**Organization:**	LSC
Project Location:	El Paso County, CO	**Performed By:**	KDF
Scenario Description:	Buildout	**Date:**	6/2/2017
Analysis Year:	2040	**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				41	17	24
Retail				1,304	658	646
Restaurant				333	172	161
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses[2]				0		
				1,678	847	831

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		600	200			
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		4	1	0	0	0
Retail	5		50	0	0	0
Restaurant	5	66		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	1,678	847	831
Internal Capture Percentage	16%	15%	16%
External Vehicle-Trips[5]	1,416	716	700
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	59%	21%
Retail	11%	9%
Restaurant	30%	44%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	Falcon Marketplace
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	17	17	1.00	24	24
Retail	1.00	658	658	1.00	646	646
Restaurant	1.00	172	172	1.00	161	161
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	0	0	1.00	0	0
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		4	1	0	0	0
Retail	13		187	26	168	32
Restaurant	5	66		13	29	11
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		46	3	0	0	0
Retail	5		50	0	0	0
Restaurant	5	329		0	0	0
Cinema/Entertainment	1	26	5		0	0
Residential	10	66	24	0		0
Hotel	0	13	9	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	10	7	17	7	0	0
Retail	70	588	658	588	0	0
Restaurant	51	121	172	121	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	5	19	24	19	0	0
Retail	55	591	646	591	0	0
Restaurant	71	90	161	90	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

Southwest Roundabout Exhibits

TRANSPORTATION
CONSULTANTS, INC.

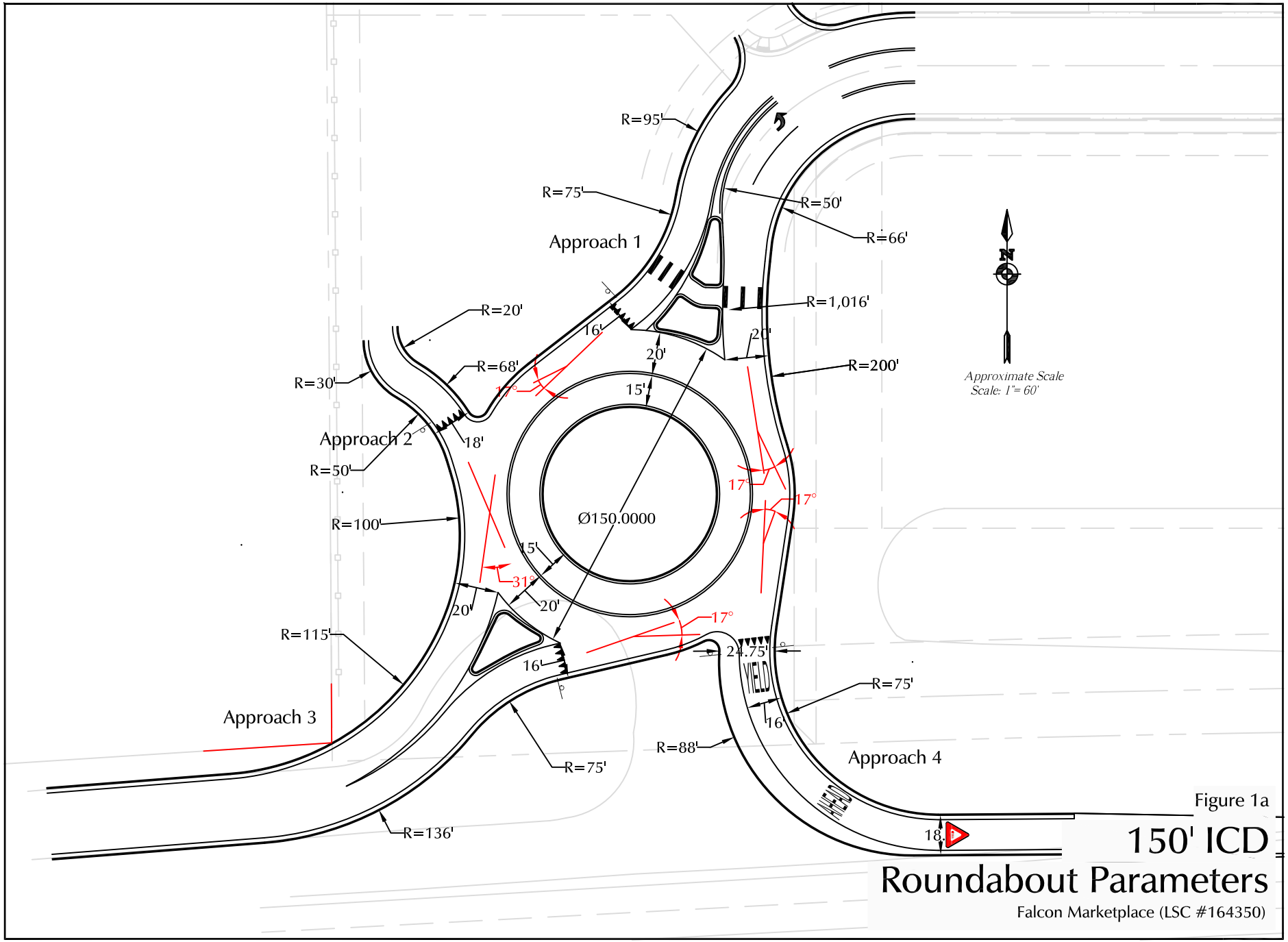


Figure 1a

150' ICD Roundabout Parameters

Falcon Marketplace (LSC #164350)

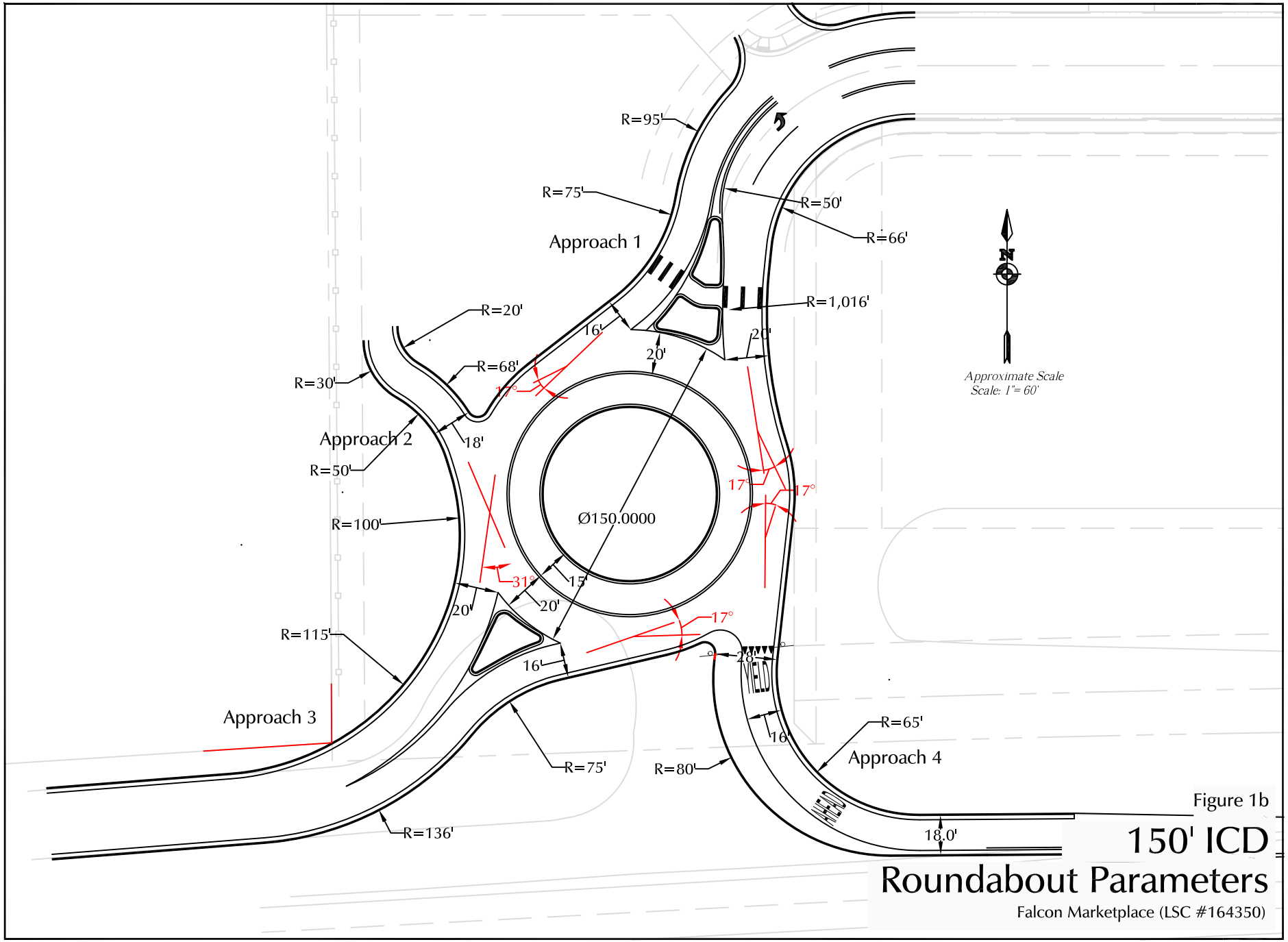


Figure 1b

150' ICD Roundabout Parameters

Falcon Marketplace (LSC #164350)

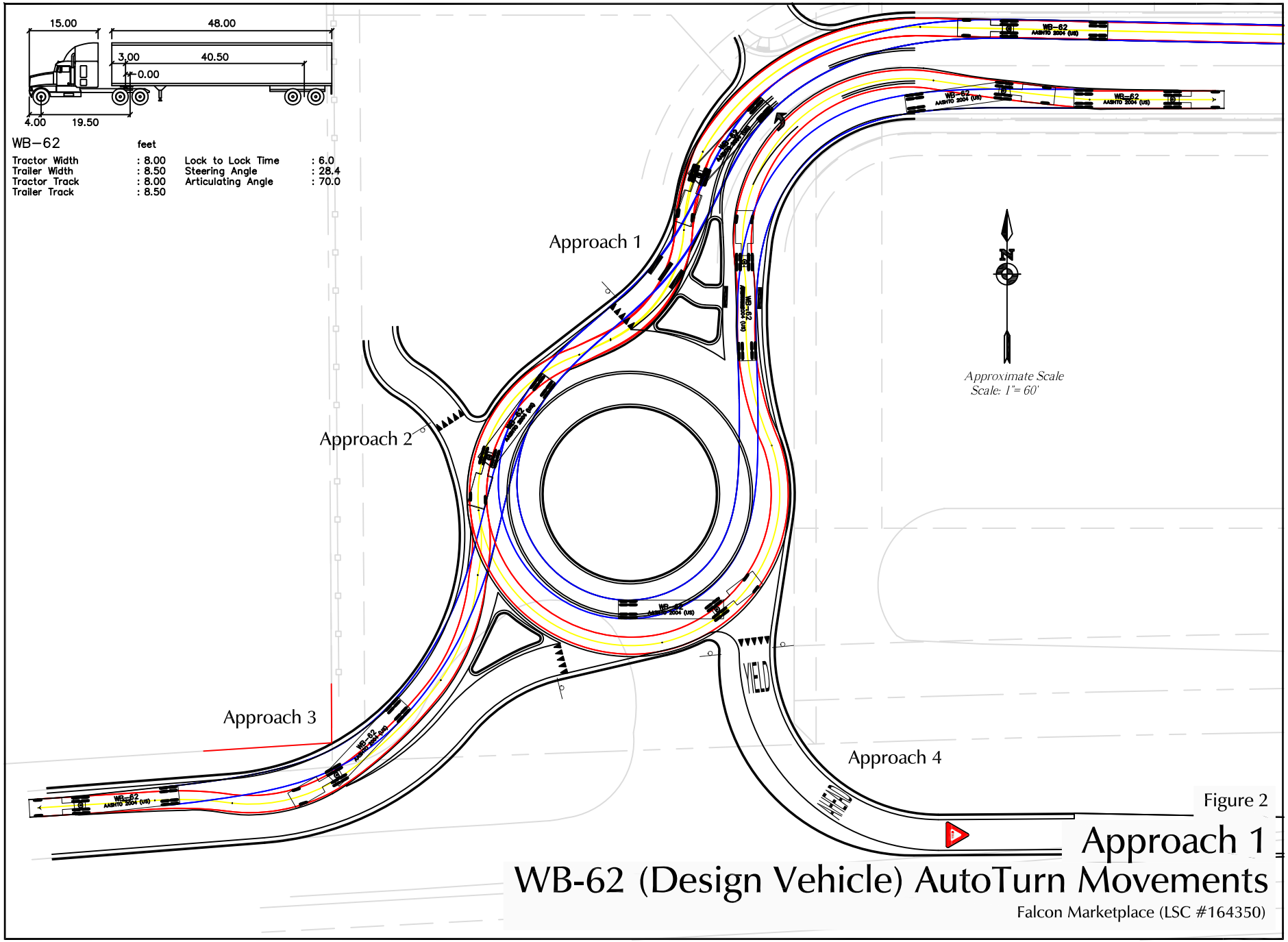


Figure 2

Approach 1

WB-62 (Design Vehicle) AutoTurn Movements

Falcon Marketplace (LSC #164350)

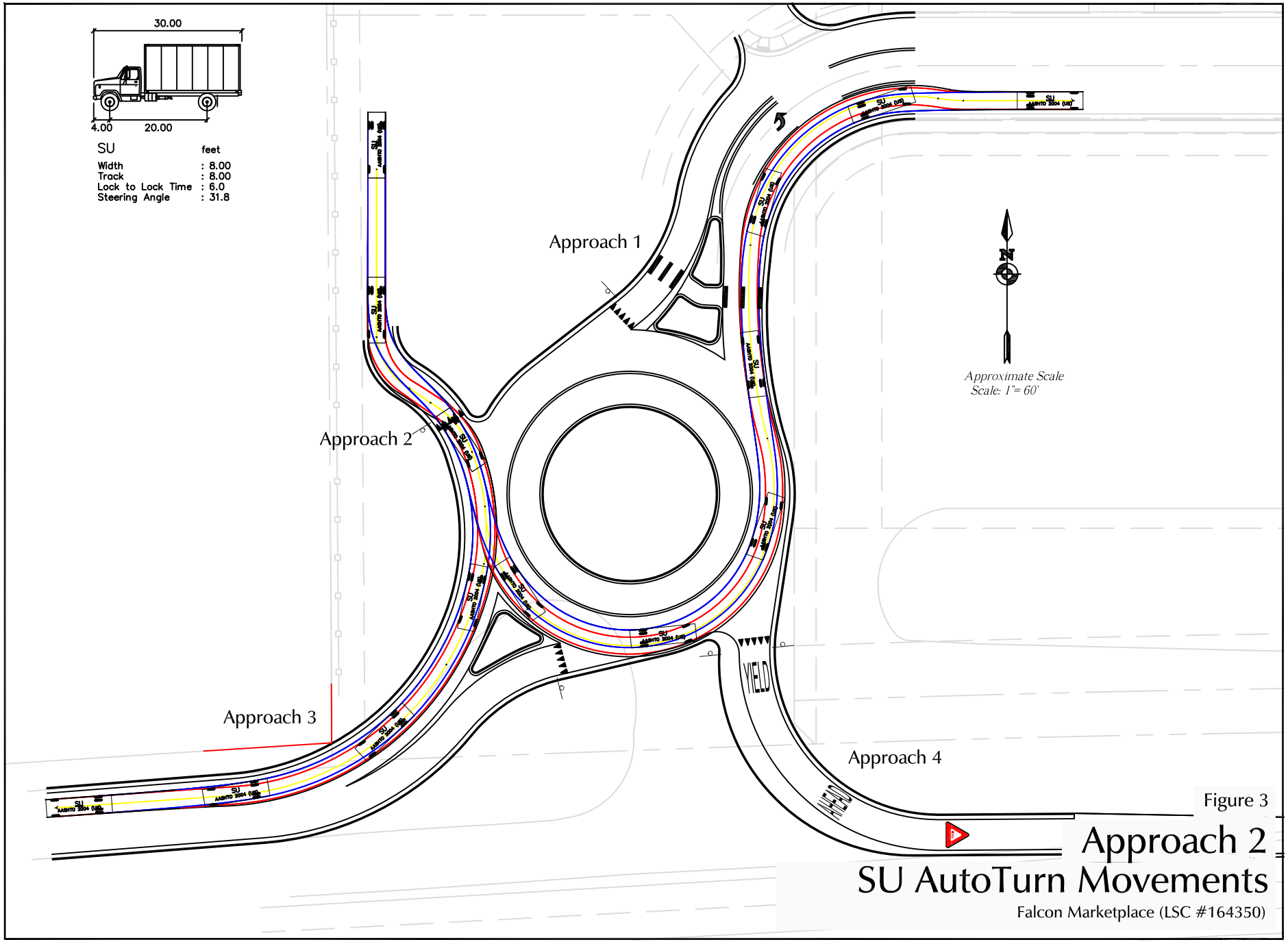


Figure 3

Approach 2 SU AutoTurn Movements

Falcon Marketplace (LSC #164350)

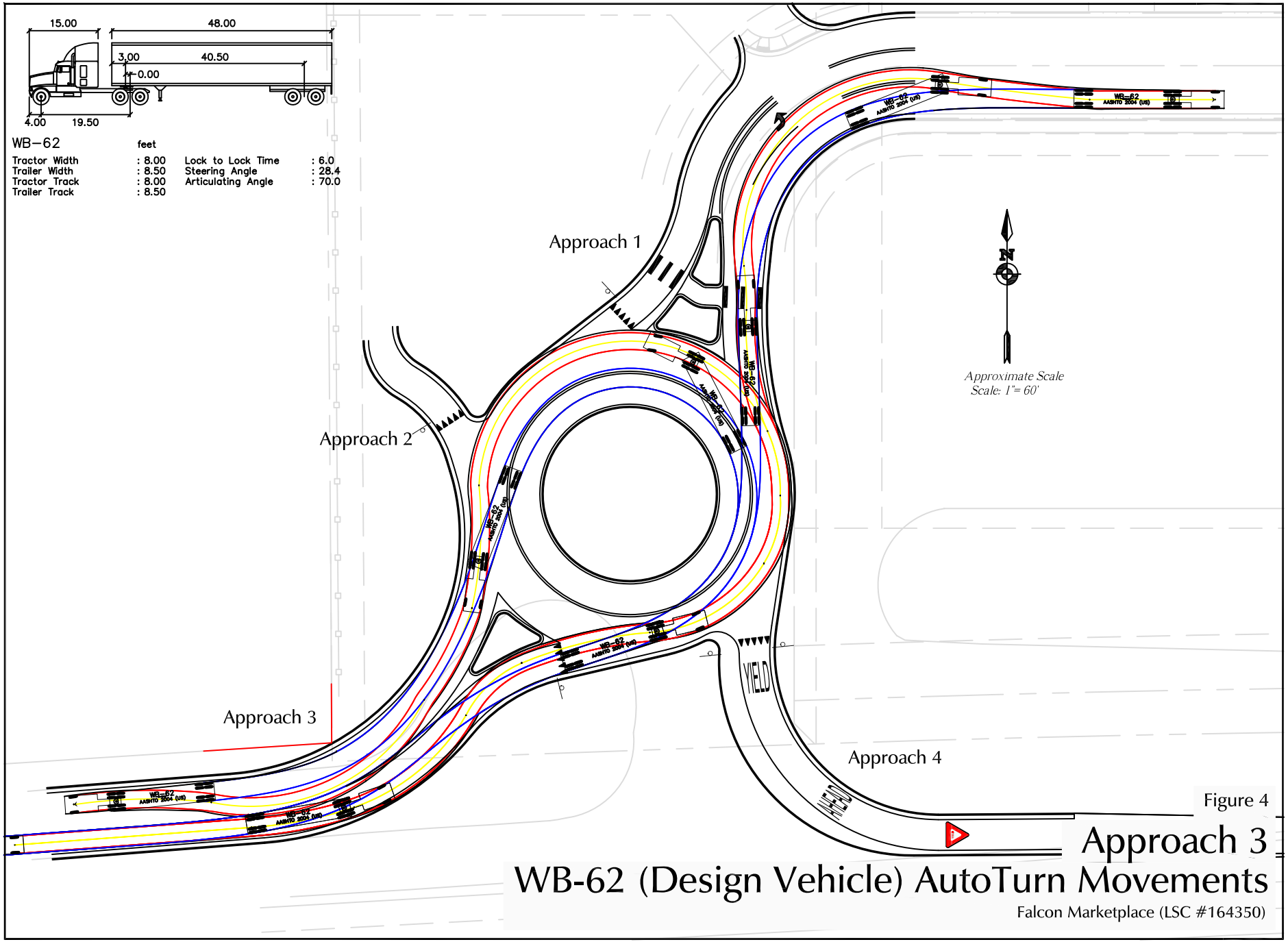


Figure 4

Approach 3

WB-62 (Design Vehicle) AutoTurn Movements

Falcon Marketplace (LSC #164350)

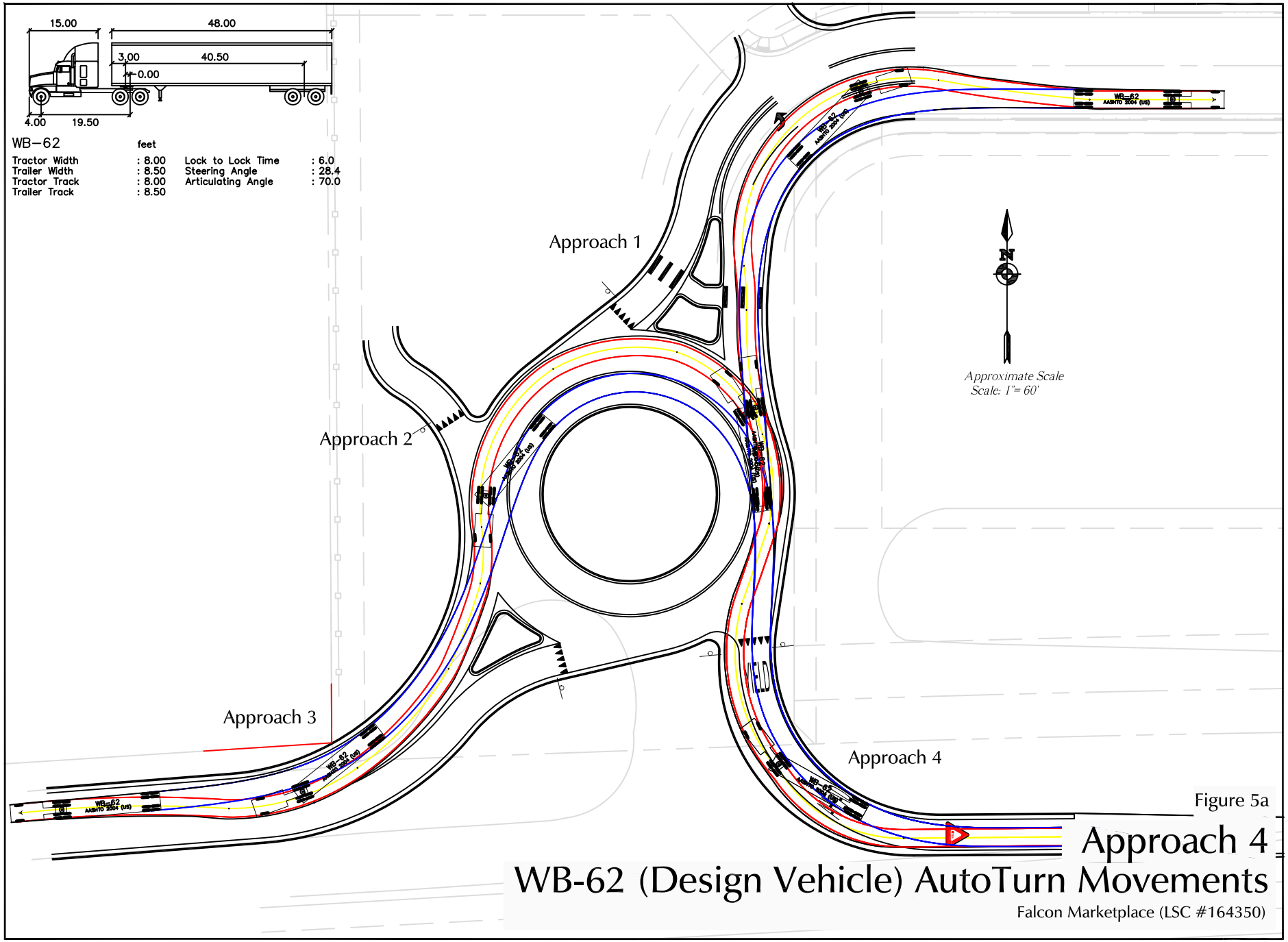


Figure 5a

Approach 4

WB-62 (Design Vehicle) AutoTurn Movements

Falcon Marketplace (LSC #164350)

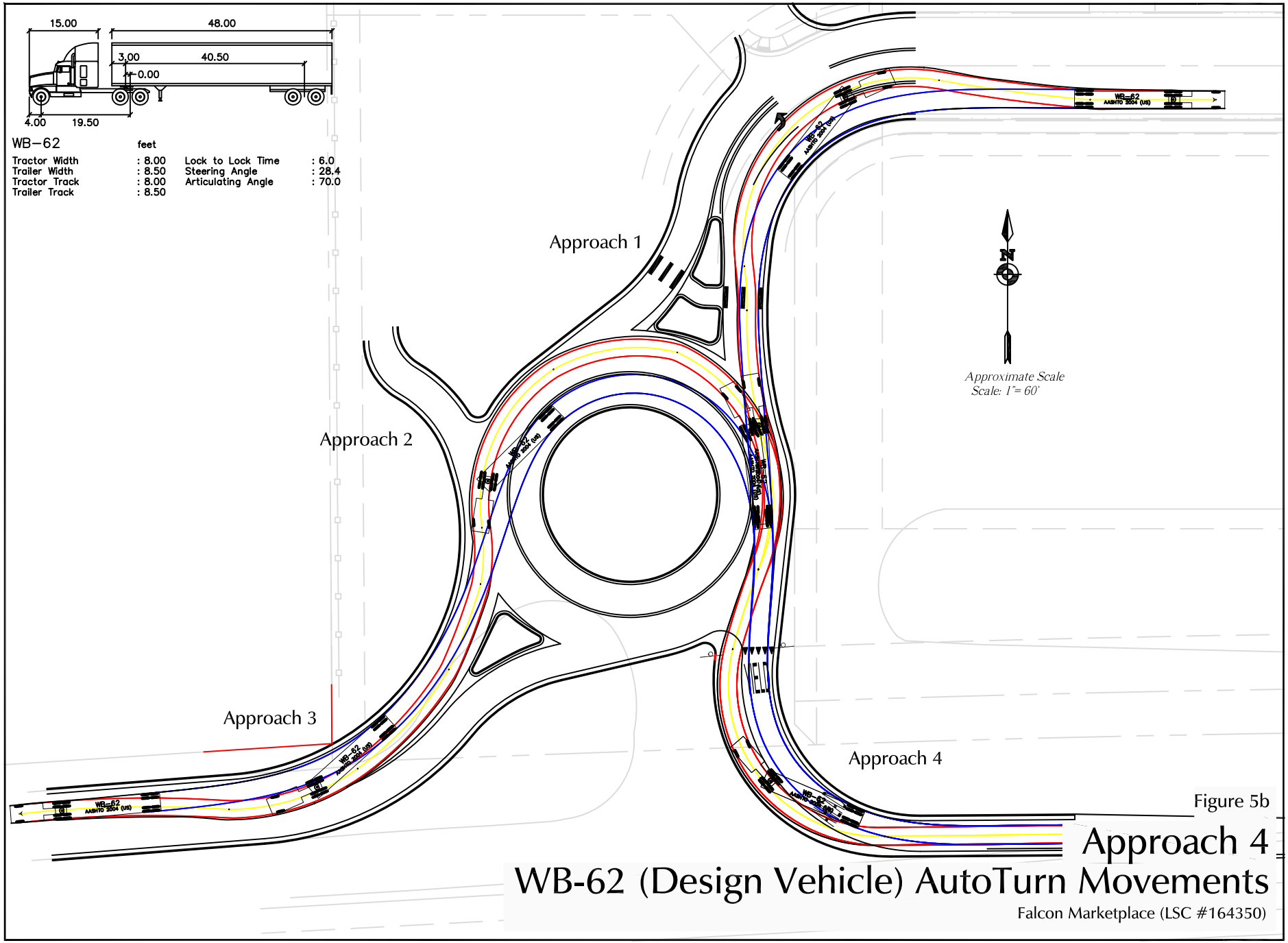


Figure 5b

Approach 4

WB-62 (Design Vehicle) AutoTurn Movements

Falcon Marketplace (LSC #164350)

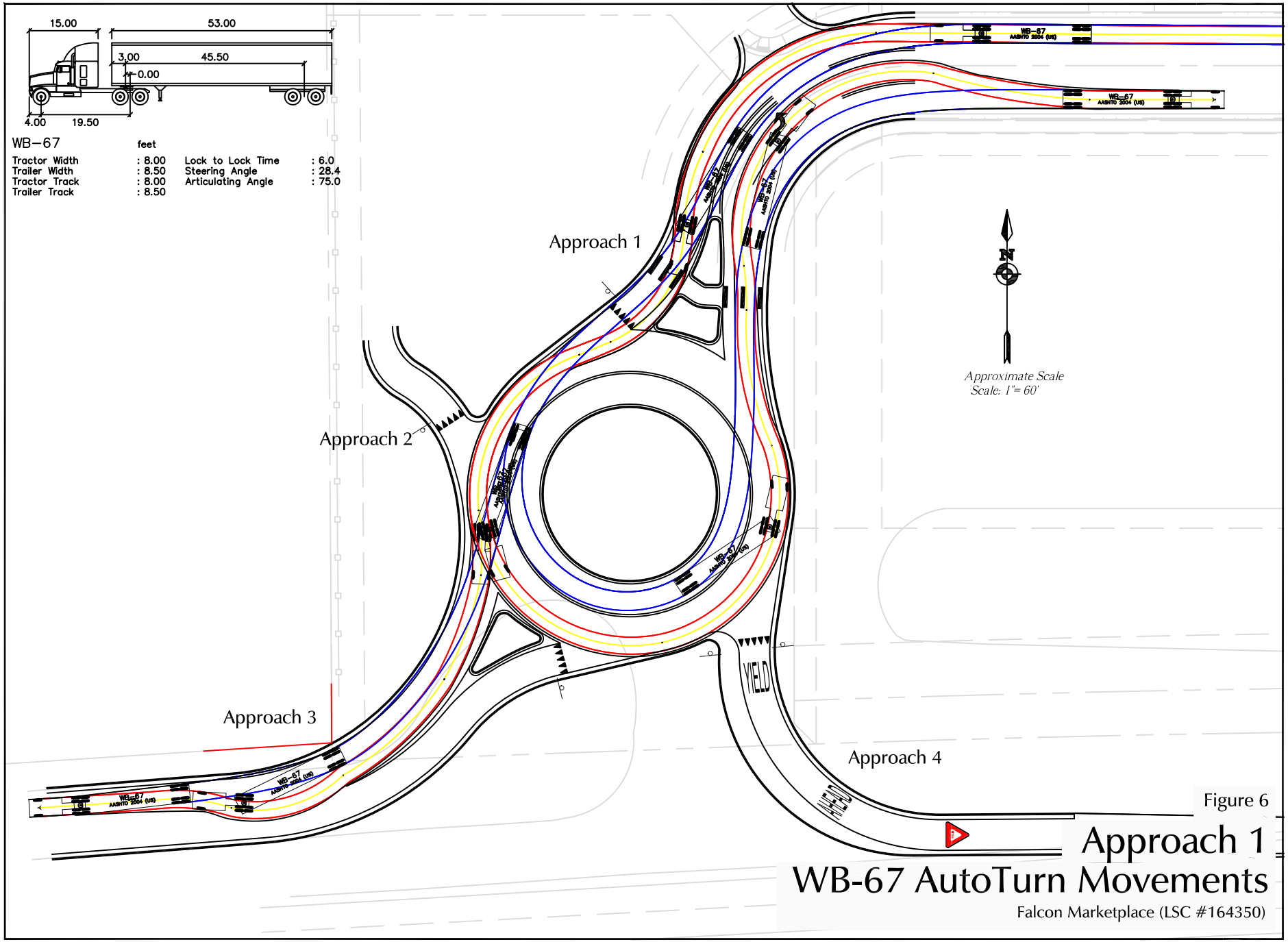


Figure 6

Approach 1
WB-67 AutoTurn Movements

Falcon Marketplace (LSC #164350)

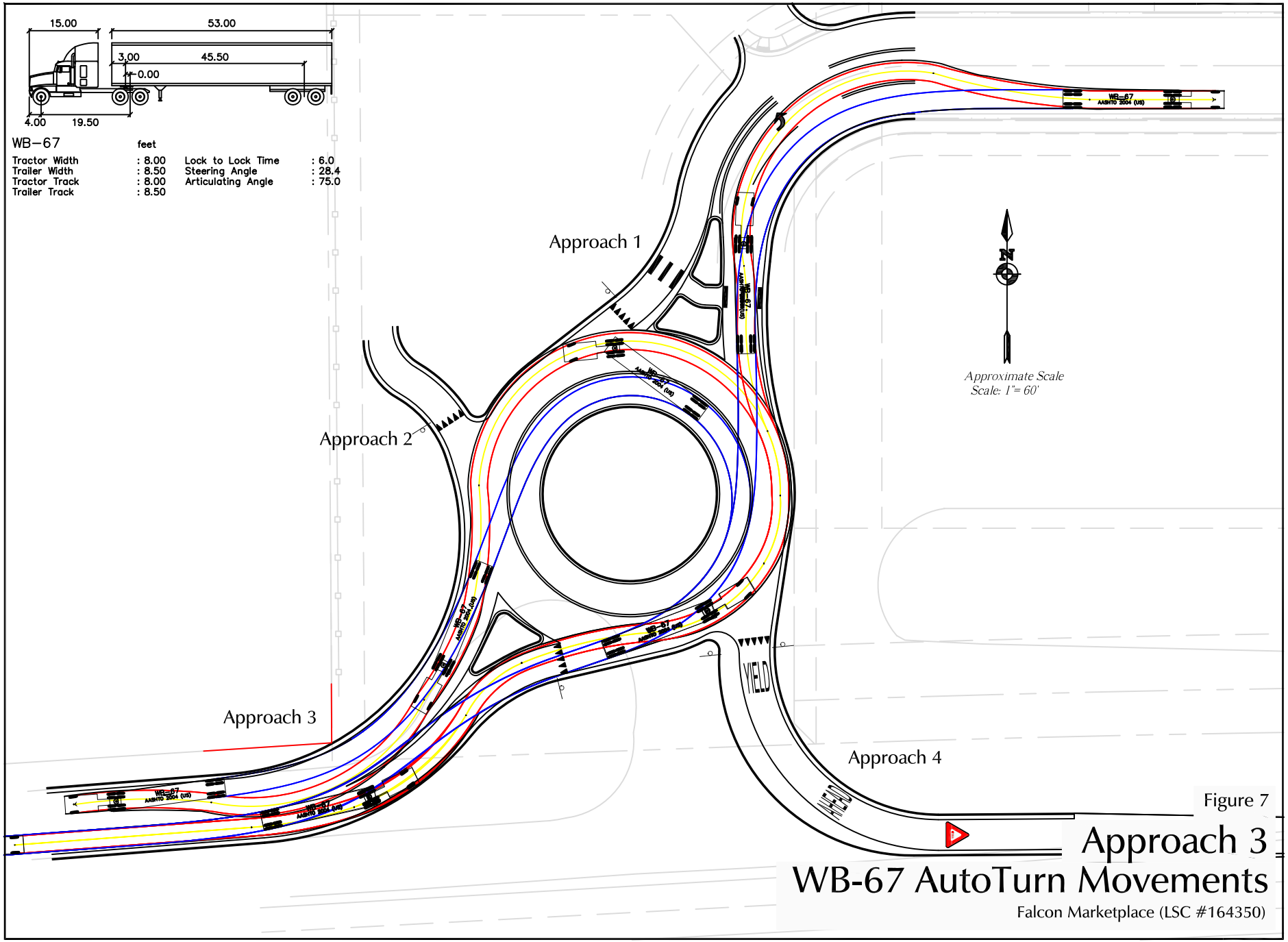


Figure 7

Approach 3
WB-67 AutoTurn Movements

Falcon Marketplace (LSC #164350)

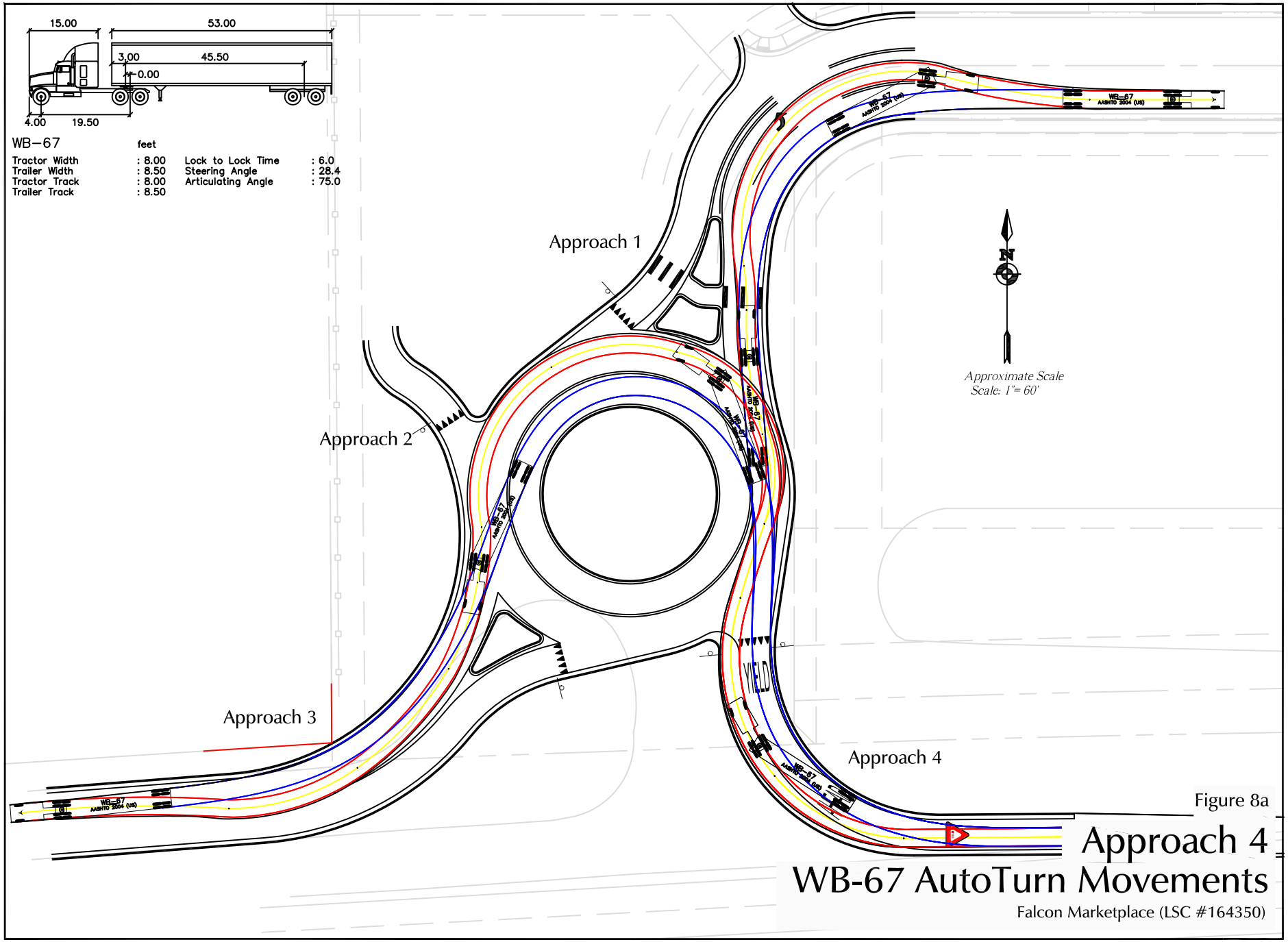


Figure 8a

Approach 4
WB-67 AutoTurn Movements

Falcon Marketplace (LSC #164350)

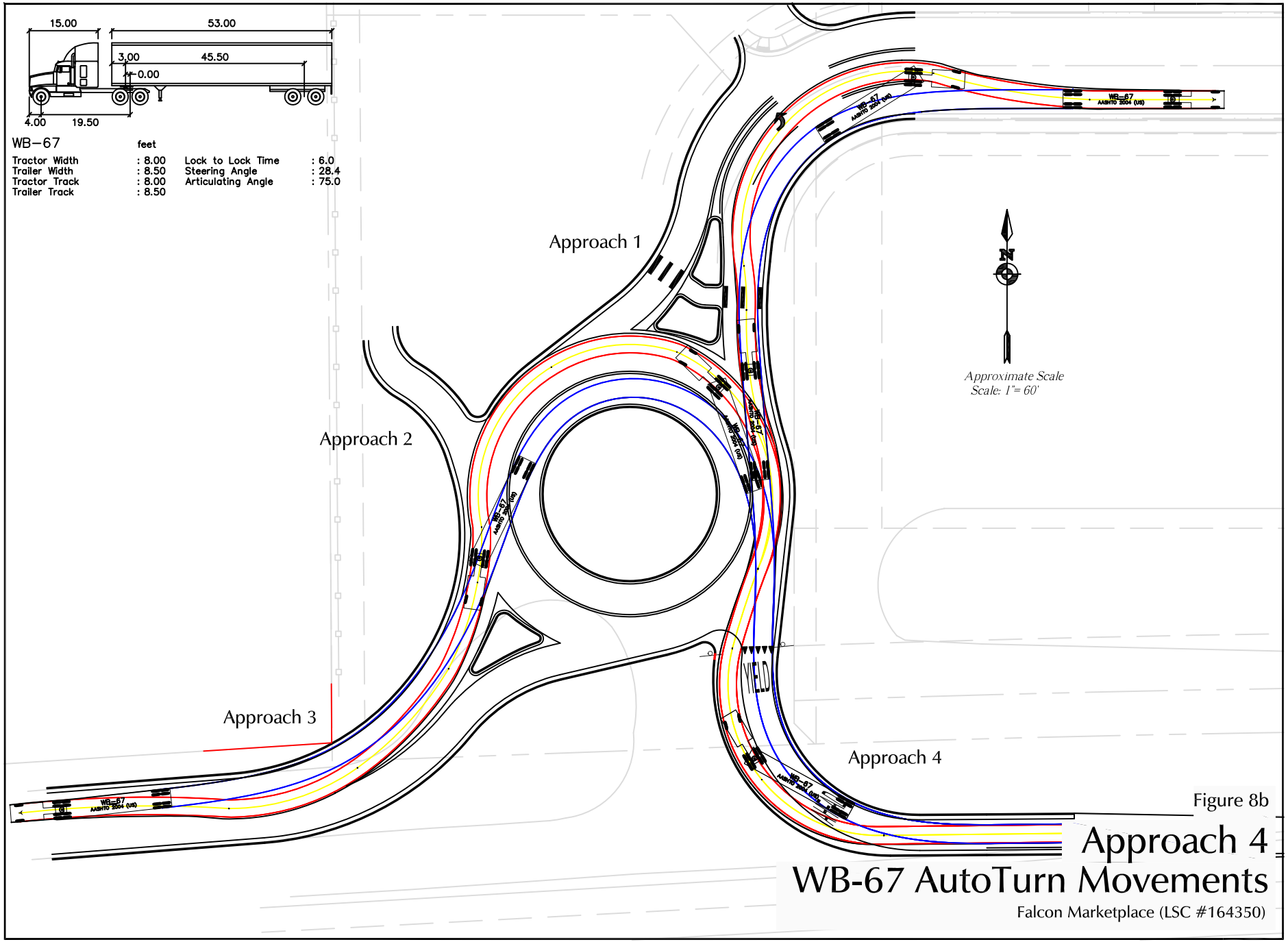


Figure 8b

Approach 4
WB-67 AutoTurn Movements

Falcon Marketplace (LSC #164350)

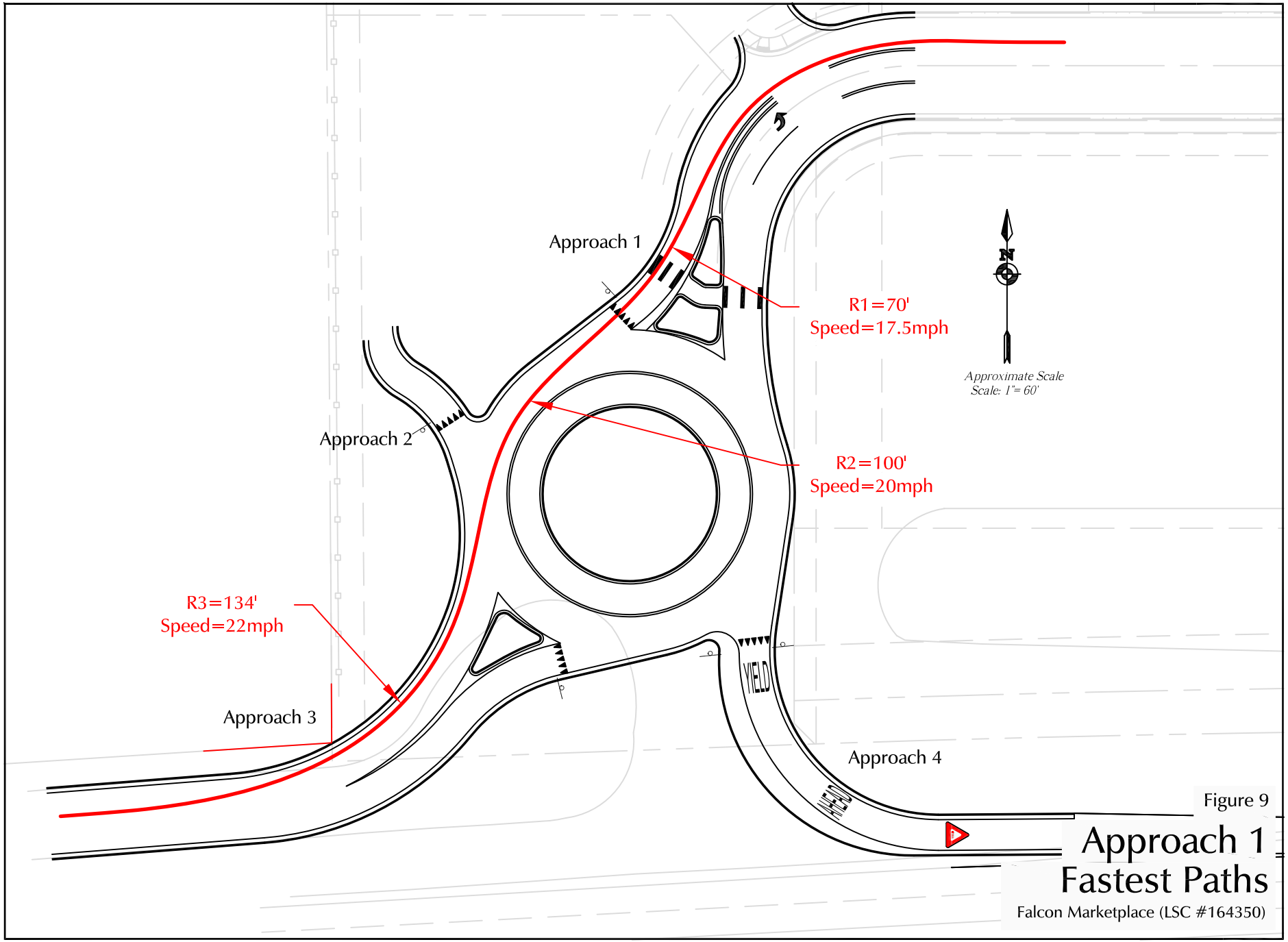


Figure 9

Approach 1 Fastest Paths

Falcon Marketplace (LSC #164350)

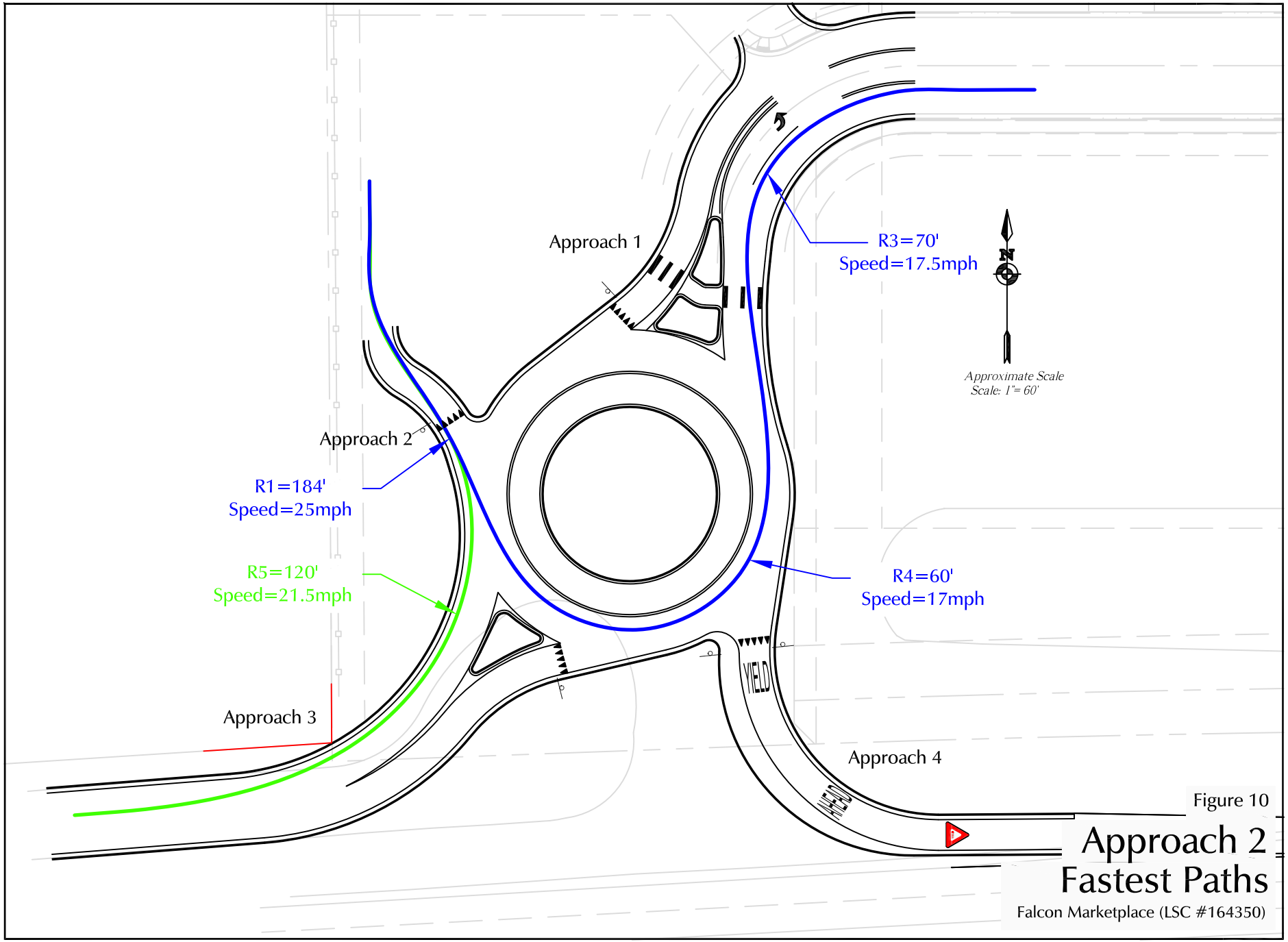


Figure 10

Approach 2 Fastest Paths

Falcon Marketplace (LSC #164350)

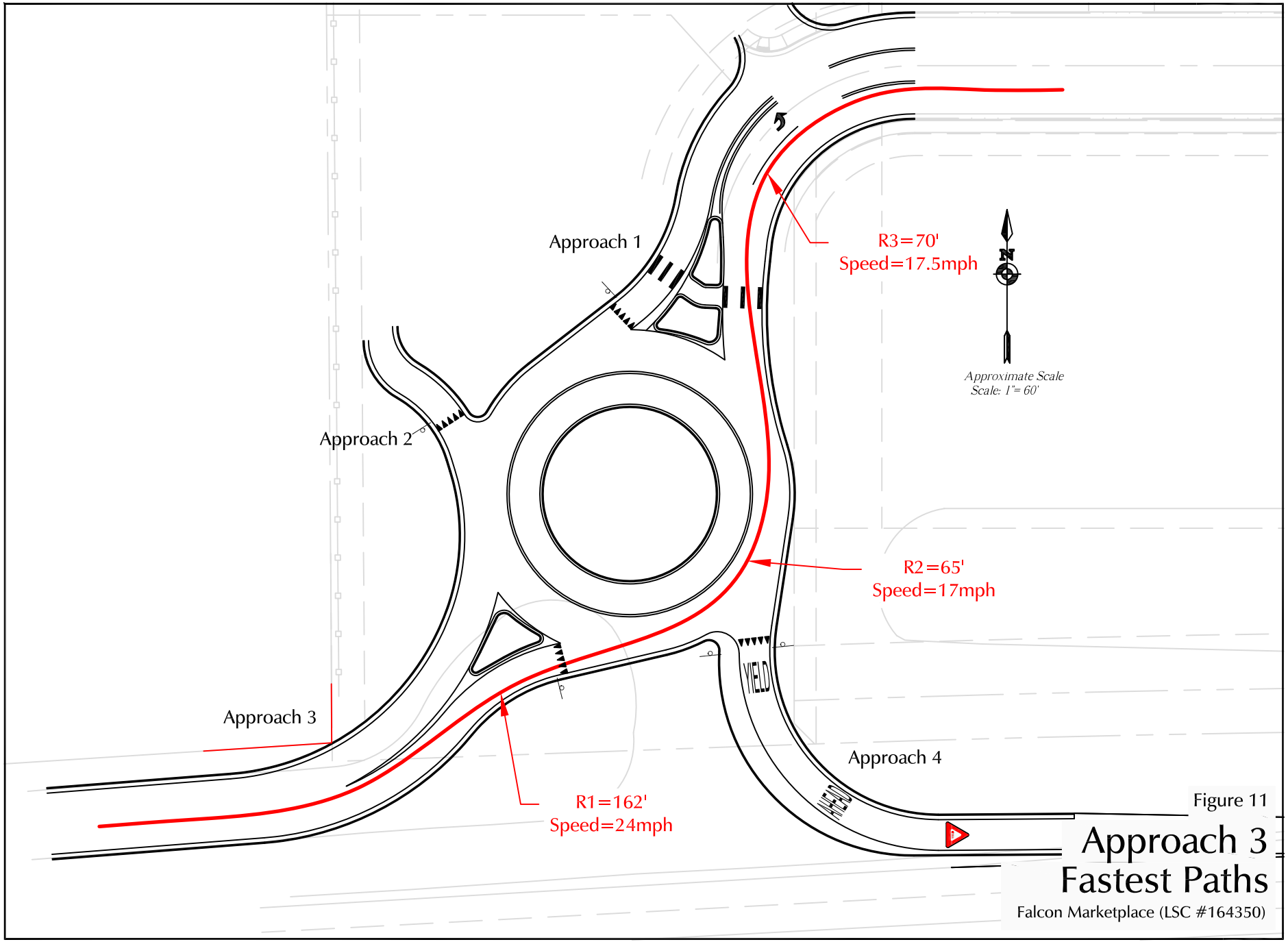


Figure 11

Approach 3 Fastest Paths

Falcon Marketplace (LSC #164350)

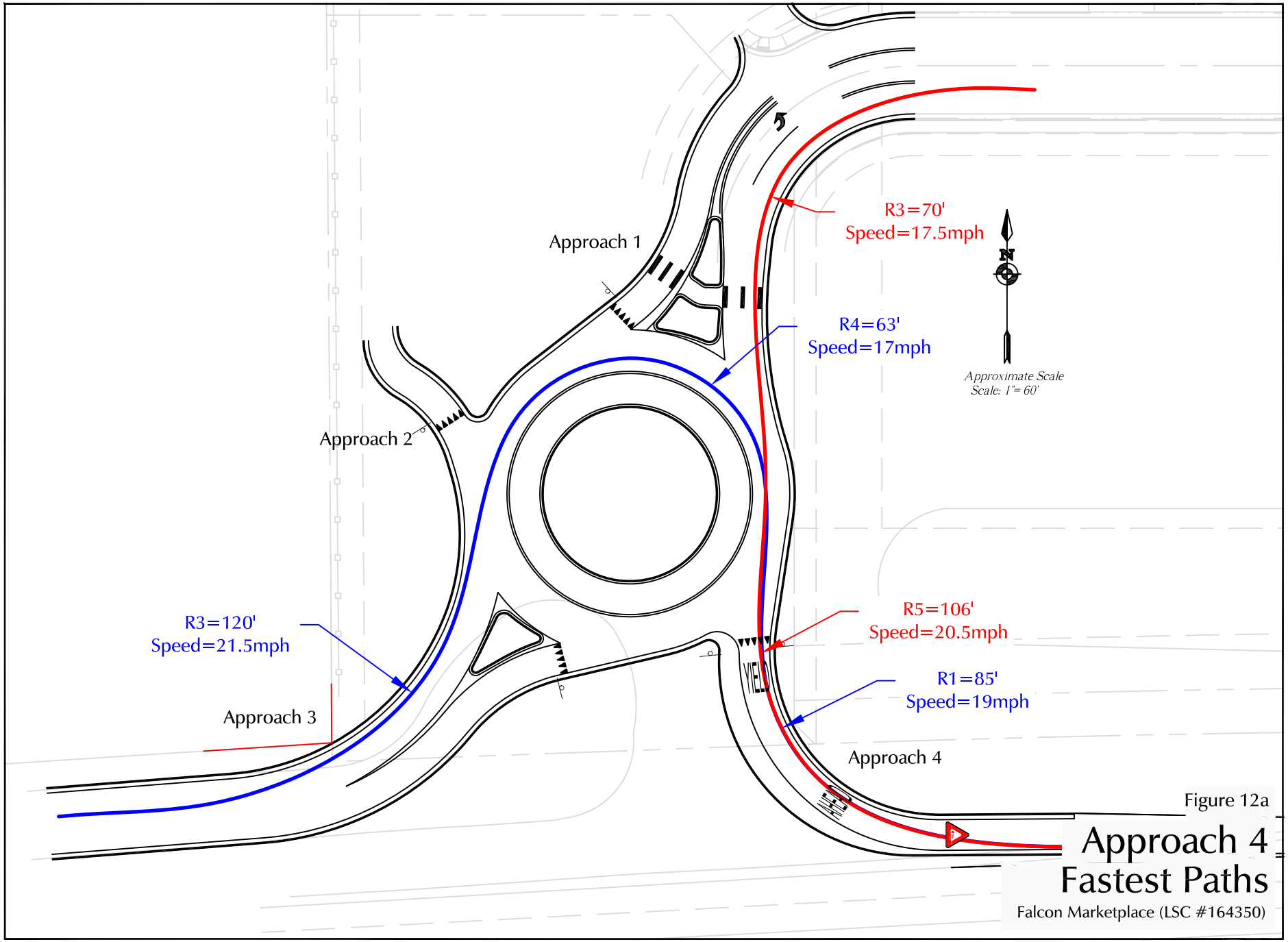


Figure 12a

Approach 4 Fastest Paths

Falcon Marketplace (LSC #164350)

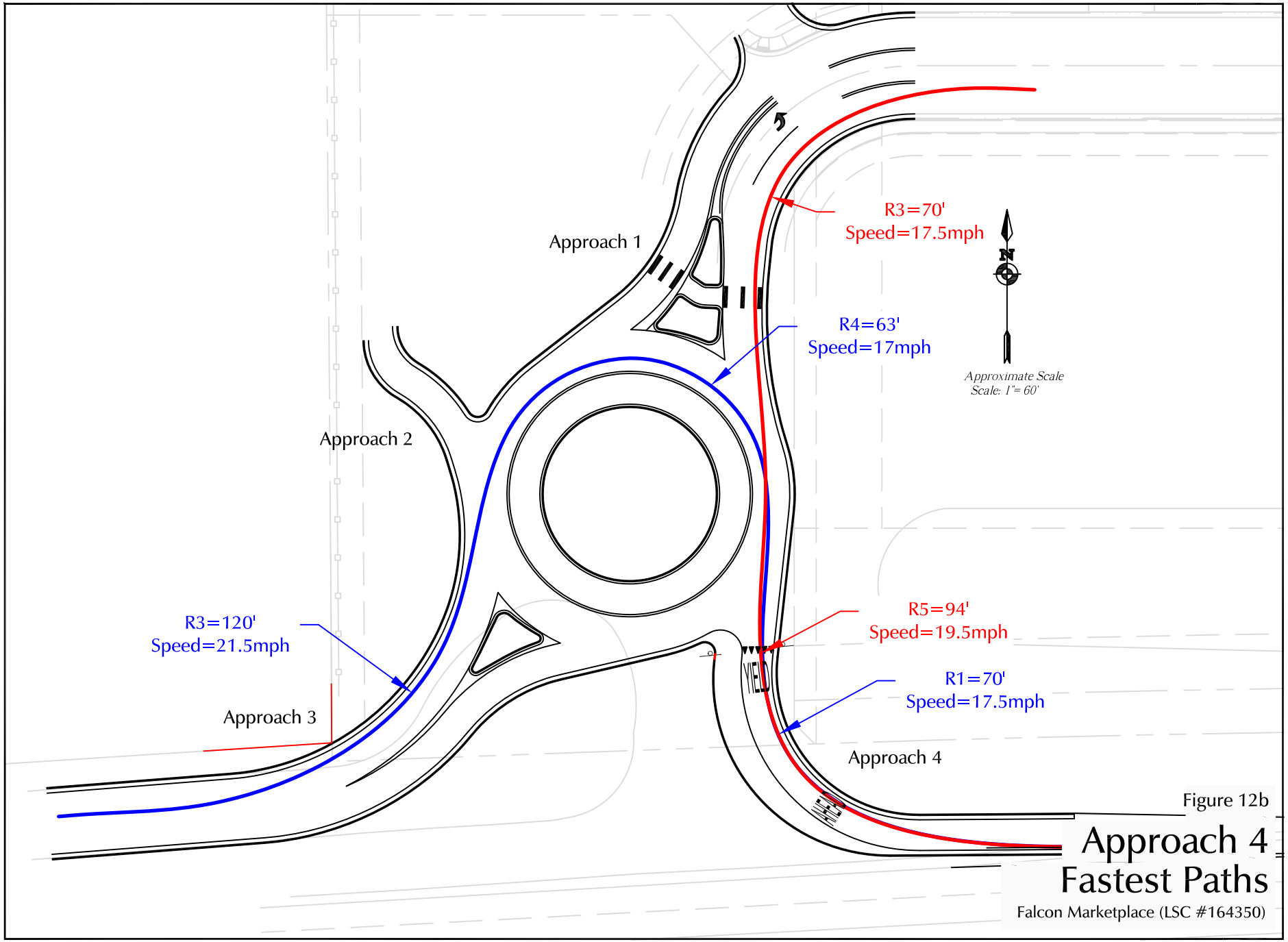


Figure 12b

Approach 4 Fastest Paths

Falcon Marketplace (LSC #164350)

Rodel Analysis Reports

Note: The following Rodel Analysis Reports (dated September 2017) will be updated with the final plat/construction drawings along with the other roundabout design items to reflect the minor geometric changes to the southwest roundabout

TRANSPORTATION CONSULTANTS, INC.

Operational Results

2040 AM Peak - 15 minutes

Flows and Capacity

Leg	Leg Names	Bypass Type	Flows (veh/hr)					Capacity (veh/hr)			
			Arrival Flow		Opposing Flow		Exit Flow	Capacity		Average VCR	
			Entry	Bypass	Entry	Bypass		Entry	Bypass	Entry	Bypass
1	Approach 1	None	65		216		346	1087		0.0604	
2	Approach 2	None	41		281		0	1281		0.0324	
3	Approach 3	None	164		17		305	1203		0.1374	
4	Approach 4	None	380		181		0	1107		0.3470	

Delays, Queues and Level of Service

Leg	Leg Names	Bypass Type	Average Delay (sec)			95% Queue (veh)		Level of Service		
			Entry	Bypass	Leg	Entry	Bypass	Entry	Bypass	Leg
1	Approach 1	None	3.63		3.63	0.16		A		A
2	Approach 2	None	2.91		2.91	0.09		A		A
3	Approach 3	None	3.95		3.95	0.41		A		A
4	Approach 4	None	5.56		5.56	1.31		A		A

Global Results

Performance and Accidents

2040 AM Peak Global Performance

Parameter	Units	Entries	Bypasses	Total
Arrive Flows	veh/hr	599		599
Capacity	veh/hr	4712		4712
Average Delay	sec/veh	5.08		5.08
L.O.S. (Signal)	A – F	A		A
L.O.S. (Unsig)	A – F	A		A
Total Delay	veh.hrs	0.85		0.85

Operational Results

2040 PM Peak - 15 minutes

Flows and Capacity

Leg	Leg Names	Bypass Type	Flows (veh/hr)					Capacity (veh/hr)			
			Arrival Flow		Opposing Flow		Exit Flow	Capacity		Average VCR	
			Entry	Bypass	Entry	Bypass		Entry	Bypass	Entry	Bypass
1	Approach 1	None	71		171		473	1113		0.0639	
2	Approach 2	None	10		241		0	1307		0.0075	
3	Approach 3	None	273		5		246	1210		0.2272	
4	Approach 4	None	365		278		0	1050		0.3513	

Delays, Queues and Level of Service

Leg	Leg Names	Bypass Type	Average Delay (sec)			95% Queue (veh)		Level of Service		
			Entry	Bypass	Leg	Entry	Bypass	Entry	Bypass	Leg
1	Approach 1	None	3.58		3.58	0.17		A		A
2	Approach 2	None	0.04		0.04	0.00		A		A
3	Approach 3	None	4.59		4.59	0.74		A		A
4	Approach 4	None	5.82		5.82	1.34		A		A

Global Results

Performance and Accidents

2040 PM Peak Global Performance

Parameter	Units	Entries	Bypasses	Total
Arrive Flows	veh/hr	661		661
Capacity	veh/hr	4714		4714
Average Delay	sec/veh	5.32		5.32
L.O.S. (Signal)	A – F	A		A
L.O.S. (Unsig)	A – F	A		A
Total Delay	veh.hrs	0.98		0.98

Traffic Count Reports

TRANSPORTATION
CONSULTANTS, INC.

LSC Transportation Consultants, Inc.
516 N. Tejon St.
Colorado Springs, CO
(719) 633-2868

LSC Transportation Consultants, Inc.

File Name : Meridian Rd - Eastonville Rd AM
Site Code : 00154450
Start Date : 09/09/2015
Page No : 1

Groups Printed- Unshifted

	Meridian Rd From North				Eastonville Rd From East				Meridian Rd From South				From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
Factor	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	
06:30 AM	0	291	22	0	4	0	15	0	3	70	0	0	0	0	0	0	405
06:45 AM	0	289	13	0	8	0	11	0	9	101	0	0	0	0	0	0	431
Total	0	580	35	0	12	0	26	0	12	171	0	0	0	0	0	0	836
07:00 AM	0	385	13	1	13	0	17	0	19	119	0	0	0	0	0	0	567
07:15 AM	0	375	23	1	18	0	13	0	9	118	0	1	0	0	0	0	558
07:30 AM	0	387	24	1	27	0	18	1	13	146	0	0	0	0	0	0	617
07:45 AM	0	272	29	0	14	0	12	0	13	118	0	0	0	0	0	0	458
Total	0	1419	89	3	72	0	60	1	54	501	0	1	0	0	0	0	2200
08:00 AM	0	255	22	2	17	0	12	0	14	112	0	0	0	0	0	0	434
08:15 AM	0	278	18	0	21	0	12	0	10	99	0	0	0	0	0	0	438
Grand Total	0	2532	164	5	122	0	110	1	90	883	0	1	0	0	0	0	3908
Apprch %	0.0	93.7	6.1	0.2	52.4	0.0	47.2	0.4	9.2	90.7	0.0	0.1	0.0	0.0	0.0	0.0	
Total %	0.0	64.8	4.2	0.1	3.1	0.0	2.8	0.0	2.3	22.6	0.0	0.0	0.0	0.0	0.0	0.0	

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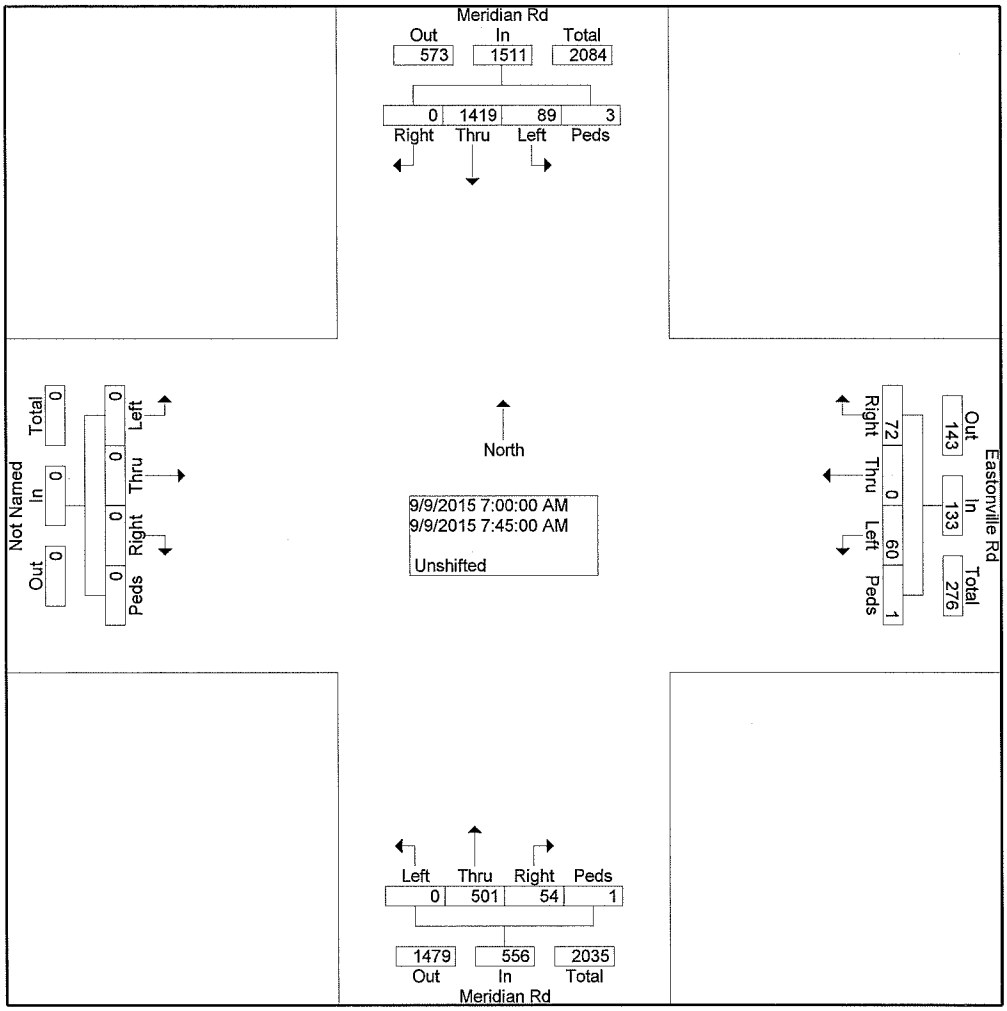
File Name : Meridian Rd - Eastonville Rd AM
Site Code : 00154450
Start Date : 09/09/2015
Page No : 2

	Meridian Rd From North					Eastonville Rd From East					Meridian Rd From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Intersection	07:00 AM																				
Volume	0	1419	89	3	1511	72	0	60	1	133	54	501	0	1	556	0	0	0	0	0	2200
Percent	0.0	93.9	5.9	0.2		54.1	0.0	45.1	0.8		9.7	90.1	0.0	0.2		0.0	0.0	0.0	0.0		
07:30 Volume	0	387	24	1	412	27	0	18	1	46	13	146	0	0	159	0	0	0	0	0	617
Peak Factor																					0.891
High Int.	07:30 AM					07:30 AM					07:30 AM					6:15:00 AM					
Volume	0	387	24	1	412	27	0	18	1	46	13	146	0	0	159						
Peak Factor					0.917					0.723					0.874						



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LSC Transportation Consultants, Inc.

File Name : Meridian Rd - Eastonville Rd PM
Site Code : 00154340
Start Date : 09/09/2015
Page No : 1

Groups Printed- Unshifted

	Meridian Rd From North				Eastonville Rd From East				Meridian Rd From South				From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
Factor	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	
04:00 PM	0	182	27	0	43	0	14	0	22	238	0	0	0	0	0	0	526
04:15 PM	0	161	29	1	45	0	10	0	35	243	0	1	0	0	0	0	525
04:30 PM	0	150	14	0	40	0	5	0	21	270	0	0	0	0	0	0	500
04:45 PM	0	198	19	0	38	0	3	0	21	300	0	1	0	0	0	0	580
Total	0	691	89	1	166	0	32	0	99	1051	0	2	0	0	0	0	2131
05:00 PM	0	199	10	0	38	0	6	0	23	313	0	0	0	0	0	0	589
05:15 PM	0	207	20	0	39	0	10	0	35	290	0	0	0	0	0	0	601
05:30 PM	0	201	13	1	31	0	11	0	42	331	0	0	0	0	0	0	630
05:45 PM	0	183	15	0	30	0	10	0	39	301	0	1	0	0	0	0	579
Total	0	790	58	1	138	0	37	0	139	1235	0	1	0	0	0	0	2399
Grand Total	0	1481	147	2	304	0	69	0	238	2286	0	3	0	0	0	0	4530
Apprch %	0.0	90.9	9.0	0.1	81.5	0.0	18.5	0.0	9.4	90.5	0.0	0.1	0.0	0.0	0.0	0.0	
Total %	0.0	32.7	3.2	0.0	6.7	0.0	1.5	0.0	5.3	50.5	0.0	0.1	0.0	0.0	0.0	0.0	

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(719) 633-2868

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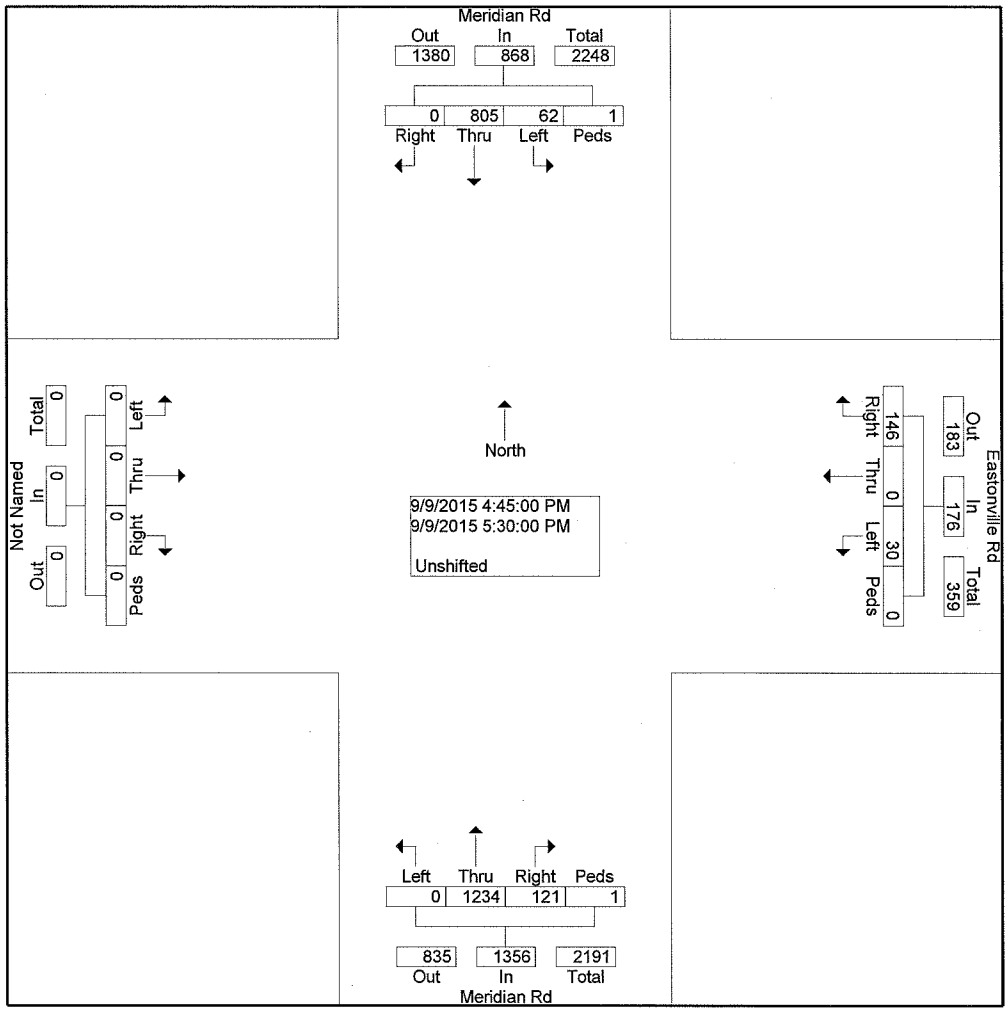
File Name : Meridian Rd - Eastonville Rd PM
Site Code : 00154340
Start Date : 09/09/2015
Page No : 2

	Meridian Rd From North					Eastonville Rd From East					Meridian Rd From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:45 PM																				
Volume	0	805	62	1	868	146	0	30	0	176	121	1234	0	1	1356	0	0	0	0	0	2400
Percent	0.0	92.7	7.1	0.1		83.0	0.0	17.0	0.0		8.9	91.0	0.0	0.1		0.0	0.0	0.0	0.0		
05:30 Volume	0	201	13	1	215	31	0	11	0	42	42	331	0	0	373	0	0	0	0	0	630
Peak Factor																					0.952
High Int.	05:15 PM					05:15 PM					05:30 PM					3:45:00 PM					
Volume	0	207	20	0	227	39	0	10	0	49	42	331	0	0	373						
Peak Factor					0.956					0.898					0.909						



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File Name : Meridian Rd - Woodman Rd AM
Site Code : 00154450
Start Date : 09/16/2015
Page No : 1

Groups Printed- Unshifted

	Meridian Rd From North				Woodmen Rd From East				Meridian Rd From South				Woodmen Rd From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
Factor	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	
06:30 AM	140	66	41	0	20	141	4	0	1	22	14	0	4	86	55	0	594
06:45 AM	145	72	44	0	25	155	6	0	3	24	13	0	5	88	56	0	636
Total	285	138	85	0	45	296	10	0	4	46	27	0	9	174	111	0	1230
07:00 AM	200	121	69	0	19	168	14	0	4	29	22	0	9	82	59	0	796
07:15 AM	213	94	69	0	33	154	5	0	0	29	22	0	7	87	66	0	779
07:30 AM	249	84	56	0	34	187	7	0	1	24	22	0	9	98	90	0	861
07:45 AM	150	80	40	0	36	118	9	0	4	24	13	0	9	86	54	0	623
Total	812	379	234	0	122	627	35	0	9	106	79	0	34	353	269	0	3059
08:00 AM	147	82	47	0	28	96	11	0	4	35	26	0	14	73	69	1	633
08:15 AM	139	75	40	0	22	88	8	0	2	29	22	0	6	69	63	0	563
Grand Total	1383	674	406	0	217	1107	64	0	19	216	154	0	63	669	512	1	5485
Apprch %	56.2	27.4	16.5	0.0	15.6	79.8	4.6	0.0	4.9	55.5	39.6	0.0	5.1	53.7	41.1	0.1	
Total %	25.2	12.3	7.4	0.0	4.0	20.2	1.2	0.0	0.3	3.9	2.8	0.0	1.1	12.2	9.3	0.0	

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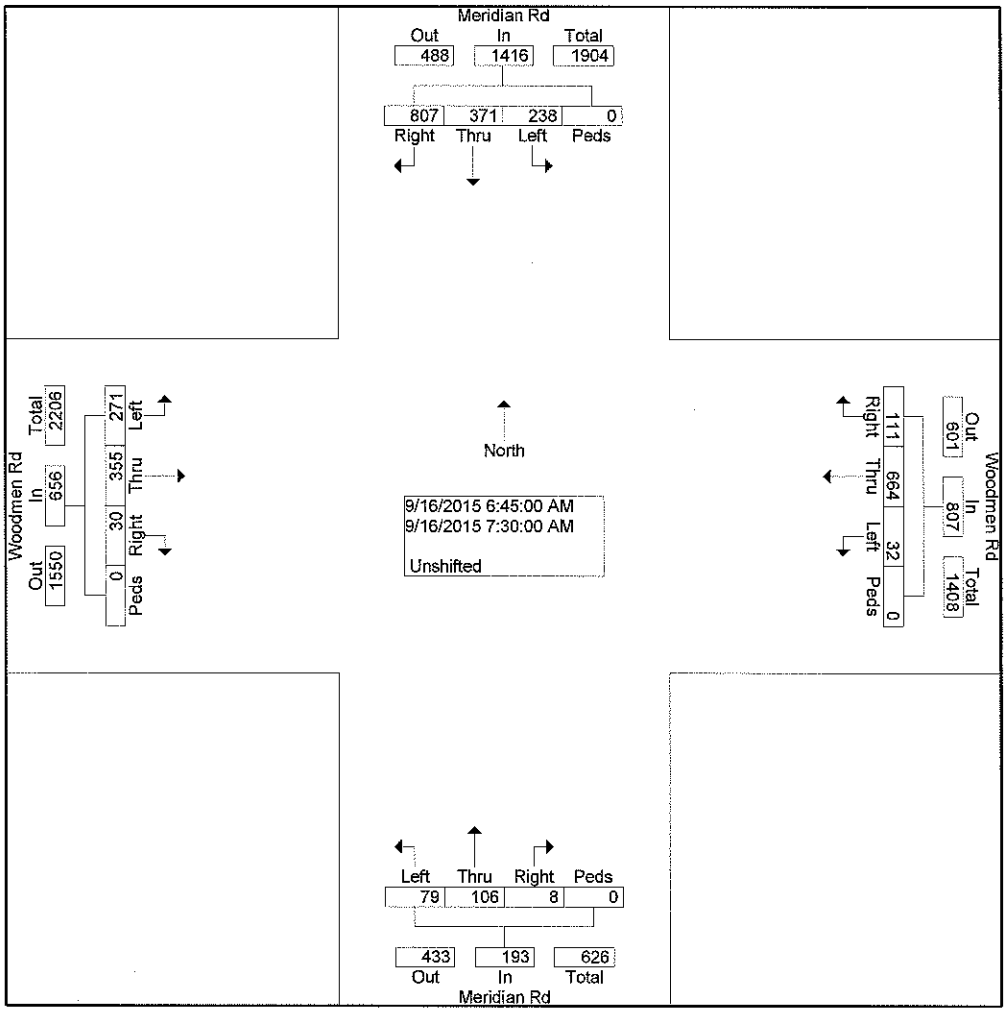
File Name : Meridian Rd - Woodman Rd AM
Site Code : 00154450
Start Date : 09/16/2015
Page No : 2

	Meridian Rd From North					Woodmen Rd From East					Meridian Rd From South					Woodmen Rd From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Intersection	06:45 AM																				
Volume	807	371	238	0	1416	111	664	32	0	807	8	106	79	0	193	30	355	271	0	656	3072
Percent	57.0	26.2	16.8	0.0		13.8	82.3	4.0	0.0		4.1	54.9	40.9	0.0		4.6	54.1	41.3	0.0		
07:30 Volume	249	84	56	0	389	34	187	7	0	228	1	24	22	0	47	9	98	90	0	197	861
Peak Factor																					0.892
High Int.	07:00 AM					07:30 AM					07:00 AM					07:30 AM					
Volume	200	121	69	0	390	34	187	7	0	228	4	29	22	0	55	9	98	90	0	197	
Peak Factor					0.908					0.885					0.877					0.832	



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File Name : Meridian Rd - Woodman Rd PM
Site Code : 00145450
Start Date : 09/15/2015
Page No : 1

Groups Printed- Unshifted

	Meridian Rd From North				Woodman Rd From East				Meridian Rd From South				Woodman Rd From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
Factor	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	
04:00 PM	74	48	29	0	24	111	40	0	10	92	19	1	23	130	149	0	750
04:15 PM	67	53	31	0	36	110	24	0	22	96	19	2	17	145	136	0	758
04:30 PM	84	63	27	3	43	141	29	0	20	110	19	2	18	143	131	0	833
04:45 PM	59	56	42	0	57	120	34	0	17	103	21	0	28	165	152	1	855
Total	284	220	129	3	160	482	127	0	69	401	78	5	86	583	568	1	3196
05:00 PM	72	71	26	0	38	125	27	0	21	113	25	0	23	130	162	0	833
05:15 PM	83	53	25	0	35	95	30	0	30	115	32	1	29	159	163	1	851
05:30 PM	81	69	26	0	44	116	30	0	21	106	21	3	24	145	131	0	817
05:45 PM	63	51	21	0	56	83	31	0	33	88	18	2	32	133	162	1	774
Total	299	244	98	0	173	419	118	0	105	422	96	6	108	567	618	2	3275
Grand Total	583	464	227	3	333	901	245	0	174	823	174	11	194	1150	1186	3	6471
Apprch %	45.7	36.3	17.8	0.2	22.5	60.9	16.6	0.0	14.7	69.6	14.7	0.9	7.7	45.4	46.8	0.1	
Total %	9.0	7.2	3.5	0.0	5.1	13.9	3.8	0.0	2.7	12.7	2.7	0.2	3.0	17.8	18.3	0.0	

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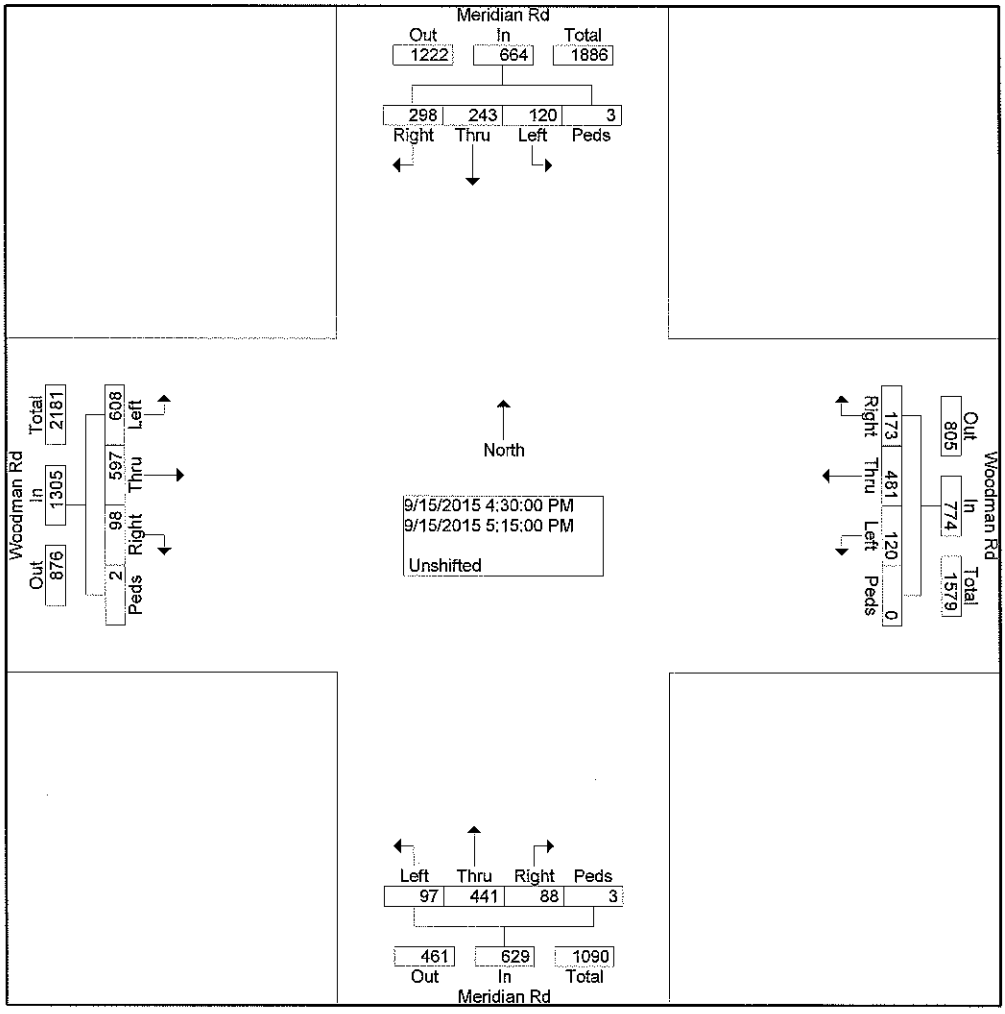
LSC Transportation Consultants, Inc.

File Name : Meridian Rd - Woodman Rd PM
Site Code : 00145450
Start Date : 09/15/2015
Page No : 2

	Meridian Rd From North					Woodman Rd From East					Meridian Rd From South					Woodman Rd From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:30 PM																				
Volume	298	243	120	3	664	173	481	120	0	774	88	441	97	3	629	98	597	608	2	1305	3372
Percent	44.9	36.6	18.1	0.5		22.4	62.1	15.5	0.0		14.0	70.1	15.4	0.5		7.5	45.7	46.6	0.2		
04:45 Volume	59	56	42	0	157	57	120	34	0	211	17	103	21	0	141	28	165	152	1	346	855
Peak Factor																					0.986
High Int.	04:30 PM					04:30 PM					05:15 PM					05:15 PM					
Volume	84	63	27	3	177	43	141	29	0	213	30	115	32	1	178	29	159	163	1	352	
Peak Factor					0.938					0.908					0.883					0.927	



LSC Transportation Consultants, Inc.
545 E. Pikes Peak Ave., #210
Colorado Springs, CO 80903
(719) 633-2868

LSC Transportation Consultants, Inc.

File Name : Golden Sage Rd - Woodmen Rd AM
Site Code : 00164350
Start Date : 03/08/2017
Page No : 1

Groups Printed- Unshifted

	Golden Sage Rd From North				Woodmen Rd From East				Golden Sage Rd From South				Woodmen Rd From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
Factor	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	
06:30 AM	10	0	11	0	32	368	0	0	1	4	18	0	3	151	27	0	625
06:45 AM	15	0	11	0	28	307	0	0	0	1	31	0	10	186	16	0	605
Total	25	0	22	0	60	675	0	0	1	5	49	0	13	337	43	0	1230
07:00 AM	13	2	11	0	6	459	1	0	2	3	34	0	10	212	10	0	763
07:15 AM	17	3	13	0	15	434	3	1	2	2	38	0	10	211	5	0	754
07:30 AM	21	1	11	0	12	396	3	1	0	1	29	0	8	208	8	0	699
07:45 AM	12	2	3	0	4	289	3	0	2	0	27	0	17	166	14	0	539
Total	63	8	38	0	37	1578	10	2	6	6	128	0	45	797	37	0	2755
08:00 AM	8	1	2	0	6	256	1	0	1	1	15	0	10	154	11	0	466
08:15 AM	9	0	8	0	16	326	3	0	0	0	17	0	2	153	18	0	552
Grand Total	105	9	70	0	119	2835	14	2	8	12	209	0	70	1441	109	0	5003
Apprch %	57.1	4.9	38.0	0.0	4.0	95.5	0.5	0.1	3.5	5.2	91.3	0.0	4.3	89.0	6.7	0.0	
Total %	2.1	0.2	1.4	0.0	2.4	56.7	0.3	0.0	0.2	0.2	4.2	0.0	1.4	28.8	2.2	0.0	

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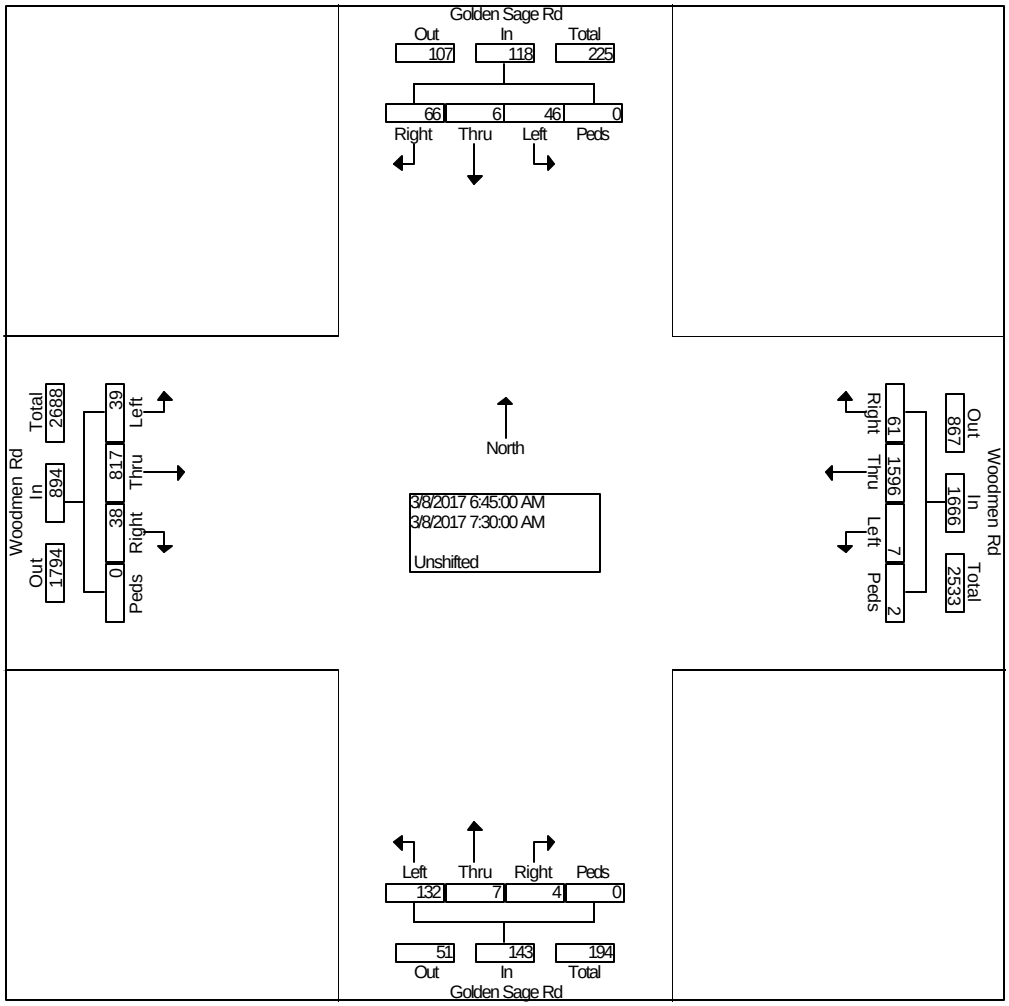
(719) 633-2868

File Name : Golden Sage Rd - Woodmen Rd AM
Site Code : 00164350
Start Date : 03/08/2017

	Golden Sage Rd From North					Woodmen Rd From East					Golden Sage Rd From South					Woodmen Rd From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Intersection	06:45 AM																				
Volume	66	6	46	0	118	61	1596	7	2	1666	4	7	132	0	143	38	817	39	0	894	2821
Percent	55.9	5.1	39.0	0.0		3.7	95.8	0.4	0.1		2.8	4.9	92.3	0.0		4.3	91.4	4.4	0.0		
07:00 Volume	13	2	11	0	26	6	459	1	0	466	2	3	34	0	39	10	212	10	0	232	763
Peak Factor																					0.924
High Int.	07:15 AM					07:00 AM					07:15 AM					07:00 AM					
Volume	17	3	13	0	33	6	459	1	0	466	2	2	38	0	42	10	212	10	0	232	
Peak Factor					0.894					0.894					0.851					0.963	



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Colorado Springs, CO 80903
(719) 633-2868

LSC Transportation Consultants, Inc.

File Name : Golden Sage Rd - Woodmen Rd PM
Site Code : 00164350
Start Date : 03/07/2017
Page No : 1

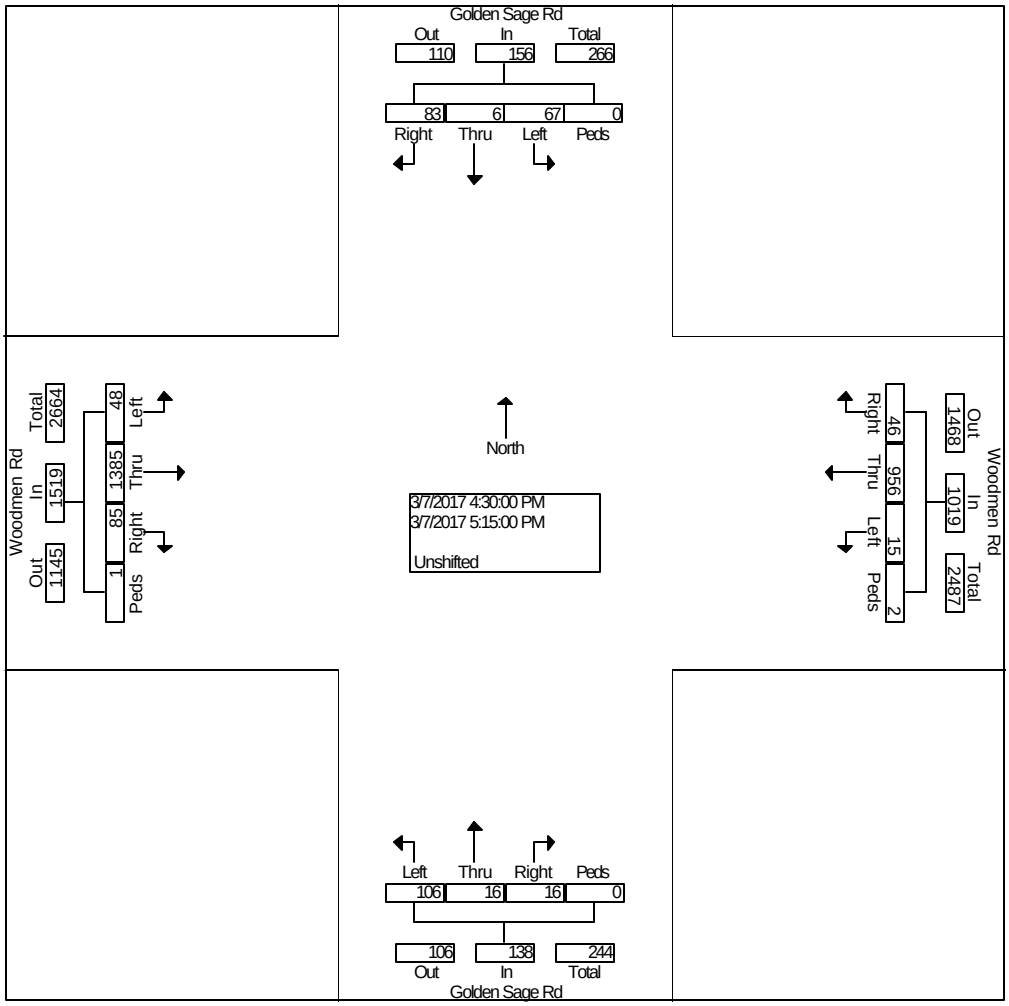
Groups Printed- Unshifted

	Golden Sage Rd From North				Woodmen Rd From East				Golden Sage Rd From South				Woodmen Rd From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
Factor	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	
04:00 PM	16	3	7	0	9	243	5	0	2	2	21	0	14	319	25	0	666
04:15 PM	19	4	18	0	10	234	1	1	3	2	16	0	28	324	15	0	675
04:30 PM	14	0	16	0	10	249	1	0	3	4	15	0	18	340	16	0	686
04:45 PM	21	1	15	0	16	233	2	1	3	4	27	0	20	313	10	0	666
Total	70	8	56	0	45	959	9	2	11	12	79	0	80	1296	66	0	2693
05:00 PM	17	3	15	0	14	264	2	0	2	3	24	0	20	355	13	0	732
05:15 PM	31	2	21	0	6	210	10	1	8	5	40	0	27	377	9	1	748
05:30 PM	30	2	40	0	7	178	2	1	5	3	14	0	17	381	6	0	686
05:45 PM	9	3	13	0	6	172	1	0	1	2	14	0	16	294	7	0	538
Total	87	10	89	0	33	824	15	2	16	13	92	0	80	1407	35	1	2704
Grand Total	157	18	145	0	78	1783	24	4	27	25	171	0	160	2703	101	1	5397
Apprch %	49.1	5.6	45.3	0.0	4.1	94.4	1.3	0.2	12.1	11.2	76.7	0.0	5.4	91.2	3.4	0.0	
Total %	2.9	0.3	2.7	0.0	1.4	33.0	0.4	0.1	0.5	0.5	3.2	0.0	3.0	50.1	1.9	0.0	

LSC Transportation Consultants, Inc.
545 E. Pikes Peak Ave., #210
Colorado Springs, CO 80903
(719) 633-2868

File Name : Golden Sage Rd - Woodmen Rd PM
Site Code : 00164350
Start Date : 03/07/2017

	Golden Sage Rd From North					Woodmen Rd From East					Golden Sage Rd From South					Woodmen Rd From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:30 PM																				
Volume	83	6	67	0	156	46	956	15	2	1019	16	16	106	0	138	85	1385	48	1	1519	2832
Percent	53.2	3.8	42.9	0.0		4.5	93.8	1.5	0.2		11.6	11.6	76.8	0.0		5.6	91.2	3.2	0.1		
05:15 Volume	31	2	21	0	54	6	210	10	1	227	8	5	40	0	53	27	377	9	1	414	748
Peak Factor																					0.947
High Int.	05:15 PM					05:00 PM					05:15 PM					05:15 PM					
Volume	31	2	21	0	54	14	264	2	0	280	8	5	40	0	53	27	377	9	1	414	
Peak Factor					0.722					0.910					0.651					0.917	



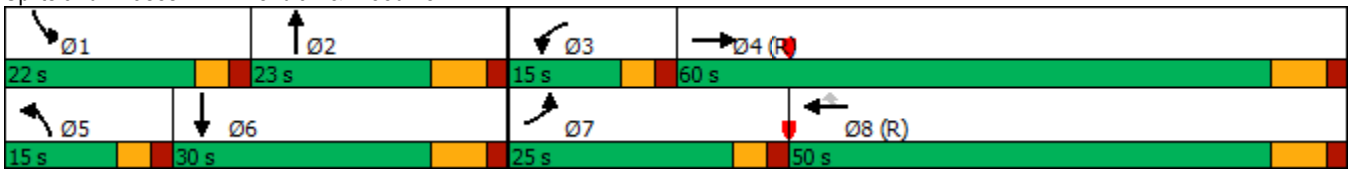
Intersection Level of Service Reports

TRANSPORTATION
CONSULTANTS, INC.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	350	437	40	32	740	140	100	135	50	240	380	825
Future Volume (vph)	350	437	40	32	740	140	100	135	50	240	380	825
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			8			Free			Free
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	9.0	21.0		9.0	21.0	21.0	9.0	21.0		9.0	21.0	
Total Split (s)	25.0	60.0		15.0	50.0	50.0	15.0	23.0		22.0	30.0	
Total Split (%)	20.8%	50.0%		12.5%	41.7%	41.7%	12.5%	19.2%		18.3%	25.0%	
Yellow Time (s)	3.0	5.0		3.0	5.0	5.0	3.0	5.0		3.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0	6.0	4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	Max	C-Max		Max	C-Max	C-Max	Max	Max		Max	Max	
Act Effct Green (s)	21.0	54.0	120.0	11.0	44.0	44.0	11.0	17.0	120.0	18.0	24.0	120.0
Actuated g/C Ratio	0.18	0.45	1.00	0.09	0.37	0.37	0.09	0.14	1.00	0.15	0.20	1.00
v/c Ratio	0.70	0.33	0.03	0.11	0.65	0.22	0.32	0.27	0.03	0.51	0.59	0.57
Control Delay	50.6	24.8	0.0	51.1	34.4	1.6	54.0	47.6	0.0	50.9	47.5	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.6	24.8	0.0	51.1	34.4	1.6	54.0	47.6	0.0	50.9	47.5	1.5
LOS	D	C	A	D	C	A	D	D	A	D	D	A
Approach Delay		34.6			30.0			41.5			21.8	
Approach LOS		C			C			D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green, Master Intersection	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 28.7	Intersection LOS: C
Intersection Capacity Utilization 60.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Meridian & Woodmen



Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	72	570	54	89	1375
Future Vol, veh/h	60	72	570	54	89	1375
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	400	385	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	73	73	87	87	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	82	99	655	62	97	1495

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1597	328	0	0	717	0
Stage 1	655	-	-	-	-	-
Stage 2	942	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	97	668	-	-	880	-
Stage 1	479	-	-	-	-	-
Stage 2	340	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	86	668	-	-	880	-
Mov Cap-2 Maneuver	212	-	-	-	-	-
Stage 1	426	-	-	-	-	-
Stage 2	340	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.8	0	0.6
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	212	668	880	-
HCM Lane V/C Ratio	-	-	0.388	0.148	0.11	-
HCM Control Delay (s)	-	-	32.3	11.3	9.6	-
HCM Lane LOS	-	-	D	B	A	-
HCM 95th %tile Q(veh)	-	-	1.7	0.5	0.4	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	39	817	38	7	1596	61	132	7	4	46	6
Future Volume (vph)	39	817	38	7	1596	61	132	7	4	46	6
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA
Protected Phases		2			6			8			4
Permitted Phases	2		2	6		6	8		8	4	
Detector Phase	2	2	2	6	6	6	8	8	8	4	4
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	9.5	9.5	9.5	9.5	9.5
Total Split (s)	85.0	85.0	85.0	85.0	85.0	85.0	35.0	35.0	35.0	35.0	35.0
Total Split (%)	70.8%	70.8%	70.8%	70.8%	70.8%	70.8%	29.2%	29.2%	29.2%	29.2%	29.2%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	5.5	5.5	5.5	5.5	5.5
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	None	None	None	None
Act Effct Green (s)	88.5	88.5	88.5	88.5	88.5	88.5	19.0	19.0	19.0	19.0	19.0
Actuated g/C Ratio	0.74	0.74	0.74	0.74	0.74	0.74	0.16	0.16	0.16	0.16	0.16
v/c Ratio	0.27	0.31	0.03	0.02	0.67	0.06	0.73	0.03	0.02	0.21	0.26
Control Delay	13.4	6.3	2.0	4.4	12.7	0.8	66.7	38.9	0.0	43.6	29.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.4	6.3	2.0	4.4	12.7	0.8	66.7	38.9	0.0	43.6	29.2
LOS	B	A	A	A	B	A	E	D	A	D	C
Approach Delay		6.4			12.3			63.3			34.8
Approach LOS		A			B			E			C

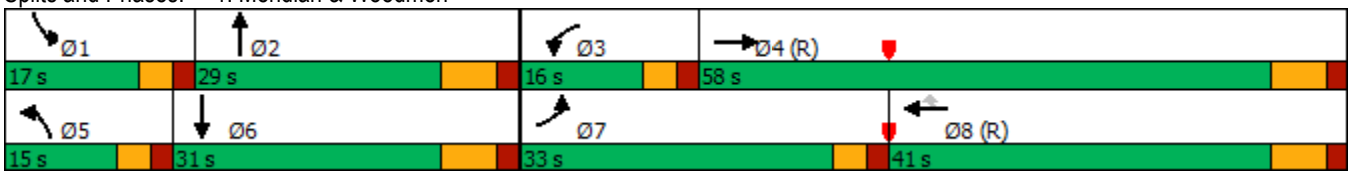
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 103 (86%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 14.2	Intersection LOS: B
Intersection Capacity Utilization 68.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 30: Golden Sage & Woodmen

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	675	650	115	120	525	200	110	525	135	150	310	380
Future Volume (vph)	675	650	115	120	525	200	110	525	135	150	310	380
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			8			Free			Free
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	9.0	21.0		9.0	21.0	21.0	9.0	21.0		9.0	21.0	
Total Split (s)	33.0	58.0		16.0	41.0	41.0	15.0	29.0		17.0	31.0	
Total Split (%)	27.5%	48.3%		13.3%	34.2%	34.2%	12.5%	24.2%		14.2%	25.8%	
Yellow Time (s)	3.0	5.0		3.0	5.0	5.0	3.0	5.0		3.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0	6.0	4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	Max	C-Max		Max	C-Max	C-Max	Max	Max		Max	Max	
Act Effct Green (s)	29.0	52.0	120.0	12.0	35.0	35.0	11.0	23.0	120.0	13.0	25.0	120.0
Actuated g/C Ratio	0.24	0.43	1.00	0.10	0.29	0.29	0.09	0.19	1.00	0.11	0.21	1.00
v/c Ratio	0.87	0.45	0.08	0.38	0.55	0.35	0.35	0.77	0.09	0.40	0.42	0.24
Control Delay	52.9	25.6	0.1	54.0	38.4	5.9	54.6	54.8	0.1	53.5	43.3	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.9	25.6	0.1	54.0	38.4	5.9	54.6	54.8	0.1	53.5	43.3	0.4
LOS	D	C	A	D	D	A	D	D	A	D	D	A
Approach Delay		36.4			32.9			45.2			25.7	
Approach LOS		D			C			D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green, Master Intersection	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 35.1	Intersection LOS: D
Intersection Capacity Utilization 69.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Meridian & Woodmen



Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	146	1300	121	62	805
Future Vol, veh/h	30	146	1300	121	62	805
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	400	385	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	93	93	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	146	1398	130	62	805

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1925	699	0	0	1528	0
Stage 1	1398	-	-	-	-	-
Stage 2	527	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	59	382	-	-	432	-
Stage 1	194	-	-	-	-	-
Stage 2	557	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	51	382	-	-	432	-
Mov Cap-2 Maneuver	152	-	-	-	-	-
Stage 1	166	-	-	-	-	-
Stage 2	557	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.5	0	1.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	152	382	432	-
HCM Lane V/C Ratio	-	-	0.197	0.382	0.144	-
HCM Control Delay (s)	-	-	34.4	20.1	14.7	-
HCM Lane LOS	-	-	D	C	B	-
HCM 95th %tile Q(veh)	-	-	0.7	1.8	0.5	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	48	1385	85	15	956	46	106	16	16	67	6
Future Volume (vph)	48	1385	85	15	956	46	106	16	16	67	6
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA
Protected Phases		2			6			8			4
Permitted Phases	2		2	6		6	8		8	4	
Detector Phase	2	2	2	6	6	6	8	8	8	4	4
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	9.5	9.5	9.5	9.5	9.5
Total Split (s)	84.0	84.0	84.0	84.0	84.0	84.0	36.0	36.0	36.0	36.0	36.0
Total Split (%)	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	30.0%	30.0%	30.0%	30.0%	30.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	5.5	5.5	5.5	5.5	5.5
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	None	None	None	None
Act Effct Green (s)	86.3	86.3	86.3	86.3	86.3	86.3	21.2	21.2	21.2	21.2	21.2
Actuated g/C Ratio	0.72	0.72	0.72	0.72	0.72	0.72	0.18	0.18	0.18	0.18	0.18
v/c Ratio	0.13	0.59	0.08	0.08	0.38	0.04	0.80	0.08	0.08	0.38	0.33
Control Delay	7.8	10.3	1.6	5.3	5.3	0.4	73.0	38.3	7.4	46.3	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.8	10.3	1.6	5.3	5.3	0.4	73.0	38.3	7.4	46.3	10.4
LOS	A	B	A	A	A	A	E	D	A	D	B
Approach Delay		9.8			5.1			61.2			25.8
Approach LOS		A			A			E			C

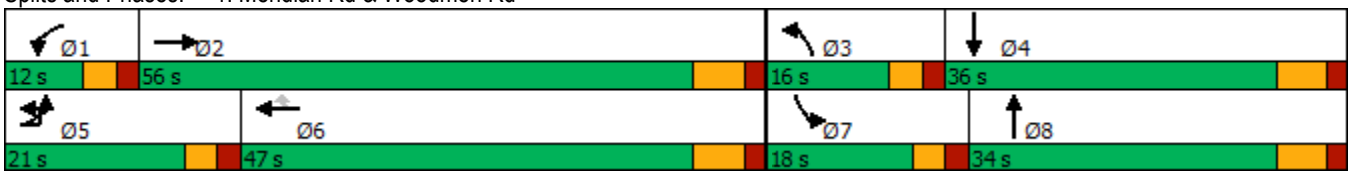
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 12.9	Intersection LOS: B
Intersection Capacity Utilization 61.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 30: Golden Sage & Woodmen

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	275	675	100	100	800	75	150	300	50	200	575	800
Future Volume (vph)	275	675	100	100	800	75	150	300	50	200	575	800
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			6			Free			Free
Detector Phase	5	2		1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	11.5		10.0	11.5	11.5	10.0	11.5		10.0	11.5	
Total Split (s)	21.0	56.0		12.0	47.0	47.0	16.0	34.0		18.0	36.0	
Total Split (%)	17.5%	46.7%		10.0%	39.2%	39.2%	13.3%	28.3%		15.0%	30.0%	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	5.5		4.0	5.5	5.5	4.0	5.5		4.0	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	Min		None	Min	Min	None	None		None	None	
Act Effct Green (s)	14.3	40.3	98.7	8.0	31.0	31.0	10.6	21.7	98.7	12.0	23.2	98.7
Actuated g/C Ratio	0.14	0.41	1.00	0.08	0.31	0.31	0.11	0.22	1.00	0.12	0.24	1.00
v/c Ratio	0.57	0.48	0.06	0.37	0.73	0.13	0.42	0.39	0.03	0.49	0.71	0.52
Control Delay	46.6	24.0	0.1	51.9	35.3	0.4	48.4	35.9	0.0	47.7	40.9	1.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.6	24.0	0.1	51.9	35.3	0.4	48.4	35.9	0.0	47.7	40.9	1.2
LOS	D	C	A	D	D	A	D	D	A	D	D	A
Approach Delay		27.7			34.3			36.1			21.6	
Approach LOS		C			C			D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 98.7	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 27.9	Intersection LOS: C
Intersection Capacity Utilization 66.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Meridian Rd & Woodmen Rd



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	15	3	75	2	75	45	531	75	90	1446	3
Future Volume (vph)	15	3	75	2	75	45	531	75	90	1446	3
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	10.0	11.5	11.5	10.0	11.5	11.5
Total Split (s)	10.0	14.0	10.0	14.0	14.0	18.0	86.0	86.0	10.0	78.0	78.0
Total Split (%)	8.3%	11.7%	8.3%	11.7%	11.7%	15.0%	71.7%	71.7%	8.3%	65.0%	65.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	4.5	4.5	3.0	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effct Green (s)	7.9	7.6	9.7	7.6	7.6	50.4	44.2	44.2	48.3	45.5	45.5
Actuated g/C Ratio	0.12	0.11	0.14	0.11	0.11	0.75	0.65	0.65	0.71	0.67	0.67
v/c Ratio	0.04	0.01	0.32	0.01	0.24	0.13	0.23	0.07	0.14	0.62	0.00
Control Delay	35.0	40.0	35.3	40.5	1.7	3.8	7.4	0.8	3.8	12.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.0	40.0	35.3	40.5	1.7	3.8	7.4	0.8	3.8	12.0	0.0
LOS	C	D	D	D	A	A	A	A	A	B	A
Approach Delay		35.8		18.8			6.4			11.4	
Approach LOS		D		B			A			B	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 67.6		
Natural Cycle: 65		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.62		
Intersection Signal Delay: 10.7	Intersection LOS: B	
Intersection Capacity Utilization 66.2%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 2: Meridian Rd & Eastonville Rd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	52	837	38	7	1719	24	132	7	4	27	6
Future Volume (vph)	52	837	38	7	1719	24	132	7	4	27	6
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		3	8		7	4
Permitted Phases	2		2	6		6	8		8	4	
Detector Phase	5	2	2	1	6	6	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	12.0	12.0	10.0	12.0	12.0	10.0	10.0	10.0	10.0	10.0
Total Split (s)	17.0	80.0	80.0	10.0	73.0	73.0	16.0	15.0	15.0	15.0	14.0
Total Split (%)	14.2%	66.7%	66.7%	8.3%	60.8%	60.8%	13.3%	12.5%	12.5%	12.5%	11.7%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None
Act Effct Green (s)	73.3	69.5	69.5	67.5	60.9	60.9	20.7	15.5	15.5	17.5	7.9
Actuated g/C Ratio	0.70	0.66	0.66	0.64	0.58	0.58	0.20	0.15	0.15	0.17	0.08
v/c Ratio	0.25	0.36	0.04	0.02	0.85	0.03	0.55	0.03	0.01	0.10	0.53
Control Delay	7.5	8.6	0.1	5.1	24.3	0.0	48.6	48.3	0.0	37.5	20.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.5	8.6	0.1	5.1	24.3	0.0	48.6	48.3	0.0	37.5	20.3
LOS	A	A	A	A	C	A	D	D	A	D	C
Approach Delay		8.2			23.9			47.3			23.6
Approach LOS		A			C			D			C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 104.7	
Natural Cycle: 75	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 20.1	Intersection LOS: C
Intersection Capacity Utilization 69.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 25: Golden Sage Rd & Woodmen Rd

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	138	0	0	0	0	83	0	0	0
Future Vol, veh/h	0	0	0	138	0	0	0	0	83	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	95	95	95	95	92	95	92	95	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	145	0	0	0	0	87	0	0	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	88	1	1	1	-	1	0	0	87	0	0
Stage 1	-	1	-	0	0	-	-	-	-	-	-	-
Stage 2	-	87	-	1	1	-	-	-	-	-	-	-
Critical Hdwy	-	6.52	6.22	7.12	6.52	-	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.018	3.318	3.518	4.018	-	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	802	1084	1022	895	0	1622	-	-	1509	-	-
Stage 1	0	895	-	-	-	0	-	-	-	-	-	-
Stage 2	0	823	-	1022	895	0	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	802	1084	1022	895	-	1622	-	-	1509	-	-
Mov Cap-2 Maneuver	-	802	-	1022	895	-	-	-	-	-	-	-
Stage 1	-	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	823	-	1022	895	-	-	-	-	-	-	-

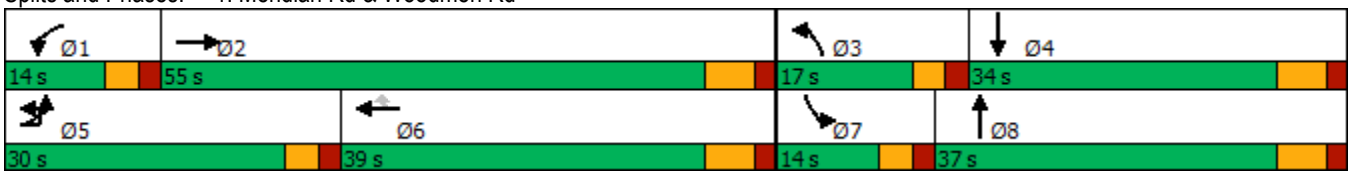
Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.1	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1622	-	-	-	1022	1509	-	-
HCM Lane V/C Ratio	-	-	-	-	0.142	-	-	-
HCM Control Delay (s)	0	-	-	0	9.1	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.5	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	600	725	200	150	650	150	175	750	175	150	450	325
Future Volume (vph)	600	725	200	150	650	150	175	750	175	150	450	325
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			6			Free			Free
Detector Phase	5	2		1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	11.5		10.0	11.5	11.5	10.0	11.5		10.0	11.5	
Total Split (s)	30.0	55.0		14.0	39.0	39.0	17.0	37.0		14.0	34.0	
Total Split (%)	25.0%	45.8%		11.7%	32.5%	32.5%	14.2%	30.8%		11.7%	28.3%	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	5.5		4.0	5.5	5.5	4.0	5.5		4.0	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	Min		None	Min	Min	None	None		None	None	
Act Effct Green (s)	23.9	41.8	109.2	9.7	27.6	27.6	11.5	28.7	109.2	9.7	26.9	109.2
Actuated g/C Ratio	0.22	0.38	1.00	0.09	0.25	0.25	0.11	0.26	1.00	0.09	0.25	1.00
v/c Ratio	0.82	0.55	0.13	0.50	0.74	0.29	0.49	0.82	0.11	0.50	0.53	0.21
Control Delay	51.6	28.1	0.2	56.2	43.6	5.5	53.2	47.2	0.1	56.2	39.4	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	51.6	28.1	0.2	56.2	43.6	5.5	53.2	47.2	0.1	56.2	39.4	0.3
LOS	D	C	A	E	D	A	D	D	A	E	D	A
Approach Delay		33.7			39.6			40.6			28.4	
Approach LOS		C			D			D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 109.2	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 35.5	Intersection LOS: D
Intersection Capacity Utilization 76.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Meridian Rd & Woodmen Rd



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	13	3	40	3	150	68	1257	175	75	835	8
Future Volume (vph)	13	3	40	3	150	68	1257	175	75	835	8
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	10.0	11.5	11.5	10.0	11.5	11.5
Total Split (s)	15.0	24.0	12.0	21.0	21.0	23.0	72.0	72.0	12.0	61.0	61.0
Total Split (%)	12.5%	20.0%	10.0%	17.5%	17.5%	19.2%	60.0%	60.0%	10.0%	50.8%	50.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	4.5	4.5	3.0	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effct Green (s)	8.8	7.7	9.5	8.3	8.3	47.1	39.1	39.1	46.1	38.7	38.7
Actuated g/C Ratio	0.13	0.11	0.14	0.12	0.12	0.69	0.57	0.57	0.68	0.57	0.57
v/c Ratio	0.03	0.01	0.19	0.01	0.47	0.14	0.63	0.19	0.23	0.42	0.01
Control Delay	29.3	35.3	30.6	34.7	10.8	4.0	12.5	2.1	5.2	10.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.3	35.3	30.6	34.7	10.8	4.0	12.5	2.1	5.2	10.3	0.0
LOS	C	D	C	C	B	A	B	A	A	B	A
Approach Delay		30.4		15.3			10.9			9.8	
Approach LOS		C		B			B			A	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 68.1	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 11.0	Intersection LOS: B
Intersection Capacity Utilization 59.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 2: Meridian Rd & Eastonville Rd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	93	1539	85	15	1111	24	106	16	16	30	6
Future Volume (vph)	93	1539	85	15	1111	24	106	16	16	30	6
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		3	8		7	4
Permitted Phases	2		2	6		6	8		8	4	
Detector Phase	5	2	2	1	6	6	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	12.0	12.0	10.0	12.0	12.0	10.0	10.0	10.0	10.0	10.0
Total Split (s)	18.0	82.0	82.0	10.0	74.0	74.0	15.0	18.0	18.0	10.0	13.0
Total Split (%)	15.0%	68.3%	68.3%	8.3%	61.7%	61.7%	12.5%	15.0%	15.0%	8.3%	10.8%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None
Act Effct Green (s)	58.1	53.1	53.1	53.0	46.2	46.2	19.0	13.4	13.4	12.5	7.8
Actuated g/C Ratio	0.68	0.62	0.62	0.62	0.54	0.54	0.22	0.16	0.16	0.15	0.09
v/c Ratio	0.28	0.72	0.09	0.07	0.59	0.03	0.40	0.06	0.04	0.14	0.48
Control Delay	7.1	14.7	1.3	5.7	16.2	0.0	36.3	41.7	0.2	33.8	18.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.1	14.7	1.3	5.7	16.2	0.0	36.3	41.7	0.2	33.8	18.1
LOS	A	B	A	A	B	A	D	D	A	C	B
Approach Delay		13.6			15.7			32.7			21.4
Approach LOS		B			B			C			C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 85.6	
Natural Cycle: 65	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 15.6	Intersection LOS: B
Intersection Capacity Utilization 70.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 25: Golden Sage Rd & Woodmen Rd

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	145	0	0	0	0	133	0	0	0
Future Vol, veh/h	0	0	0	145	0	0	0	0	133	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	95	95	95	95	92	95	92	95	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	153	0	0	0	0	140	0	0	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	141	1	1	1	-	1	0	0	140	0	0
Stage 1	-	1	-	0	0	-	-	-	-	-	-	-
Stage 2	-	140	-	1	1	-	-	-	-	-	-	-
Critical Hdwy	-	6.52	6.22	7.12	6.52	-	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.018	3.318	3.518	4.018	-	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	750	1084	1022	895	0	1622	-	-	1443	-	-
Stage 1	0	895	-	-	-	0	-	-	-	-	-	-
Stage 2	0	781	-	1022	895	0	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	750	1084	1022	895	-	1622	-	-	1443	-	-
Mov Cap-2 Maneuver	-	750	-	1022	895	-	-	-	-	-	-	-
Stage 1	-	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	781	-	1022	895	-	-	-	-	-	-	-

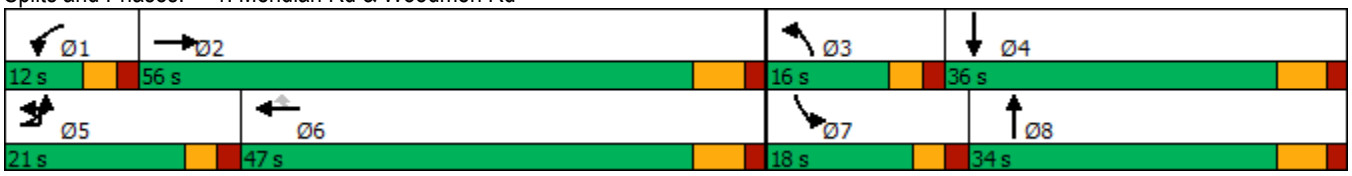
Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.1	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1622	-	-	-	1022	1443	-	-
HCM Lane V/C Ratio	-	-	-	-	0.149	-	-	-
HCM Control Delay (s)	0	-	-	0	9.1	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.5	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	275	675	100	100	832	43	162	288	50	200	575	809
Future Volume (vph)	275	675	100	100	832	43	162	288	50	200	575	809
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			6			Free			Free
Detector Phase	5	2		1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	11.5		10.0	11.5	11.5	10.0	11.5		10.0	11.5	
Total Split (s)	21.0	56.0		12.0	47.0	47.0	16.0	34.0		18.0	36.0	
Total Split (%)	17.5%	46.7%		10.0%	39.2%	39.2%	13.3%	28.3%		15.0%	30.0%	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	5.5		4.0	5.5	5.5	4.0	5.5		4.0	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	Min		None	Min	Min	None	None		None	None	
Act Effct Green (s)	14.9	41.1	104.8	8.0	34.2	34.2	11.0	23.7	104.8	12.4	25.1	104.8
Actuated g/C Ratio	0.14	0.39	1.00	0.08	0.33	0.33	0.10	0.23	1.00	0.12	0.24	1.00
v/c Ratio	0.62	0.53	0.07	0.42	0.78	0.07	0.49	0.39	0.03	0.53	0.74	0.56
Control Delay	50.4	26.1	0.1	55.6	38.0	0.2	52.1	37.3	0.0	51.2	43.7	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.4	26.1	0.1	55.6	38.0	0.2	52.1	37.3	0.0	51.2	43.7	1.4
LOS	D	C	A	E	D	A	D	D	A	D	D	A
Approach Delay		30.0			38.1			38.4			23.0	
Approach LOS		C			D			D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 104.8	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 30.3	Intersection LOS: C
Intersection Capacity Utilization 67.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Meridian Rd & Woodmen Rd



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT	Ø5
Lane Configurations										
Traffic Volume (vph)	15	3	75	2	75	531	75	90	1449	
Future Volume (vph)	15	3	75	2	75	531	75	90	1449	
Turn Type	pm+pt	NA	pm+pt	NA	Perm	NA	Perm	pm+pt	NA	
Protected Phases	7	4	3	8		2		1	6	5
Permitted Phases	4		8		8		2	6		
Detector Phase	7	4	3	8	8	2	2	1	6	
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	11.5	11.5	10.0	11.5	10.0
Total Split (s)	10.0	14.0	10.0	14.0	14.0	86.0	86.0	10.0	82.0	14.0
Total Split (%)	8.3%	11.7%	8.3%	11.7%	11.7%	71.7%	71.7%	8.3%	68.3%	12%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	4.5	4.5	3.0	4.5	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.5	
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	7.5	7.3	7.9	7.2	7.2	31.8	31.8	39.7	39.7	
Actuated g/C Ratio	0.14	0.14	0.15	0.13	0.13	0.59	0.59	0.74	0.74	
v/c Ratio	0.03	0.01	0.33	0.01	0.26	0.28	0.08	0.15	0.60	
Control Delay	23.9	28.7	27.3	29.0	5.0	8.4	1.4	3.6	6.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	23.9	28.7	27.3	29.0	5.0	8.4	1.4	3.6	6.4	
LOS	C	C	C	C	A	A	A	A	A	
Approach Delay		24.6		16.3		7.6			6.2	
Approach LOS		C		B		A			A	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 53.9	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 7.4	Intersection LOS: A
Intersection Capacity Utilization 66.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 2: Meridian Rd & Eastonville Rd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	51	838	38	7	1719	24	132	7	4	27	6
Future Volume (vph)	51	838	38	7	1719	24	132	7	4	27	6
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		3	8		7	4
Permitted Phases	2		2	6		6	8		8	4	
Detector Phase	5	2	2	1	6	6	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	12.0	12.0	10.0	12.0	12.0	10.0	10.0	10.0	10.0	10.0
Total Split (s)	17.0	80.0	80.0	10.0	73.0	73.0	16.0	15.0	15.0	15.0	14.0
Total Split (%)	14.2%	66.7%	66.7%	8.3%	60.8%	60.8%	13.3%	12.5%	12.5%	12.5%	11.7%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None
Act Effct Green (s)	78.3	74.5	74.5	72.5	65.9	65.9	20.5	15.1	15.1	17.5	7.9
Actuated g/C Ratio	0.71	0.68	0.68	0.66	0.60	0.60	0.19	0.14	0.14	0.16	0.07
v/c Ratio	0.25	0.36	0.04	0.02	0.91	0.03	0.60	0.03	0.01	0.11	0.55
Control Delay	8.3	8.5	0.1	5.1	28.3	0.0	52.1	48.4	0.0	37.9	21.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.3	8.5	0.1	5.1	28.3	0.0	52.1	48.4	0.0	37.9	21.0
LOS	A	A	A	A	C	A	D	D	A	D	C
Approach Delay		8.1			27.8			50.5			24.2
Approach LOS		A			C			D			C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 109.6	
Natural Cycle: 80	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 22.9	Intersection LOS: C
Intersection Capacity Utilization 69.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 25: Golden Sage Rd & Woodmen Rd

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	138	0	0	0	0	82	0	0	0
Future Vol, veh/h	0	0	0	138	0	0	0	0	82	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	145	0	0	0	0	86	0	0	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	87	1	1	1	-	1	0	0	86	0	0
Stage 1	-	1	-	0	0	-	-	-	-	-	-	-
Stage 2	-	86	-	1	1	-	-	-	-	-	-	-
Critical Hdwy	-	6.52	6.22	7.12	6.52	-	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.018	3.318	3.518	4.018	-	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	803	1084	1022	895	0	1622	-	-	1510	-	-
Stage 1	0	895	-	-	-	0	-	-	-	-	-	-
Stage 2	0	824	-	1022	895	0	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	803	1084	1022	895	-	1622	-	-	1510	-	-
Mov Cap-2 Maneuver	-	803	-	1022	895	-	-	-	-	-	-	-
Stage 1	-	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	824	-	1022	895	-	-	-	-	-	-	-

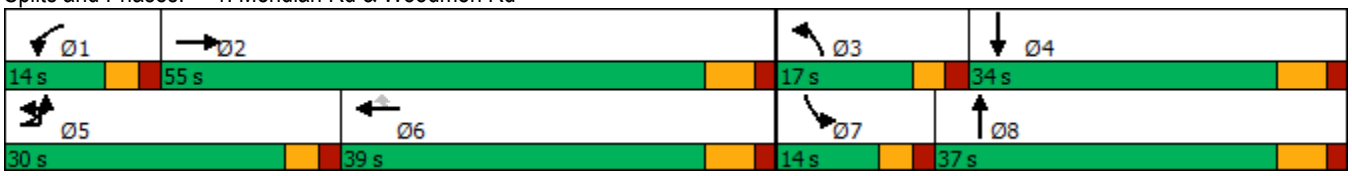
Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.1	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1622	-	-	-	1022	1510	-	-
HCM Lane V/C Ratio	-	-	-	-	0.142	-	-	-
HCM Control Delay (s)	0	-	-	0	9.1	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.5	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	600	725	200	150	708	92	185	740	175	150	450	342
Future Volume (vph)	600	725	200	150	708	92	185	740	175	150	450	342
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			6			Free			Free
Detector Phase	5	2		1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	11.5		10.0	11.5	11.5	10.0	11.5		10.0	11.5	
Total Split (s)	30.0	55.0		14.0	39.0	39.0	17.0	37.0		14.0	34.0	
Total Split (%)	25.0%	45.8%		11.7%	32.5%	32.5%	14.2%	30.8%		11.7%	28.3%	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	5.5		4.0	5.5	5.5	4.0	5.5		4.0	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	Min		None	Min	Min	None	None		None	None	
Act Effct Green (s)	24.1	43.5	111.0	9.7	29.1	29.1	11.7	28.8	111.0	9.7	26.8	111.0
Actuated g/C Ratio	0.22	0.39	1.00	0.09	0.26	0.26	0.11	0.26	1.00	0.09	0.24	1.00
v/c Ratio	0.83	0.53	0.13	0.51	0.78	0.17	0.52	0.82	0.11	0.51	0.54	0.22
Control Delay	53.2	27.6	0.2	57.1	45.0	0.7	54.2	48.0	0.1	57.1	40.5	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	53.2	27.6	0.2	57.1	45.0	0.7	54.2	48.0	0.1	57.1	40.5	0.3
LOS	D	C	A	E	D	A	D	D	A	E	D	A
Approach Delay		34.1			42.6			41.4			28.5	
Approach LOS		C			D			D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 111	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 36.5	Intersection LOS: D
Intersection Capacity Utilization 77.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Meridian Rd & Woodmen Rd



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT	Ø5
Lane Configurations										
Traffic Volume (vph)	13	3	40	3	150	1257	175	75	843	
Future Volume (vph)	13	3	40	3	150	1257	175	75	843	
Turn Type	pm+pt	NA	pm+pt	NA	Perm	NA	Perm	pm+pt	NA	
Protected Phases	7	4	3	8		2		1	6	5
Permitted Phases	4		8		8		2	6		
Detector Phase	7	4	3	8	8	2	2	1	6	
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	11.5	11.5	10.0	11.5	10.0
Total Split (s)	15.0	24.0	12.0	21.0	21.0	72.0	72.0	12.0	62.0	22.0
Total Split (%)	12.5%	20.0%	10.0%	17.5%	17.5%	60.0%	60.0%	10.0%	51.7%	18%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	4.5	4.5	3.0	4.5	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.5	
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	None	Min	None
Act Effct Green (s)	8.8	7.7	9.5	8.3	8.3	39.1	39.1	49.8	48.2	
Actuated g/C Ratio	0.13	0.11	0.14	0.12	0.12	0.57	0.57	0.73	0.71	
v/c Ratio	0.03	0.01	0.19	0.01	0.47	0.63	0.19	0.23	0.34	
Control Delay	29.3	35.3	30.6	34.7	10.8	12.5	2.1	4.9	4.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	29.3	35.3	30.6	34.7	10.8	12.5	2.1	4.9	4.6	
LOS	C	D	C	C	B	B	A	A	A	
Approach Delay		30.4		15.3		11.2			4.7	
Approach LOS		C		B		B			A	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 68.1	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 9.3	Intersection LOS: A
Intersection Capacity Utilization 59.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 2: Meridian Rd & Eastonville Rd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	88	1544	85	15	1111	24	106	16	16	30	6
Future Volume (vph)	88	1544	85	15	1111	24	106	16	16	30	6
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		3	8		7	4
Permitted Phases	2		2	6		6	8		8	4	
Detector Phase	5	2	2	1	6	6	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	12.0	12.0	10.0	12.0	12.0	10.0	10.0	10.0	10.0	10.0
Total Split (s)	18.0	82.0	82.0	10.0	74.0	74.0	15.0	18.0	18.0	10.0	13.0
Total Split (%)	15.0%	68.3%	68.3%	8.3%	61.7%	61.7%	12.5%	15.0%	15.0%	8.3%	10.8%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None
Act Effct Green (s)	58.4	53.4	53.4	53.5	46.7	46.7	19.0	13.5	13.5	12.5	7.8
Actuated g/C Ratio	0.68	0.62	0.62	0.62	0.54	0.54	0.22	0.16	0.16	0.15	0.09
v/c Ratio	0.26	0.72	0.09	0.07	0.59	0.03	0.40	0.06	0.04	0.14	0.48
Control Delay	7.0	14.7	1.3	5.7	16.0	0.0	36.6	42.1	0.2	34.1	18.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.0	14.7	1.3	5.7	16.0	0.0	36.6	42.1	0.2	34.1	18.3
LOS	A	B	A	A	B	A	D	D	A	C	B
Approach Delay		13.6			15.5			33.0			21.6
Approach LOS		B			B			C			C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 86	
Natural Cycle: 65	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 15.6	Intersection LOS: B
Intersection Capacity Utilization 71.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 25: Golden Sage Rd & Woodmen Rd

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	145	0	0	0	0	128	0	0	0
Future Vol, veh/h	0	0	0	145	0	0	0	0	128	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	95	95	95	95	92	95	92	95	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	153	0	0	0	0	135	0	0	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	136	1	1	1	-	1	0	0	135	0	0
Stage 1	-	1	-	0	0	-	-	-	-	-	-	-
Stage 2	-	135	-	1	1	-	-	-	-	-	-	-
Critical Hdwy	-	6.52	6.22	7.12	6.52	-	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.018	3.318	3.518	4.018	-	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	755	1084	1022	895	0	1622	-	-	1449	-	-
Stage 1	0	895	-	-	-	0	-	-	-	-	-	-
Stage 2	0	785	-	1022	895	0	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	755	1084	1022	895	-	1622	-	-	1449	-	-
Mov Cap-2 Maneuver	-	755	-	1022	895	-	-	-	-	-	-	-
Stage 1	-	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	785	-	1022	895	-	-	-	-	-	-	-

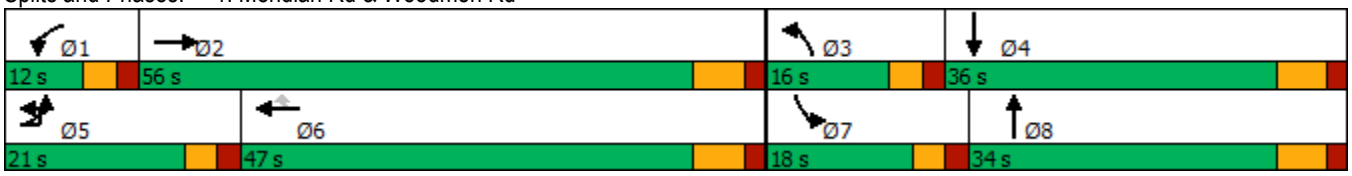
Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.1	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1622	-	-	-	1022	1449	-	-
HCM Lane V/C Ratio	-	-	-	-	0.149	-	-	-
HCM Control Delay (s)	0	-	-	0	9.1	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.5	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	293	645	100	100	754	167	150	381	50	241	621	807
Future Volume (vph)	293	645	100	100	754	167	150	381	50	241	621	807
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			6			Free			Free
Detector Phase	5	2		1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	11.5		10.0	11.5	11.5	10.0	11.5		10.0	11.5	
Total Split (s)	21.0	56.0		12.0	47.0	47.0	16.0	34.0		18.0	36.0	
Total Split (%)	17.5%	46.7%		10.0%	39.2%	39.2%	13.3%	28.3%		15.0%	30.0%	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	5.5		4.0	5.5	5.5	4.0	5.5		4.0	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	Min		None	Min	Min	None	None		None	None	
Act Effct Green (s)	14.6	40.0	99.6	8.0	30.4	30.4	10.6	22.3	99.6	12.8	24.5	99.6
Actuated g/C Ratio	0.15	0.40	1.00	0.08	0.31	0.31	0.11	0.22	1.00	0.13	0.25	1.00
v/c Ratio	0.59	0.46	0.06	0.37	0.71	0.28	0.42	0.49	0.03	0.56	0.73	0.52
Control Delay	47.4	24.4	0.1	52.4	35.4	5.5	48.9	37.3	0.0	49.0	41.2	1.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.4	24.4	0.1	52.4	35.4	5.5	48.9	37.3	0.0	49.0	41.2	1.2
LOS	D	C	A	D	D	A	D	D	A	D	D	A
Approach Delay		28.5			32.2			37.1			23.0	
Approach LOS		C			C			D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 99.6	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 28.4	Intersection LOS: C
Intersection Capacity Utilization 66.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Meridian Rd & Woodmen Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	113	42	89	75	45	75	285	481	75	90	1458	78
Future Volume (vph)	113	42	89	75	45	75	285	481	75	90	1458	78
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	11.5	11.5	10.0	11.5	11.5
Total Split (s)	10.0	14.0	14.0	10.0	14.0	14.0	18.0	86.0	86.0	10.0	78.0	78.0
Total Split (%)	8.3%	11.7%	11.7%	8.3%	11.7%	11.7%	15.0%	71.7%	71.7%	8.3%	65.0%	65.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.5	4.5	3.0	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effct Green (s)	13.2	8.7	8.7	13.0	8.7	8.7	71.2	62.1	62.1	58.7	50.8	50.8
Actuated g/C Ratio	0.14	0.09	0.09	0.14	0.09	0.09	0.74	0.65	0.65	0.61	0.53	0.53
v/c Ratio	0.31	0.26	0.32	0.37	0.28	0.27	0.86	0.21	0.07	0.16	0.79	0.09
Control Delay	39.3	50.4	2.8	43.9	50.8	2.2	51.8	8.0	0.7	5.1	21.5	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.3	50.4	2.8	43.9	50.8	2.2	51.8	8.0	0.7	5.1	21.5	0.2
LOS	D	D	A	D	D	A	D	A	A	A	C	A
Approach Delay		27.8			29.4			22.4			19.5	
Approach LOS		C			C			C			B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 95.7	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 21.8	Intersection LOS: C
Intersection Capacity Utilization 78.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 2: Meridian Rd & Eastonville Rd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	93	826	38	7	1680	24	132	10	4	27	7
Future Volume (vph)	93	826	38	7	1680	24	132	10	4	27	7
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		3	8		7	4
Permitted Phases	2		2	6		6	8		8	4	
Detector Phase	5	2	2	1	6	6	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	12.0	12.0	10.0	12.0	12.0	10.0	10.0	10.0	10.0	10.0
Total Split (s)	17.0	80.0	80.0	10.0	73.0	73.0	16.0	15.0	15.0	15.0	14.0
Total Split (%)	14.2%	66.7%	66.7%	8.3%	60.8%	60.8%	13.3%	12.5%	12.5%	12.5%	11.7%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None
Act Effct Green (s)	74.1	70.3	70.3	66.7	60.2	60.2	21.1	15.9	15.9	18.2	8.6
Actuated g/C Ratio	0.70	0.66	0.66	0.63	0.57	0.57	0.20	0.15	0.15	0.17	0.08
v/c Ratio	0.39	0.36	0.04	0.02	0.86	0.03	0.60	0.04	0.01	0.10	0.70
Control Delay	16.5	8.8	0.1	5.4	26.0	0.0	52.3	49.5	0.0	38.1	31.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.5	8.8	0.1	5.4	26.0	0.0	52.3	49.5	0.0	38.1	31.2
LOS	B	A	A	A	C	A	D	D	A	D	C
Approach Delay		9.2			25.6			50.7			32.2
Approach LOS		A			C			D			C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 106.4	
Natural Cycle: 75	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 22.1	Intersection LOS: C
Intersection Capacity Utilization 84.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 25: Golden Sage Rd & Woodmen Rd

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	195	0	0	0	0	127	0	0	0
Future Vol, veh/h	0	0	0	195	0	0	0	0	127	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	95	95	95	95	92	95	92	95	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	205	0	0	0	0	134	0	0	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	135	1	1	1	-	1	0	0	134	0	0
Stage 1	-	1	-	0	0	-	-	-	-	-	-	-
Stage 2	-	134	-	1	1	-	-	-	-	-	-	-
Critical Hdwy	-	6.52	6.22	7.12	6.52	-	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.018	3.318	3.518	4.018	-	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	756	1084	1022	895	0	1622	-	-	1451	-	-
Stage 1	0	895	-	-	-	0	-	-	-	-	-	-
Stage 2	0	785	-	1022	895	0	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	756	1084	1022	895	-	1622	-	-	1451	-	-
Mov Cap-2 Maneuver	-	756	-	1022	895	-	-	-	-	-	-	-
Stage 1	-	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	785	-	1022	895	-	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1622	-	-	-	1022	1451	-	-
HCM Lane V/C Ratio	-	-	-	-	0.201	-	-	-
HCM Control Delay (s)	0	-	-	0	9.4	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.7	0	-	-

87: Meridian Rd & Site RIRO Performance by movement Interval #1 7:00

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	11.6	0.7	0.1	0.1	1.1

87: Meridian Rd & Site RIRO Performance by movement Interval #2 7:15

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	18.8	0.7	0.1	0.1	1.5

87: Meridian Rd & Site RIRO Performance by movement Interval #3 7:30

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	15.3	0.7	0.1	0.1	1.2

87: Meridian Rd & Site RIRO Performance by movement Interval #4 7:45

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	9.2	0.6	0.1	0.1	0.8

87: Meridian Rd & Site RIRO Performance by movement Entire Run

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	14.1	0.7	0.1	0.1	1.1

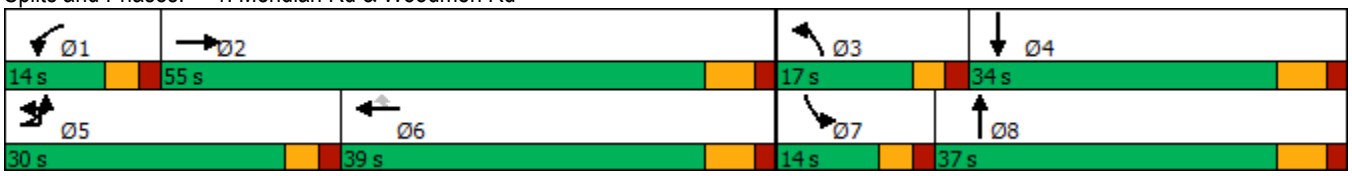
Total Zone Performance By Interval

Interval Start	7:00	7:15	7:30	7:45	All
Stop Del/Veh (s)	74.9	78.3	52.8	85.8	499.8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	622	669	200	150	611	258	175	871	175	225	566	368
Future Volume (vph)	622	669	200	150	611	258	175	871	175	225	566	368
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			6			Free			Free
Detector Phase	5	2		1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	11.5		10.0	11.5	11.5	10.0	11.5		10.0	11.5	
Total Split (s)	30.0	55.0		14.0	39.0	39.0	17.0	37.0		14.0	34.0	
Total Split (%)	25.0%	45.8%		11.7%	32.5%	32.5%	14.2%	30.8%		11.7%	28.3%	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	5.5		4.0	5.5	5.5	4.0	5.5		4.0	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	Min		None	Min	Min	None	None		None	None	
Act Effct Green (s)	24.5	42.1	112.1	9.7	27.3	27.3	11.5	31.1	112.1	10.1	29.6	112.1
Actuated g/C Ratio	0.22	0.38	1.00	0.09	0.24	0.24	0.10	0.28	1.00	0.09	0.26	1.00
v/c Ratio	0.85	0.51	0.13	0.52	0.72	0.50	0.51	0.91	0.11	0.75	0.62	0.24
Control Delay	54.3	28.4	0.2	57.1	44.3	14.8	54.0	53.6	0.1	66.9	41.0	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.3	28.4	0.2	57.1	44.3	14.8	54.0	53.6	0.1	66.9	41.0	0.4
LOS	D	C	A	E	D	B	D	D	A	E	D	A
Approach Delay		35.4			38.7			46.0			33.1	
Approach LOS		D			D			D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 112.1	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 38.2	Intersection LOS: D
Intersection Capacity Utilization 81.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Meridian Rd & Woodmen Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	262	113	134	40	68	150	442	1133	175	75	881	91
Future Volume (vph)	262	113	134	40	68	150	442	1133	175	75	881	91
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	11.5	11.5	10.0	11.5	11.5
Total Split (s)	15.0	24.0	24.0	12.0	21.0	21.0	23.0	72.0	72.0	12.0	61.0	61.0
Total Split (%)	12.5%	20.0%	20.0%	10.0%	17.5%	17.5%	19.2%	60.0%	60.0%	10.0%	50.8%	50.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.5	4.5	3.0	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effct Green (s)	24.3	18.2	18.2	17.5	10.0	10.0	55.3	44.6	44.6	39.7	30.5	30.5
Actuated g/C Ratio	0.28	0.21	0.21	0.20	0.11	0.11	0.63	0.51	0.51	0.45	0.35	0.35
v/c Ratio	0.39	0.31	0.31	0.14	0.34	0.48	0.94	0.65	0.21	0.27	0.74	0.15
Control Delay	27.6	36.9	5.8	26.9	43.0	11.1	51.7	19.0	2.7	10.8	29.3	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.6	36.9	5.8	26.9	43.0	11.1	51.7	19.0	2.7	10.8	29.3	1.1
LOS	C	D	A	C	D	B	D	B	A	B	C	A
Approach Delay		23.9			22.0			25.8			25.4	
Approach LOS		C			C			C			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 88.3	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 25.1	Intersection LOS: C
Intersection Capacity Utilization 74.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 2: Meridian Rd & Eastonville Rd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	170	1505	85	15	1115	24	106	20	16	30	10
Future Volume (vph)	170	1505	85	15	1115	24	106	20	16	30	10
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		3	8		7	4
Permitted Phases	2		2	6		6	8		8	4	
Detector Phase	5	2	2	1	6	6	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	12.0	12.0	10.0	12.0	12.0	10.0	10.0	10.0	10.0	10.0
Total Split (s)	18.0	82.0	82.0	10.0	74.0	74.0	15.0	18.0	18.0	10.0	13.0
Total Split (%)	15.0%	68.3%	68.3%	8.3%	61.7%	61.7%	12.5%	15.0%	15.0%	8.3%	10.8%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None
Act Effct Green (s)	57.5	52.3	52.3	48.8	40.2	40.2	19.0	13.5	13.5	12.5	7.9
Actuated g/C Ratio	0.68	0.62	0.62	0.57	0.47	0.47	0.22	0.16	0.16	0.15	0.09
v/c Ratio	0.48	0.70	0.09	0.07	0.68	0.03	0.41	0.07	0.04	0.14	0.57
Control Delay	10.5	14.6	1.3	5.9	19.4	0.1	36.6	40.7	0.2	33.4	18.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.5	14.6	1.3	5.9	19.4	0.1	36.6	40.7	0.2	33.4	18.5
LOS	B	B	A	A	B	A	D	D	A	C	B
Approach Delay		13.5			18.8			33.0			20.9
Approach LOS		B			B			C			C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 84.9	
Natural Cycle: 65	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 16.7	Intersection LOS: B
Intersection Capacity Utilization 76.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 25: Golden Sage Rd & Woodmen Rd

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	187	0	0	0	0	215	0	0	0
Future Vol, veh/h	0	0	0	187	0	0	0	0	215	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	95	95	95	95	92	95	92	95	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	197	0	0	0	0	226	0	0	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	227	1	1	1	-	1	0	0	226	0	0
Stage 1	-	1	-	0	0	-	-	-	-	-	-	-
Stage 2	-	226	-	1	1	-	-	-	-	-	-	-
Critical Hdwy	-	6.52	6.22	7.12	6.52	-	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.018	3.318	3.518	4.018	-	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	672	1084	1022	895	0	1622	-	-	1342	-	-
Stage 1	0	895	-	-	-	0	-	-	-	-	-	-
Stage 2	0	717	-	1022	895	0	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	672	1084	1022	895	-	1622	-	-	1342	-	-
Mov Cap-2 Maneuver	-	672	-	1022	895	-	-	-	-	-	-	-
Stage 1	-	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	717	-	1022	895	-	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1622	-	-	-	1022	1342	-	-
HCM Lane V/C Ratio	-	-	-	-	0.193	-	-	-
HCM Control Delay (s)	0	-	-	0	9.4	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.7	0	-	-

87: Meridian Rd & Site RIRO Performance by movement Interval #1 5:00

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	8.5	2.0	0.1	0.1	1.8

87: Meridian Rd & Site RIRO Performance by movement Interval #2 5:15

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	7.9	1.8	0.1	0.1	1.7

87: Meridian Rd & Site RIRO Performance by movement Interval #3 5:30

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	9.4	1.9	0.1	0.1	1.8

87: Meridian Rd & Site RIRO Performance by movement Interval #4 5:45

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	6.7	2.1	0.2	0.1	1.8

87: Meridian Rd & Site RIRO Performance by movement Entire Run

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	8.1	2.0	0.1	0.1	1.8

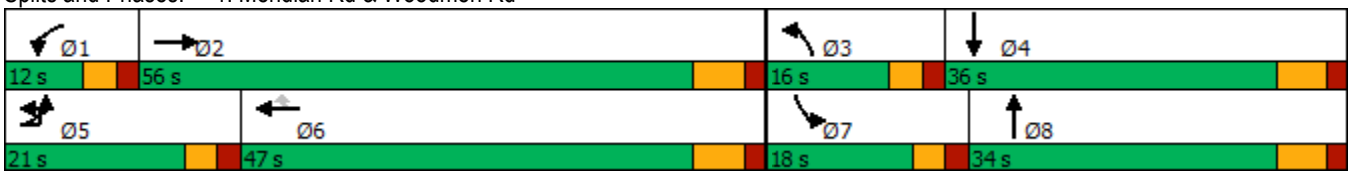
Total Zone Performance By Interval

Interval Start	5:00	5:15	5:30	5:45	All
Stop Del/Veh (s)	50.4	72.0	40.5	40.3	82.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	286	645	100	100	852	69	212	319	50	241	621	842
Future Volume (vph)	286	645	100	100	852	69	212	319	50	241	621	842
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			6			Free			Free
Detector Phase	5	2		1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	11.5		10.0	11.5	11.5	10.0	11.5		10.0	11.5	
Total Split (s)	21.0	56.0		12.0	47.0	47.0	16.0	34.0		18.0	36.0	
Total Split (%)	17.5%	46.7%		10.0%	39.2%	39.2%	13.3%	28.3%		15.0%	30.0%	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	5.5		4.0	5.5	5.5	4.0	5.5		4.0	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	Min		None	Min	Min	None	None		None	None	
Act Effct Green (s)	14.9	40.3	104.4	8.0	33.4	33.4	11.4	23.8	104.4	12.8	25.2	104.4
Actuated g/C Ratio	0.14	0.39	1.00	0.08	0.32	0.32	0.11	0.23	1.00	0.12	0.24	1.00
v/c Ratio	0.62	0.48	0.06	0.39	0.77	0.11	0.57	0.40	0.03	0.58	0.74	0.54
Control Delay	50.1	25.5	0.1	54.8	37.7	0.4	53.6	37.2	0.0	51.8	43.5	1.3
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	50.1	25.5	0.1	54.8	37.7	0.4	53.6	37.2	0.0	51.8	43.5	1.3
LOS	D	C	A	D	D	A	D	D	A	D	D	A
Approach Delay		30.1			36.9			40.0			23.9	
Approach LOS		C			D			D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 104.4	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 30.6	Intersection LOS: C
Intersection Capacity Utilization 71.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Meridian Rd & Woodmen Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	113	42	89	75	45	75	117	482	75	90	1472	64
Future Volume (vph)	113	42	89	75	45	75	117	482	75	90	1472	64
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	11.5	11.5	10.0	11.5	11.5
Total Split (s)	10.0	14.0	14.0	10.0	14.0	14.0	14.0	86.0	86.0	10.0	82.0	82.0
Total Split (%)	8.3%	11.7%	11.7%	8.3%	11.7%	11.7%	11.7%	71.7%	71.7%	8.3%	68.3%	68.3%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.5	4.5	3.0	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effct Green (s)	13.1	9.0	9.0	13.1	9.0	9.0	64.7	57.9	57.9	56.8	48.5	48.5
Actuated g/C Ratio	0.15	0.10	0.10	0.15	0.10	0.10	0.75	0.67	0.67	0.66	0.57	0.57
v/c Ratio	0.26	0.23	0.34	0.33	0.24	0.29	0.40	0.21	0.07	0.15	0.75	0.07
Control Delay	35.2	45.8	8.0	38.8	46.1	5.2	12.8	8.4	0.8	4.9	17.9	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.2	45.8	8.0	38.8	46.1	5.2	12.8	8.4	0.8	4.9	17.9	0.6
LOS	D	D	A	D	D	A	B	A	A	A	B	A
Approach Delay		27.1			27.5			8.3			16.5	
Approach LOS		C			C			A			B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 85.8	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 16.2	Intersection LOS: B
Intersection Capacity Utilization 69.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 2: Meridian Rd & Eastonville Rd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	89	826	38	7	1680	24	132	10	4	27	7
Future Volume (vph)	89	826	38	7	1680	24	132	10	4	27	7
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		3	8		7	4
Permitted Phases	2		2	6		6	8		8	4	
Detector Phase	5	2	2	1	6	6	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	12.0	12.0	10.0	12.0	12.0	10.0	10.0	10.0	10.0	10.0
Total Split (s)	17.0	80.0	80.0	10.0	73.0	73.0	16.0	15.0	15.0	15.0	14.0
Total Split (%)	14.2%	66.7%	66.7%	8.3%	60.8%	60.8%	13.3%	12.5%	12.5%	12.5%	11.7%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None
Act Effct Green (s)	74.0	70.2	70.2	66.7	60.2	60.2	21.1	15.9	15.9	18.2	8.6
Actuated g/C Ratio	0.70	0.66	0.66	0.63	0.57	0.57	0.20	0.15	0.15	0.17	0.08
v/c Ratio	0.38	0.36	0.04	0.02	0.86	0.03	0.60	0.04	0.01	0.10	0.70
Control Delay	15.5	8.8	0.1	5.4	25.9	0.0	52.2	49.4	0.0	38.1	31.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.5	8.8	0.1	5.4	25.9	0.0	52.2	49.4	0.0	38.1	31.2
LOS	B	A	A	A	C	A	D	D	A	D	C
Approach Delay		9.1			25.5			50.7			32.1
Approach LOS		A			C			D			C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 106.3	
Natural Cycle: 75	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 22.0	Intersection LOS: C
Intersection Capacity Utilization 84.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 25: Golden Sage Rd & Woodmen Rd

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	195	0	0	0	0	123	0	0	0
Future Vol, veh/h	0	0	0	195	0	0	0	0	123	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	95	95	95	95	92	95	92	95	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	205	0	0	0	0	129	0	0	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	130	1	1	1	-	1	0	0	129	0	0
Stage 1	-	1	-	0	0	-	-	-	-	-	-	-
Stage 2	-	129	-	1	1	-	-	-	-	-	-	-
Critical Hdwy	-	6.52	6.22	7.12	6.52	-	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.018	3.318	3.518	4.018	-	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	761	1084	1022	895	0	1622	-	-	1457	-	-
Stage 1	0	895	-	-	-	0	-	-	-	-	-	-
Stage 2	0	789	-	1022	895	0	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	761	1084	1022	895	-	1622	-	-	1457	-	-
Mov Cap-2 Maneuver	-	761	-	1022	895	-	-	-	-	-	-	-
Stage 1	-	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	789	-	1022	895	-	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1622	-	-	-	1022	1457	-	-
HCM Lane V/C Ratio	-	-	-	-	0.201	-	-	-
HCM Control Delay (s)	0	-	-	0	9.4	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.7	0	-	-

87: Meridian Rd & Site RIRO Performance by movement Interval #1 7:00

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	10.6	0.5	0.1	0.1	0.9

87: Meridian Rd & Site RIRO Performance by movement Interval #2 7:15

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	12.7	0.4	0.1	0.0	0.9

87: Meridian Rd & Site RIRO Performance by movement Interval #3 7:30

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	11.2	0.4	0.1	0.0	0.9

87: Meridian Rd & Site RIRO Performance by movement Interval #4 7:45

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	9.9	0.4	0.1	0.1	0.7

87: Meridian Rd & Site RIRO Performance by movement Entire Run

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	11.3	0.4	0.1	0.1	0.9

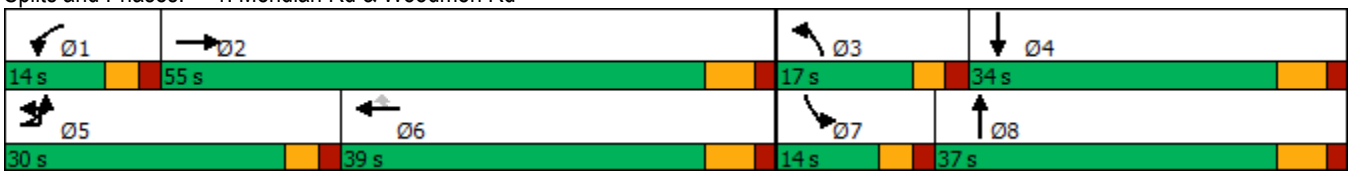
Total Zone Performance By Interval

Interval Start	7:00	7:15	7:30	7:45	All
Stop Del/Veh (s)	58.7	42.2	61.8	47.8	191.3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	612	669	200	150	753	116	279	767	175	225	566	398
Future Volume (vph)	612	669	200	150	753	116	279	767	175	225	566	398
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			6			Free			Free
Detector Phase	5	2		1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	11.5		10.0	11.5	11.5	10.0	11.5		10.0	11.5	
Total Split (s)	30.0	55.0		14.0	39.0	39.0	17.0	37.0		14.0	34.0	
Total Split (%)	25.0%	45.8%		11.7%	32.5%	32.5%	14.2%	30.8%		11.7%	28.3%	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	5.5		4.0	5.5	5.5	4.0	5.5		4.0	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	Min		None	Min	Min	None	None		None	None	
Act Effct Green (s)	24.9	45.8	114.3	9.7	30.6	30.6	12.7	29.6	114.3	10.1	27.0	114.3
Actuated g/C Ratio	0.22	0.40	1.00	0.08	0.27	0.27	0.11	0.26	1.00	0.09	0.24	1.00
v/c Ratio	0.86	0.48	0.13	0.53	0.81	0.22	0.75	0.85	0.11	0.76	0.69	0.26
Control Delay	56.8	26.9	0.2	58.6	47.2	2.3	63.2	51.1	0.1	69.2	45.5	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.8	26.9	0.2	58.6	47.2	2.3	63.2	51.1	0.1	69.2	45.5	0.4
LOS	E	C	A	E	D	A	E	D	A	E	D	A
Approach Delay		35.9			43.8			46.5			34.9	
Approach LOS		D			D			D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 114.3	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 39.9	Intersection LOS: D
Intersection Capacity Utilization 82.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Meridian Rd & Woodmen Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	262	113	134	40	68	150	187	1133	175	75	895	77
Future Volume (vph)	262	113	134	40	68	150	187	1133	175	75	895	77
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	11.5	11.5	10.0	11.5	11.5
Total Split (s)	15.0	24.0	24.0	12.0	21.0	21.0	22.0	72.0	72.0	12.0	62.0	62.0
Total Split (%)	12.5%	20.0%	20.0%	10.0%	17.5%	17.5%	18.3%	60.0%	60.0%	10.0%	51.7%	51.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.5	4.5	3.0	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effct Green (s)	24.4	18.4	18.4	17.5	9.9	9.9	49.1	39.1	39.1	41.9	32.6	32.6
Actuated g/C Ratio	0.29	0.22	0.22	0.21	0.12	0.12	0.59	0.47	0.47	0.51	0.39	0.39
v/c Ratio	0.36	0.29	0.29	0.13	0.32	0.47	0.51	0.69	0.22	0.28	0.65	0.11
Control Delay	25.5	35.2	5.6	25.6	41.0	10.7	12.3	20.4	2.8	10.2	22.8	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	25.5	35.2	5.6	25.6	41.0	10.7	12.3	20.4	2.8	10.2	22.8	0.3
LOS	C	D	A	C	D	B	B	C	A	B	C	A
Approach Delay		22.5			21.0			17.2			20.2	
Approach LOS		C			C			B			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 82.8	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 19.3	Intersection LOS: B
Intersection Capacity Utilization 60.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 2: Meridian Rd & Eastonville Rd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	160	1515	85	15	1115	24	106	20	16	30	10
Future Volume (vph)	160	1515	85	15	1115	24	106	20	16	30	10
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2		1	6		3	8		7	4
Permitted Phases	2		2	6		6	8		8	4	
Detector Phase	5	2	2	1	6	6	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	12.0	12.0	10.0	12.0	12.0	10.0	10.0	10.0	10.0	10.0
Total Split (s)	18.0	82.0	82.0	10.0	74.0	74.0	15.0	18.0	18.0	10.0	13.0
Total Split (%)	15.0%	68.3%	68.3%	8.3%	61.7%	61.7%	12.5%	15.0%	15.0%	8.3%	10.8%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None
Act Effct Green (s)	57.5	52.3	52.3	49.1	40.4	40.4	19.0	13.5	13.5	12.5	7.9
Actuated g/C Ratio	0.68	0.62	0.62	0.58	0.48	0.48	0.22	0.16	0.16	0.15	0.09
v/c Ratio	0.46	0.71	0.09	0.07	0.68	0.03	0.41	0.07	0.04	0.14	0.57
Control Delay	9.4	14.7	1.3	5.9	19.1	0.1	36.7	40.9	0.2	33.5	18.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.4	14.7	1.3	5.9	19.1	0.1	36.7	40.9	0.2	33.5	18.5
LOS	A	B	A	A	B	A	D	D	A	C	B
Approach Delay		13.5			18.5			33.1			20.9
Approach LOS		B			B			C			C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 84.9	
Natural Cycle: 65	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 16.6	Intersection LOS: B
Intersection Capacity Utilization 76.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 25: Golden Sage Rd & Woodmen Rd

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	187	0	0	0	0	204	0	0	0
Future Vol, veh/h	0	0	0	187	0	0	0	0	204	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	95	95	95	95	92	95	92	95	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	197	0	0	0	0	215	0	0	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	216	1	1	1	-	1	0	0	215	0	0
Stage 1	-	1	-	0	0	-	-	-	-	-	-	-
Stage 2	-	215	-	1	1	-	-	-	-	-	-	-
Critical Hdwy	-	6.52	6.22	7.12	6.52	-	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.018	3.318	3.518	4.018	-	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	682	1084	1022	895	0	1622	-	-	1355	-	-
Stage 1	0	895	-	-	-	0	-	-	-	-	-	-
Stage 2	0	725	-	1022	895	0	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	682	1084	1022	895	-	1622	-	-	1355	-	-
Mov Cap-2 Maneuver	-	682	-	1022	895	-	-	-	-	-	-	-
Stage 1	-	895	-	-	-	-	-	-	-	-	-	-
Stage 2	-	725	-	1022	895	-	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1622	-	-	-	1022	1355	-	-
HCM Lane V/C Ratio	-	-	-	-	0.193	-	-	-
HCM Control Delay (s)	0	-	-	0	9.4	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.7	0	-	-

87: Meridian Rd & Site RIRO Performance by movement Interval #1 5:00

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	7.2	0.8	0.1	0.1	1.1

87: Meridian Rd & Site RIRO Performance by movement Interval #2 5:15

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	7.9	1.0	0.1	0.2	1.2

87: Meridian Rd & Site RIRO Performance by movement Interval #3 5:30

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	8.1	0.9	0.1	0.1	1.2

87: Meridian Rd & Site RIRO Performance by movement Interval #4 5:45

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	9.3	1.2	0.1	0.1	1.4

87: Meridian Rd & Site RIRO Performance by movement Entire Run

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	8.2	1.0	0.1	0.1	1.3

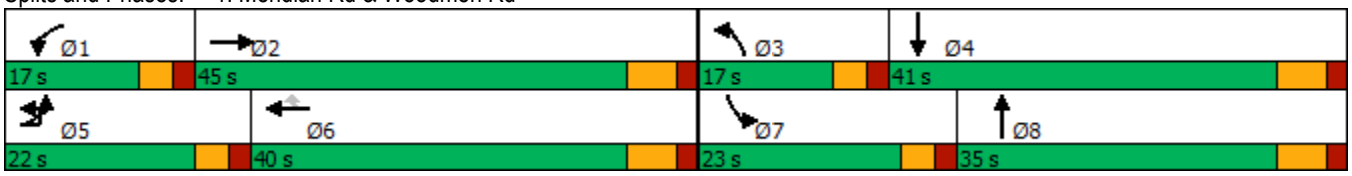
Total Zone Performance By Interval

Interval Start	5:00	5:15	5:30	5:45	All
Stop Del/Veh (s)	27.5	50.1	31.4	36.3	62.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	450	550	175	150	850	150	250	350	100	250	900	925
Future Volume (vph)	450	550	175	150	850	150	250	350	100	250	900	925
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			6			Free			Free
Detector Phase	5	2		1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	11.5		10.0	11.5	11.5	10.0	11.5		10.0	11.5	
Total Split (s)	22.0	45.0		17.0	40.0	40.0	17.0	35.0		23.0	41.0	
Total Split (%)	18.3%	37.5%		14.2%	33.3%	33.3%	14.2%	29.2%		19.2%	34.2%	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	5.5		4.0	5.5	5.5	4.0	5.5		4.0	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	Min		None	Min	Min	None	None		None	None	
Act Effct Green (s)	17.9	39.5	116.4	11.2	32.9	32.9	12.6	31.6	116.4	15.0	34.0	116.4
Actuated g/C Ratio	0.15	0.34	1.00	0.10	0.28	0.28	0.11	0.27	1.00	0.13	0.29	1.00
v/c Ratio	0.88	0.47	0.11	0.46	0.87	0.27	0.69	0.37	0.06	0.58	0.89	0.60
Control Delay	67.9	32.3	0.1	55.1	50.4	5.1	61.2	36.6	0.1	53.5	51.3	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.9	32.3	0.1	55.1	50.4	5.1	61.2	36.6	0.1	53.5	51.3	1.7
LOS	E	C	A	E	D	A	E	D	A	D	D	A
Approach Delay		41.2			45.1			40.2			29.4	
Approach LOS		D			D			D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 116.4	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 37.1	Intersection LOS: D
Intersection Capacity Utilization 84.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Meridian Rd & Woodmen Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	25	52	250	55	125	155	645	150	100	1724	73
Future Volume (vph)	36	25	52	250	55	125	155	645	150	100	1724	73
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8			2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	11.5	11.5	10.0	11.5	11.5	10.0	11.5	11.5	10.0	11.5	11.5
Total Split (s)	15.0	17.0	17.0	18.0	20.0	20.0	20.0	75.0	75.0	10.0	65.0	65.0
Total Split (%)	12.5%	14.2%	14.2%	15.0%	16.7%	16.7%	16.7%	62.5%	62.5%	8.3%	54.2%	54.2%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.5	4.5	3.0	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effct Green (s)	14.1	8.1	8.1	23.8	16.9	16.9	11.5	65.2	65.2	67.3	59.8	59.8
Actuated g/C Ratio	0.13	0.07	0.07	0.22	0.16	0.16	0.11	0.60	0.60	0.62	0.55	0.55
v/c Ratio	0.10	0.19	0.20	0.85	0.20	0.34	0.45	0.31	0.16	0.20	0.90	0.08
Control Delay	34.3	52.1	1.7	64.0	44.9	5.6	50.4	11.6	2.0	7.2	31.0	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.3	52.1	1.7	64.0	44.9	5.6	50.4	11.6	2.0	7.2	31.0	0.2
LOS	C	D	A	E	D	A	D	B	A	A	C	A
Approach Delay		23.1			44.5			16.5			28.5	
Approach LOS		C			D			B			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 108.6	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 27.0	Intersection LOS: C
Intersection Capacity Utilization 83.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 2: Meridian Rd & Eastonville Rd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	383	876	74	77	1764	184	150	16	48	251	21	299
Future Volume (vph)	383	876	74	77	1764	184	150	16	48	251	21	299
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2	6		6	8		8	4		Free
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.0	12.5	12.5	10.0	12.5	12.5	10.0	11.0	11.0	10.0	11.0	
Total Split (s)	19.0	74.0	74.0	10.0	65.0	65.0	20.0	13.0	13.0	23.0	16.0	
Total Split (%)	15.8%	61.7%	61.7%	8.3%	54.2%	54.2%	16.7%	10.8%	10.8%	19.2%	13.3%	
Yellow Time (s)	3.0	5.5	5.5	3.0	5.5	5.5	3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	
Total Lost Time (s)	4.0	6.5	6.5	4.0	6.5	6.5	4.0	5.0	5.0	4.0	5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	
Act Effct Green (s)	15.0	70.0	70.0	67.2	58.7	58.7	23.7	7.4	7.4	25.2	9.3	116.2
Actuated g/C Ratio	0.13	0.60	0.60	0.58	0.51	0.51	0.20	0.06	0.06	0.22	0.08	1.00
v/c Ratio	0.91	0.42	0.08	0.20	1.01	0.22	0.46	0.15	0.19	0.73	0.15	0.20
Control Delay	75.9	14.5	0.8	8.9	52.9	3.0	41.2	55.9	1.6	53.6	52.8	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3	0.0	0.0
Total Delay	75.9	14.5	0.8	8.9	52.9	3.0	41.2	55.9	1.6	63.9	52.8	0.3
LOS	E	B	A	A	D	A	D	E	A	E	D	A
Approach Delay		31.7			46.6			33.4			30.1	
Approach LOS		C			D			C			C	

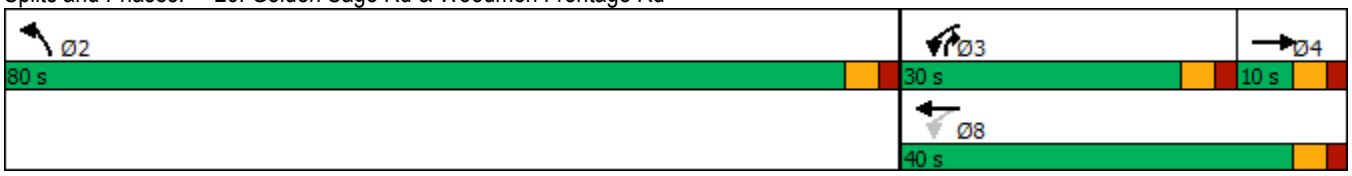
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 116.2	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 38.8	Intersection LOS: D
Intersection Capacity Utilization 93.2%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 25: Golden Sage Rd & Woodmen Rd

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	27	320	2	100	483
Future Volume (vph)	27	320	2	100	483
Turn Type	NA	pm+pt	NA	Prot	Over
Protected Phases	4	3	8	2	3
Permitted Phases		8			
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0
Total Split (s)	10.0	30.0	40.0	80.0	30.0
Total Split (%)	8.3%	25.0%	33.3%	66.7%	25.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0		-1.0	-1.0	-1.0
Total Lost Time (s)	4.0		4.0	4.0	4.0
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	None	None	None	Min	None
Act Effct Green (s)	14.8		27.1	11.6	8.1
Actuated g/C Ratio	0.31		0.57	0.25	0.17
v/c Ratio	0.42		0.59	0.60	0.59
Control Delay	5.1		9.9	14.1	8.9
Queue Delay	0.0		0.0	0.0	0.0
Total Delay	5.1		9.9	14.2	8.9
LOS	A		A	B	A
Approach Delay	5.1		9.9	11.6	
Approach LOS	A		A	B	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 47.2		
Natural Cycle: 45		
Control Type: Semi Act-Uncoord		
Maximum v/c Ratio: 0.60		
Intersection Signal Delay: 9.6	Intersection LOS: A	
Intersection Capacity Utilization 60.1%	ICU Level of Service B	
Analysis Period (min) 15		

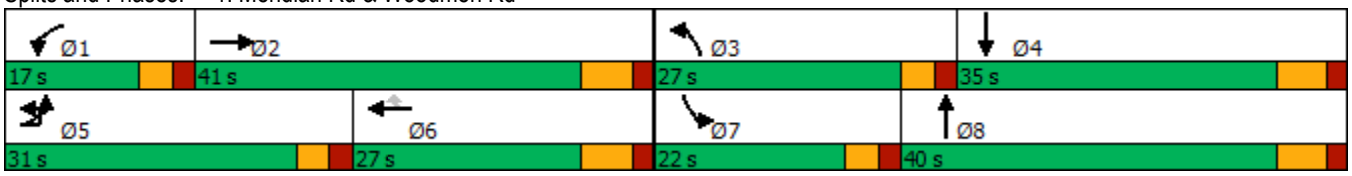
Splits and Phases: 26: Golden Sage Rd & Woodmen Frontage Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	750	850	375	225	600	250	350	900	200	400	600	500
Future Volume (vph)	750	850	375	225	600	250	350	900	200	400	600	500
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			6			Free			Free
Detector Phase	5	2		1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	11.5		10.0	11.5	11.5	10.0	11.5		10.0	11.5	
Total Split (s)	31.0	41.0		17.0	27.0	27.0	27.0	40.0		22.0	35.0	
Total Split (%)	25.8%	34.2%		14.2%	22.5%	22.5%	22.5%	33.3%		18.3%	29.2%	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	5.5		4.0	5.5	5.5	4.0	5.5		4.0	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	Min		None	Min	Min	None	None		None	None	
Act Effct Green (s)	27.0	36.1	118.7	12.4	21.5	21.5	18.5	33.7	118.7	17.5	32.7	118.7
Actuated g/C Ratio	0.23	0.30	1.00	0.10	0.18	0.18	0.16	0.28	1.00	0.15	0.28	1.00
v/c Ratio	0.99	0.81	0.24	0.64	0.95	0.52	0.67	0.91	0.13	0.81	0.63	0.32
Control Delay	76.6	45.4	0.4	59.9	74.6	9.2	53.5	55.6	0.2	62.5	41.7	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.6	45.4	0.4	59.9	74.6	9.2	53.5	55.6	0.2	62.5	41.7	0.5
LOS	E	D	A	E	E	A	D	E	A	E	D	A
Approach Delay		48.8			56.3			47.4			33.5	
Approach LOS		D			E			D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 118.7	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 46.0	Intersection LOS: D
Intersection Capacity Utilization 90.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Meridian Rd & Woodmen Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	66	103	200	50	225	280	1370	250	100	1128	92
Future Volume (vph)	119	66	103	200	50	225	280	1370	250	100	1128	92
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8			2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	11.5	11.5	10.0	11.5	11.5
Total Split (s)	20.0	24.0	24.0	18.0	22.0	22.0	27.0	55.0	55.0	23.0	51.0	51.0
Total Split (%)	16.7%	20.0%	20.0%	15.0%	18.3%	18.3%	22.5%	45.8%	45.8%	19.2%	42.5%	42.5%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.5	4.5	3.0	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effct Green (s)	19.5	10.2	10.2	26.9	14.1	14.1	14.9	48.3	48.3	53.3	42.5	42.5
Actuated g/C Ratio	0.20	0.10	0.10	0.27	0.14	0.14	0.15	0.49	0.49	0.54	0.43	0.43
v/c Ratio	0.21	0.36	0.40	0.57	0.20	0.55	0.57	0.81	0.29	0.43	0.75	0.13
Control Delay	29.0	48.9	10.7	37.1	41.6	10.9	44.4	26.3	2.9	17.4	28.2	3.5
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	29.0	48.9	10.7	37.1	41.6	10.9	44.4	26.3	2.9	17.4	28.2	3.5
LOS	C	D	B	D	D	B	D	C	A	B	C	A
Approach Delay		27.0			25.2			25.9			25.6	
Approach LOS		C			C			C			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 98.6	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 25.8	Intersection LOS: C
Intersection Capacity Utilization 72.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 2: Meridian Rd & Eastonville Rd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	329	1671	121	99	1030	329	152	35	114	191	22	408
Future Volume (vph)	329	1671	121	99	1030	329	152	35	114	191	22	408
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2	6		6	8		8	4		Free
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.0	12.0	12.0	10.0	12.0	12.0	10.0	10.0	10.0	10.0	10.0	
Total Split (s)	25.0	75.0	75.0	10.0	60.0	60.0	20.0	17.0	17.0	18.0	15.0	
Total Split (%)	20.8%	62.5%	62.5%	8.3%	50.0%	50.0%	16.7%	14.2%	14.2%	15.0%	12.5%	
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	
Act Effct Green (s)	17.0	60.5	60.5	57.7	49.6	49.6	25.4	9.1	9.1	18.5	8.0	107.5
Actuated g/C Ratio	0.16	0.56	0.56	0.54	0.46	0.46	0.24	0.08	0.08	0.17	0.07	1.00
v/c Ratio	0.64	0.86	0.13	0.60	0.64	0.38	0.44	0.24	0.41	0.70	0.17	0.27
Control Delay	49.3	25.1	2.3	32.7	24.8	3.3	39.5	52.9	6.3	52.8	53.3	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0
Total Delay	49.3	25.1	2.3	32.7	24.8	3.3	39.5	52.9	6.3	54.4	53.3	0.4
LOS	D	C	A	C	C	A	D	D	A	D	D	A
Approach Delay		27.6			20.4			28.5			18.9	
Approach LOS		C			C			C			B	

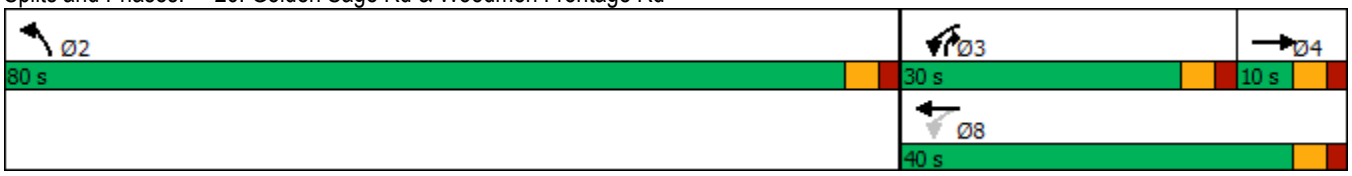
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 107.5	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 24.1	Intersection LOS: C
Intersection Capacity Utilization 80.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 25: Golden Sage Rd & Woodmen Rd

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	19	446	8	300	393
Future Volume (vph)	19	446	8	300	393
Turn Type	NA	pm+pt	NA	Prot	Over
Protected Phases	4	3	8	2	3
Permitted Phases		8			
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0
Total Split (s)	10.0	30.0	40.0	80.0	30.0
Total Split (%)	8.3%	25.0%	33.3%	66.7%	25.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0		-1.0	-1.0	-1.0
Total Lost Time (s)	4.0		4.0	4.0	4.0
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	None	None	None	Min	None
Act Effct Green (s)	23.8		36.2	19.3	8.3
Actuated g/C Ratio	0.37		0.57	0.30	0.13
v/c Ratio	0.28		0.76	0.71	0.70
Control Delay	5.5		19.2	26.3	11.6
Queue Delay	0.0		0.0	0.0	0.0
Total Delay	5.5		19.2	26.3	11.6
LOS	A		B	C	B
Approach Delay	5.5		19.2	19.3	
Approach LOS	A		B	B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 63.5	
Natural Cycle: 50	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 17.3	Intersection LOS: B
Intersection Capacity Utilization 71.6%	ICU Level of Service C
Analysis Period (min) 15	

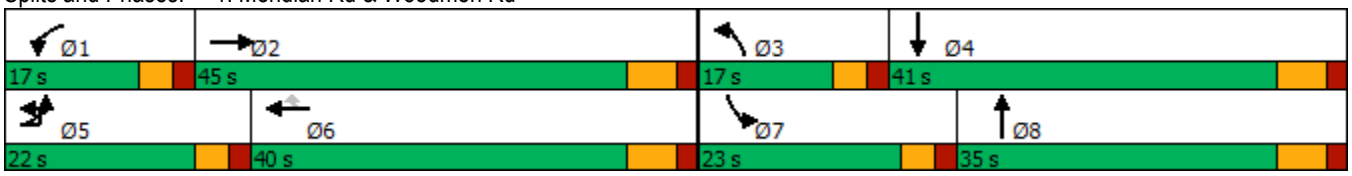
Splits and Phases: 26: Golden Sage Rd & Woodmen Frontage Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	450	550	175	150	860	140	282	318	100	250	900	1012
Future Volume (vph)	450	550	175	150	860	140	282	318	100	250	900	1012
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			6			Free			Free
Detector Phase	5	2		1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	11.5		10.0	11.5	11.5	10.0	11.5		10.0	11.5	
Total Split (s)	22.0	45.0		17.0	40.0	40.0	17.0	35.0		23.0	41.0	
Total Split (%)	18.3%	37.5%		14.2%	33.3%	33.3%	14.2%	29.2%		19.2%	34.2%	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	5.5		4.0	5.5	5.5	4.0	5.5		4.0	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	Min		None	Min	Min	None	None		None	None	
Act Effct Green (s)	17.9	39.7	116.9	11.3	33.1	33.1	12.8	31.9	116.9	15.0	34.1	116.9
Actuated g/C Ratio	0.15	0.34	1.00	0.10	0.28	0.28	0.11	0.27	1.00	0.13	0.29	1.00
v/c Ratio	0.88	0.47	0.11	0.46	0.88	0.25	0.77	0.34	0.06	0.58	0.89	0.65
Control Delay	68.6	32.4	0.1	55.3	51.3	4.1	65.7	36.1	0.1	53.7	51.7	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.6	32.4	0.1	55.3	51.3	4.1	65.7	36.1	0.1	53.7	51.7	2.1
LOS	E	C	A	E	D	A	E	D	A	D	D	A
Approach Delay		41.5			46.1			42.9			28.7	
Approach LOS		D			D			D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 116.9	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 37.4	Intersection LOS: D
Intersection Capacity Utilization 85.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Meridian Rd & Woodmen Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	25	52	250	55	125	112	645	150	100	1798	29
Future Volume (vph)	36	25	52	250	55	125	112	645	150	100	1798	29
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8			2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	11.5	11.5	10.0	11.5	11.5	10.0	11.5	11.5	10.0	11.5	11.5
Total Split (s)	15.0	17.0	17.0	18.0	20.0	20.0	16.0	75.0	75.0	10.0	69.0	69.0
Total Split (%)	12.5%	14.2%	14.2%	15.0%	16.7%	16.7%	13.3%	62.5%	62.5%	8.3%	57.5%	57.5%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.5	4.5	3.0	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effct Green (s)	14.0	8.1	8.1	23.7	16.9	16.9	10.0	65.7	65.7	69.3	61.7	61.7
Actuated g/C Ratio	0.13	0.07	0.07	0.22	0.15	0.15	0.09	0.60	0.60	0.64	0.57	0.57
v/c Ratio	0.10	0.19	0.20	0.85	0.20	0.34	0.37	0.31	0.16	0.20	0.92	0.03
Control Delay	35.2	53.0	1.7	65.5	45.9	5.6	51.9	11.5	2.0	6.9	31.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.2	53.0	1.7	65.5	45.9	5.6	51.9	11.5	2.0	6.9	31.0	0.1
LOS	D	D	A	E	D	A	D	B	A	A	C	A
Approach Delay		23.6			45.6			15.0			29.2	
Approach LOS		C			D			B			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 109.1	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 27.3	Intersection LOS: C
Intersection Capacity Utilization 85.6%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 2: Meridian Rd & Eastonville Rd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	382	877	74	77	1764	116	150	16	48	251	21	299
Future Volume (vph)	382	877	74	77	1764	116	150	16	48	251	21	299
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2	6		6	8		8	4		Free
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.0	12.5	12.5	10.0	12.5	12.5	10.0	11.0	11.0	10.0	11.0	
Total Split (s)	19.0	74.0	74.0	10.0	65.0	65.0	20.0	13.0	13.0	23.0	16.0	
Total Split (%)	15.8%	61.7%	61.7%	8.3%	54.2%	54.2%	16.7%	10.8%	10.8%	19.2%	13.3%	
Yellow Time (s)	3.0	5.5	5.5	3.0	5.5	5.5	3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	
Total Lost Time (s)	4.0	6.5	6.5	4.0	6.5	6.5	4.0	5.0	5.0	4.0	5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	
Act Effct Green (s)	15.0	70.0	70.0	67.2	58.7	58.7	23.7	7.4	7.4	25.2	9.3	116.2
Actuated g/C Ratio	0.13	0.60	0.60	0.58	0.51	0.51	0.20	0.06	0.06	0.22	0.08	1.00
v/c Ratio	0.91	0.42	0.08	0.20	1.01	0.14	0.46	0.15	0.19	0.73	0.15	0.20
Control Delay	75.5	14.5	0.8	8.9	52.9	1.3	41.2	55.9	1.6	53.6	52.8	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3	0.0	0.0
Total Delay	75.5	14.5	0.8	8.9	52.9	1.3	41.2	55.9	1.6	63.9	52.8	0.3
LOS	E	B	A	A	D	A	D	E	A	E	D	A
Approach Delay		31.5			48.0			33.4			30.1	
Approach LOS		C			D			C			C	

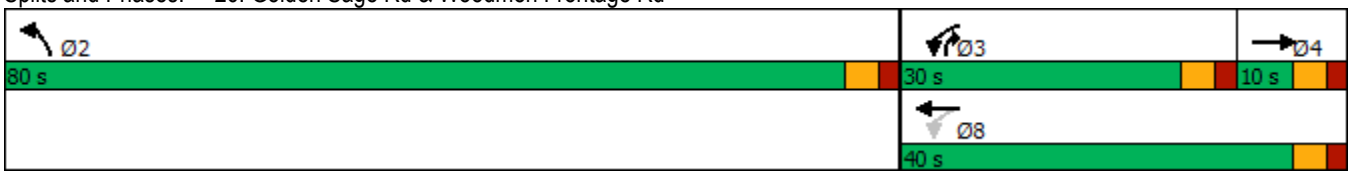
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 116.2	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 39.3	Intersection LOS: D
Intersection Capacity Utilization 93.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 25: Golden Sage Rd & Woodmen Rd

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	27	320	2	100	414
Future Volume (vph)	27	320	2	100	414
Turn Type	NA	pm+pt	NA	Prot	Over
Protected Phases	4	3	8	2	3
Permitted Phases		8			
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0
Total Split (s)	10.0	30.0	40.0	80.0	30.0
Total Split (%)	8.3%	25.0%	33.3%	66.7%	25.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0		-1.0	-1.0	-1.0
Total Lost Time (s)	4.0		4.0	4.0	4.0
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	None	None	None	Min	None
Act Effct Green (s)	14.8		27.0	11.2	8.0
Actuated g/C Ratio	0.32		0.58	0.24	0.17
v/c Ratio	0.42		0.58	0.55	0.56
Control Delay	4.9		9.6	14.4	8.7
Queue Delay	0.0		0.0	0.0	0.0
Total Delay	4.9		9.6	14.4	8.7
LOS	A		A	B	A
Approach Delay	4.9		9.6	11.6	
Approach LOS	A		A	B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 46.7	
Natural Cycle: 45	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay: 9.4	Intersection LOS: A
Intersection Capacity Utilization 58.7%	ICU Level of Service B
Analysis Period (min) 15	

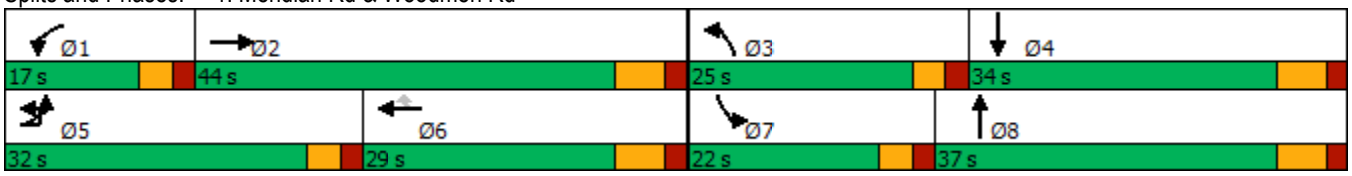
Splits and Phases: 26: Golden Sage Rd & Woodmen Frontage Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	750	850	375	225	615	235	403	847	200	400	600	555
Future Volume (vph)	750	850	375	225	615	235	403	847	200	400	600	555
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			6			Free			Free
Detector Phase	5	2		1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	11.5		10.0	11.5	11.5	10.0	11.5		10.0	11.5	
Total Split (s)	32.0	44.0		17.0	29.0	29.0	25.0	37.0		22.0	34.0	
Total Split (%)	26.7%	36.7%		14.2%	24.2%	24.2%	20.8%	30.8%		18.3%	28.3%	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	5.5		4.0	5.5	5.5	4.0	5.5		4.0	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	Min		None	Min	Min	None	None		None	None	
Act Effct Green (s)	28.0	39.0	119.2	12.5	23.4	23.4	19.3	31.2	119.2	17.5	29.5	119.2
Actuated g/C Ratio	0.23	0.33	1.00	0.10	0.20	0.20	0.16	0.26	1.00	0.15	0.25	1.00
v/c Ratio	0.97	0.75	0.24	0.64	0.90	0.48	0.74	0.93	0.13	0.81	0.70	0.36
Control Delay	70.2	40.9	0.4	60.1	64.4	8.6	56.3	60.5	0.2	62.8	46.2	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.2	40.9	0.4	60.1	64.4	8.6	56.3	60.5	0.2	62.8	46.2	0.6
LOS	E	D	A	E	E	A	E	E	A	E	D	A
Approach Delay		44.5			51.3			51.0			34.2	
Approach LOS		D			D			D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 119.2	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 44.6	Intersection LOS: D
Intersection Capacity Utilization 89.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Meridian Rd & Woodmen Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	66	103	200	50	225	212	1370	250	100	1172	67
Future Volume (vph)	119	66	103	200	50	225	212	1370	250	100	1172	67
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8			2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	11.5	11.5	10.0	11.5	11.5
Total Split (s)	21.0	27.0	27.0	16.0	22.0	22.0	24.0	54.0	54.0	23.0	53.0	53.0
Total Split (%)	17.5%	22.5%	22.5%	13.3%	18.3%	18.3%	20.0%	45.0%	45.0%	19.2%	44.2%	44.2%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.5	4.5	3.0	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effct Green (s)	19.5	10.2	10.2	24.4	12.6	12.6	12.8	48.1	48.1	55.1	44.5	44.5
Actuated g/C Ratio	0.20	0.11	0.11	0.25	0.13	0.13	0.13	0.50	0.50	0.57	0.46	0.46
v/c Ratio	0.21	0.35	0.39	0.60	0.22	0.58	0.49	0.79	0.29	0.43	0.74	0.09
Control Delay	29.0	47.1	10.4	38.6	42.3	11.7	44.0	25.0	2.8	16.1	25.3	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.0	47.1	10.4	38.6	42.3	11.7	44.0	25.0	2.8	16.1	25.3	1.4
LOS	C	D	B	D	D	B	D	C	A	B	C	A
Approach Delay		26.5			26.2			24.1			23.4	
Approach LOS		C			C			C			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 96.8	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 24.3	Intersection LOS: C
Intersection Capacity Utilization 72.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 2: Meridian Rd & Eastonville Rd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	324	1676	121	99	1030	300	152	35	114	191	26	408
Future Volume (vph)	324	1676	121	99	1030	300	152	35	114	191	26	408
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2	6		6	8		8	4		Free
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.0	12.0	12.0	10.0	12.0	12.0	10.0	10.0	10.0	10.0	10.0	
Total Split (s)	25.0	75.0	75.0	10.0	60.0	60.0	20.0	17.0	17.0	18.0	15.0	
Total Split (%)	20.8%	62.5%	62.5%	8.3%	50.0%	50.0%	16.7%	14.2%	14.2%	15.0%	12.5%	
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	
Act Effct Green (s)	16.9	60.6	60.6	58.0	49.8	49.8	25.6	9.2	9.2	18.6	8.2	107.8
Actuated g/C Ratio	0.16	0.56	0.56	0.54	0.46	0.46	0.24	0.09	0.09	0.17	0.08	1.00
v/c Ratio	0.64	0.86	0.13	0.61	0.64	0.35	0.44	0.23	0.41	0.70	0.19	0.27
Control Delay	49.5	25.4	2.3	33.3	24.8	3.2	39.5	52.7	6.2	52.9	53.7	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0
Total Delay	49.5	25.4	2.3	33.3	24.8	3.2	39.5	52.7	6.2	54.4	53.7	0.4
LOS	D	C	A	C	C	A	D	D	A	D	D	A
Approach Delay		27.8			20.8			28.4			19.1	
Approach LOS		C			C			C			B	

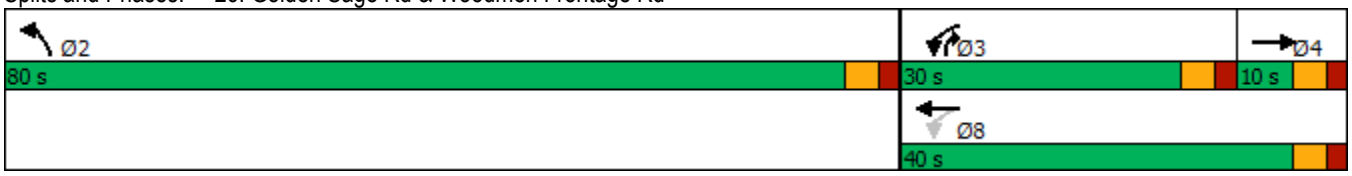
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 107.8	
Natural Cycle: 75	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 24.4	Intersection LOS: C
Intersection Capacity Utilization 80.7%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 25: Golden Sage Rd & Woodmen Rd

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	19	446	8	300	359
Future Volume (vph)	19	446	8	300	359
Turn Type	NA	pm+pt	NA	Prot	Over
Protected Phases	4	3	8	2	3
Permitted Phases		8			
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0
Total Split (s)	10.0	30.0	40.0	80.0	30.0
Total Split (%)	8.3%	25.0%	33.3%	66.7%	25.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0		-1.0	-1.0	-1.0
Total Lost Time (s)	4.0		4.0	4.0	4.0
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	None	None	None	Min	None
Act Effct Green (s)	23.9		36.2	18.6	8.2
Actuated g/C Ratio	0.38		0.58	0.30	0.13
v/c Ratio	0.28		0.75	0.69	0.68
Control Delay	5.3		18.3	26.2	11.5
Queue Delay	0.0		0.0	0.0	0.0
Total Delay	5.3		18.3	26.2	11.5
LOS	A		B	C	B
Approach Delay	5.3		18.3	19.2	
Approach LOS	A		B	B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 62.8	
Natural Cycle: 45	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 16.8	Intersection LOS: B
Intersection Capacity Utilization 70.9%	ICU Level of Service C
Analysis Period (min) 15	

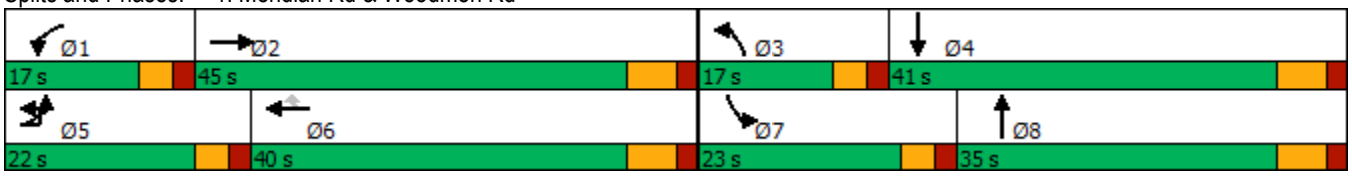
Splits and Phases: 26: Golden Sage Rd & Woodmen Frontage Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	464	520	175	150	804	248	250	422	100	294	941	929
Future Volume (vph)	464	520	175	150	804	248	250	422	100	294	941	929
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			6			Free			Free
Detector Phase	5	2		1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	11.5		10.0	11.5	11.5	10.0	11.5		10.0	11.5	
Total Split (s)	22.0	45.0		17.0	40.0	40.0	17.0	35.0		23.0	41.0	
Total Split (%)	18.3%	37.5%		14.2%	33.3%	33.3%	14.2%	29.2%		19.2%	34.2%	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	5.5		4.0	5.5	5.5	4.0	5.5		4.0	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	Min		None	Min	Min	None	None		None	None	
Act Effct Green (s)	18.1	39.3	116.6	11.3	32.5	32.5	12.5	30.9	116.6	16.1	34.5	116.6
Actuated g/C Ratio	0.16	0.34	1.00	0.10	0.28	0.28	0.11	0.27	1.00	0.14	0.30	1.00
v/c Ratio	0.90	0.45	0.11	0.46	0.83	0.41	0.69	0.46	0.06	0.63	0.92	0.60
Control Delay	70.1	32.1	0.1	55.1	48.1	6.1	61.4	38.6	0.1	54.1	54.4	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.1	32.1	0.1	55.1	48.1	6.1	61.4	38.6	0.1	54.1	54.4	1.7
LOS	E	C	A	E	D	A	E	D	A	D	D	A
Approach Delay		42.6			40.3			41.0			31.7	
Approach LOS		D			D			D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 116.6	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 37.4	Intersection LOS: D
Intersection Capacity Utilization 84.6%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Meridian Rd & Woodmen Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	73	138	250	113	125	387	596	150	100	1722	141
Future Volume (vph)	122	73	138	250	113	125	387	596	150	100	1722	141
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8			2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	11.5	11.5	10.0	11.5	11.5	10.0	11.5	11.5	10.0	11.5	11.5
Total Split (s)	15.0	17.0	17.0	18.0	20.0	20.0	20.0	75.0	75.0	10.0	65.0	65.0
Total Split (%)	12.5%	14.2%	14.2%	15.0%	16.7%	16.7%	16.7%	62.5%	62.5%	8.3%	54.2%	54.2%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.5	4.5	3.0	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effct Green (s)	20.4	10.8	10.8	28.4	15.1	15.1	16.0	69.5	69.5	67.0	59.5	59.5
Actuated g/C Ratio	0.17	0.09	0.09	0.24	0.13	0.13	0.14	0.59	0.59	0.57	0.51	0.51
v/c Ratio	0.25	0.45	0.49	0.82	0.50	0.38	0.87	0.29	0.16	0.21	0.98	0.17
Control Delay	36.4	59.4	10.7	61.8	55.9	6.3	70.3	12.6	2.1	8.4	46.9	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.4	59.4	10.7	61.8	55.9	6.3	70.3	12.6	2.1	8.4	46.9	2.7
LOS	D	E	B	E	E	A	E	B	A	A	D	A
Approach Delay		30.8			46.2			31.2			41.6	
Approach LOS		C			D			C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 117.8	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay: 38.2	Intersection LOS: D
Intersection Capacity Utilization 90.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 2: Meridian Rd & Eastonville Rd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	422	860	74	77	1722	184	150	19	48	251	21	354
Future Volume (vph)	422	860	74	77	1722	184	150	19	48	251	21	354
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2	6		6	8		8	4		Free
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.0	12.5	12.5	10.0	12.5	12.5	10.0	11.0	11.0	10.0	11.0	
Total Split (s)	20.0	74.0	74.0	10.0	64.0	64.0	20.0	13.0	13.0	23.0	16.0	
Total Split (%)	16.7%	61.7%	61.7%	8.3%	53.3%	53.3%	16.7%	10.8%	10.8%	19.2%	13.3%	
Yellow Time (s)	3.0	5.5	5.5	3.0	5.5	5.5	3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	
Total Lost Time (s)	4.0	6.5	6.5	4.0	6.5	6.5	4.0	5.0	5.0	4.0	5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	
Act Effct Green (s)	16.1	70.0	70.0	66.2	57.7	57.7	23.7	7.4	7.4	25.2	9.4	116.3
Actuated g/C Ratio	0.14	0.60	0.60	0.57	0.50	0.50	0.20	0.06	0.06	0.22	0.08	1.00
v/c Ratio	0.94	0.41	0.08	0.20	1.00	0.22	0.46	0.17	0.19	0.73	0.15	0.24
Control Delay	79.2	14.4	0.8	9.0	52.1	3.1	41.2	56.4	1.6	53.6	52.7	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3	0.0	0.0
Total Delay	79.2	14.4	0.8	9.0	52.1	3.1	41.2	56.4	1.6	63.9	52.7	0.4
LOS	E	B	A	A	D	A	D	E	A	E	D	A
Approach Delay		34.2			45.7			33.7			27.6	
Approach LOS		C			D			C			C	

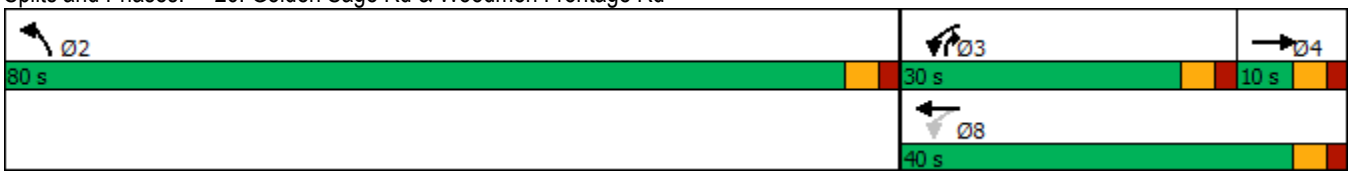
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 116.3	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.00	
Intersection Signal Delay: 38.6	Intersection LOS: D
Intersection Capacity Utilization 93.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 25: Golden Sage Rd & Woodmen Rd

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	30	377	4	100	525
Future Volume (vph)	30	377	4	100	525
Turn Type	NA	pm+pt	NA	Prot	Over
Protected Phases	4	3	8	2	3
Permitted Phases		8			
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0
Total Split (s)	10.0	30.0	40.0	80.0	30.0
Total Split (%)	8.3%	25.0%	33.3%	66.7%	25.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0		-1.0	-1.0	-1.0
Total Lost Time (s)	4.0		4.0	4.0	4.0
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	None	None	None	Min	None
Act Effct Green (s)	21.9		34.0	12.1	8.0
Actuated g/C Ratio	0.40		0.63	0.22	0.15
v/c Ratio	0.36		0.64	0.67	0.65
Control Delay	4.7		10.8	16.4	10.1
Queue Delay	0.0		0.0	0.0	0.0
Total Delay	4.7		10.8	16.4	10.1
LOS	A		B	B	B
Approach Delay	4.7		10.8	13.3	
Approach LOS	A		B	B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 54.2	
Natural Cycle: 50	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 10.7	Intersection LOS: B
Intersection Capacity Utilization 64.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 26: Golden Sage Rd & Woodmen Frontage Rd



87: Meridian Rd & Site RIRO Performance by movement Interval #1 7:00

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	21.7	1.0	0.1	0.1	1.4

87: Meridian Rd & Site RIRO Performance by movement Interval #2 7:15

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	26.5	1.2	0.1	0.1	1.6

87: Meridian Rd & Site RIRO Performance by movement Interval #3 7:30

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	17.2	1.2	0.1	0.1	1.1

87: Meridian Rd & Site RIRO Performance by movement Interval #4 7:45

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	20.7	1.1	0.1	0.1	1.4

87: Meridian Rd & Site RIRO Performance by movement Entire Run

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	22.3	1.1	0.1	0.1	1.4

Total Zone Performance By Interval

Interval Start	7:00	7:15	7:30	7:45	All
Stop Del/Veh (s)	34.1	70.8	38.1	31.2	70.5

Intersection	
Intersection Delay, s/veh	3.6
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	162	168	40
Demand Flow Rate, veh/h	165	171	40
Vehicles Circulating, veh/h	17	0	171
Vehicles Exiting, veh/h	194	182	0
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.7	3.7	3.4
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	T	T	LR
Assumed Moves	T	T	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	165	171	40
Cap Entry Lane, veh/h	1356	1380	1159
Entry HV Adj Factor	0.980	0.980	1.000
Flow Entry, veh/h	162	168	40
Cap Entry, veh/h	1330	1353	1159
V/C Ratio	0.122	0.124	0.035
Control Delay, s/veh	3.7	3.7	3.4
LOS	A	A	A
95th %tile Queue, veh	0	0	0

Intersection	
Intersection Delay, s/veh	3.8
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	533	278	82
Demand Flow Rate, veh/h	544	283	84
Vehicles Circulating, veh/h	3	79	355
Vehicles Exiting, veh/h	359	360	3
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.2	4.8	4.6
Approach LOS	A	A	A

Lane	Left	Bypass	Left	Left
Designated Moves	L	R	TR	LT
Assumed Moves	L	R	TR	LT
RT Channelized		Free		
Lane Util	1.000		1.000	1.000
Follow-Up Headway, s	2.609		2.609	2.609
Critical Headway, s	4.976	189	4.976	4.976
Entry Flow, veh/h	355	1938	283	84
Cap Entry Lane, veh/h	1376	0.980	1273	961
Entry HV Adj Factor	0.980	185	0.982	0.975
Flow Entry, veh/h	348	1900	278	82
Cap Entry, veh/h	1348	0.097	1250	937
V/C Ratio	0.258	0.0	0.222	0.087
Control Delay, s/veh	4.9	A	4.8	4.6
LOS	A	0	A	A
95th %tile Queue, veh	1		1	0

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	157	160	53	27	0
Future Vol, veh/h	13	157	160	53	27	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	165	168	56	28	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	224	0	-	0	389	196
Stage 1	-	-	-	-	196	-
Stage 2	-	-	-	-	193	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1345	-	-	-	615	845
Stage 1	-	-	-	-	837	-
Stage 2	-	-	-	-	840	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1345	-	-	-	609	845
Mov Cap-2 Maneuver	-	-	-	-	656	-
Stage 1	-	-	-	-	829	-
Stage 2	-	-	-	-	840	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1345	-	-	-	656
HCM Lane V/C Ratio	0.01	-	-	-	0.043
HCM Control Delay (s)	7.7	-	-	-	10.7
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

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	11	170	3	8	195	34	5	6	4	19	2	13
Future Vol, veh/h	11	170	3	8	195	34	5	6	4	19	2	13
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	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	179	3	8	205	36	5	6	4	20	2	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	241	0	0	182	0	0	452	462	181	449	445	223
Stage 1	-	-	-	-	-	-	205	205	-	239	239	-
Stage 2	-	-	-	-	-	-	247	257	-	210	206	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1326	-	-	1393	-	-	518	497	862	520	508	817
Stage 1	-	-	-	-	-	-	797	732	-	764	708	-
Stage 2	-	-	-	-	-	-	757	695	-	792	731	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1326	-	-	1393	-	-	502	490	862	506	500	817
Mov Cap-2 Maneuver	-	-	-	-	-	-	502	490	-	506	500	-
Stage 1	-	-	-	-	-	-	790	725	-	757	704	-
Stage 2	-	-	-	-	-	-	738	691	-	774	724	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.3	11.6	11.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	559	1326	-	-	1393	-	-	592
HCM Lane V/C Ratio	0.028	0.009	-	-	0.006	-	-	0.06
HCM Control Delay (s)	11.6	7.7	-	-	7.6	-	-	11.5
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	183	3	9	228	35	0	0	9	24	0	9
Future Vol, veh/h	7	183	3	9	228	35	0	0	9	24	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	193	3	9	240	37	0	0	9	25	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	277	0	0	196	0	0	490	504	195	490	487	259
Stage 1	-	-	-	-	-	-	209	209	-	277	277	-
Stage 2	-	-	-	-	-	-	281	295	-	213	210	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1286	-	-	1377	-	-	489	470	846	489	481	780
Stage 1	-	-	-	-	-	-	793	729	-	729	681	-
Stage 2	-	-	-	-	-	-	726	669	-	789	728	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1286	-	-	1377	-	-	479	464	846	479	475	780
Mov Cap-2 Maneuver	-	-	-	-	-	-	479	464	-	479	475	-
Stage 1	-	-	-	-	-	-	789	725	-	725	676	-
Stage 2	-	-	-	-	-	-	712	664	-	776	724	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.3	9.3	12.2
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	846	1286	-	-	1377	-	-	535
HCM Lane V/C Ratio	0.011	0.006	-	-	0.007	-	-	0.065
HCM Control Delay (s)	9.3	7.8	-	-	7.6	-	-	12.2
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	188	50	32	249	23	53
Future Vol, veh/h	188	50	32	249	23	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	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	204	54	35	271	25	58

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	258	0	572	231
Stage 1	-	-	-	-	231	-
Stage 2	-	-	-	-	341	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1307	-	482	808
Stage 1	-	-	-	-	807	-
Stage 2	-	-	-	-	720	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1307	-	469	808
Mov Cap-2 Maneuver	-	-	-	-	545	-
Stage 1	-	-	-	-	785	-
Stage 2	-	-	-	-	720	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	10.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	705	-	-	1307	-
HCM Lane V/C Ratio	0.117	-	-	0.027	-
HCM Control Delay (s)	10.8	-	-	7.8	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	9	238	4	14	302
Future Vol, veh/h	1	9	238	4	14	302
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	9	251	4	15	318

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	601	253	0	0	255	0
Stage 1	253	-	-	-	-	-
Stage 2	348	-	-	-	-	-
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	463	786	-	-	1310	-
Stage 1	789	-	-	-	-	-
Stage 2	715	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	458	786	-	-	1310	-
Mov Cap-2 Maneuver	544	-	-	-	-	-
Stage 1	780	-	-	-	-	-
Stage 2	715	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	753	1310	-
HCM Lane V/C Ratio	-	-	0.014	0.011	-
HCM Control Delay (s)	-	-	9.8	7.8	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Intersection Delay, s/veh	11.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	52	23	1	52	26	0	5	121	124	1	253	65
Future Vol, veh/h	52	23	1	52	26	0	5	121	124	1	253	65
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	55	24	1	55	27	0	5	127	131	1	266	68
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	9.5	9.6	10.4	12.4
HCM LOS	A	A	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	68%	67%	100%	0%
Vol Thru, %	0%	49%	30%	33%	0%	80%
Vol Right, %	0%	51%	1%	0%	0%	20%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	5	245	76	78	1	318
LT Vol	5	0	52	52	1	0
Through Vol	0	121	23	26	0	253
RT Vol	0	124	1	0	0	65
Lane Flow Rate	5	258	80	82	1	335
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.008	0.354	0.125	0.128	0.002	0.472
Departure Headway (Hd)	5.803	4.941	5.634	5.634	5.727	5.079
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	613	722	630	630	622	706
Service Time	3.57	2.708	3.728	3.728	3.49	2.841
HCM Lane V/C Ratio	0.008	0.357	0.127	0.13	0.002	0.475
HCM Control Delay	8.6	10.4	9.5	9.6	8.5	12.4
HCM Lane LOS	A	B	A	A	A	B
HCM 95th-tile Q	0	1.6	0.4	0.4	0	2.5

Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	101	160	13	100	363
Future Vol, veh/h	8	101	160	13	100	363
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	-	-	-	25	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	106	168	14	105	382

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	767	175	0	0	182	0
Stage 1	175	-	-	-	-	-
Stage 2	592	-	-	-	-	-
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	370	868	-	-	1393	-
Stage 1	855	-	-	-	-	-
Stage 2	553	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	342	868	-	-	1393	-
Mov Cap-2 Maneuver	391	-	-	-	-	-
Stage 1	791	-	-	-	-	-
Stage 2	553	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.3	0	1.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	797	1393	-
HCM Lane V/C Ratio	-	-	0.144	0.076	-
HCM Control Delay (s)	-	-	10.3	7.8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0.2	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	2	4	257	461	5
Future Vol, veh/h	4	2	4	257	461	5
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	-	25	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	2	4	271	485	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	767	488	490	0	-	0
Stage 1	488	-	-	-	-	-
Stage 2	279	-	-	-	-	-
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	370	580	1073	-	-	-
Stage 1	617	-	-	-	-	-
Stage 2	768	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	369	580	1073	-	-	-
Mov Cap-2 Maneuver	369	-	-	-	-	-
Stage 1	615	-	-	-	-	-
Stage 2	768	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.7	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1073	-	420	-	-
HCM Lane V/C Ratio	0.004	-	0.015	-	-
HCM Control Delay (s)	8.4	-	13.7	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	50	95	186	19	6	14
Future Vol, veh/h	50	95	186	19	6	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	2	2	5	5	5
Mvmt Flow	53	100	196	20	6	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	216	0	-	0	412	206
Stage 1	-	-	-	-	206	-
Stage 2	-	-	-	-	206	-
Critical Hdwy	4.15	-	-	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	2.245	-	-	-	3.545	3.345
Pot Cap-1 Maneuver	1336	-	-	-	591	827
Stage 1	-	-	-	-	821	-
Stage 2	-	-	-	-	821	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1336	-	-	-	566	827
Mov Cap-2 Maneuver	-	-	-	-	566	-
Stage 1	-	-	-	-	787	-
Stage 2	-	-	-	-	821	-

Approach	EB	WB	SB
HCM Control Delay, s	2.7	0	10.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1336	-	-	-	726
HCM Lane V/C Ratio	0.039	-	-	-	0.029
HCM Control Delay (s)	7.8	0	-	-	10.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	92	177	9	27	28
Future Vol, veh/h	9	92	177	9	27	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	97	186	9	28	29

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	195	0	-	0	306	191
Stage 1	-	-	-	-	191	-
Stage 2	-	-	-	-	115	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1378	-	-	-	686	851
Stage 1	-	-	-	-	841	-
Stage 2	-	-	-	-	910	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1378	-	-	-	681	851
Mov Cap-2 Maneuver	-	-	-	-	681	-
Stage 1	-	-	-	-	835	-
Stage 2	-	-	-	-	910	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	10.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1378	-	-	-	758
HCM Lane V/C Ratio	0.007	-	-	-	0.076
HCM Control Delay (s)	7.6	0	-	-	10.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	113	168	14	41	18
Future Vol, veh/h	6	113	168	14	41	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	119	177	15	43	19

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	192	0	-	0	316	185
Stage 1	-	-	-	-	185	-
Stage 2	-	-	-	-	131	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1381	-	-	-	677	857
Stage 1	-	-	-	-	847	-
Stage 2	-	-	-	-	895	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1381	-	-	-	674	857
Mov Cap-2 Maneuver	-	-	-	-	702	-
Stage 1	-	-	-	-	843	-
Stage 2	-	-	-	-	895	-

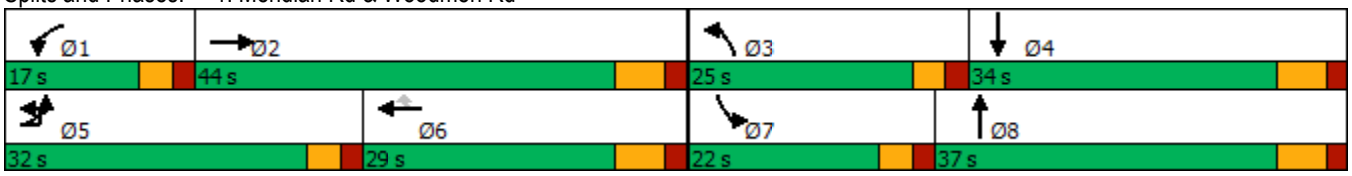
Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1381	-	-	-	743
HCM Lane V/C Ratio	0.005	-	-	-	0.084
HCM Control Delay (s)	7.6	0	-	-	10.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	765	794	375	225	561	367	350	1008	200	483	704	535
Future Volume (vph)	765	794	375	225	561	367	350	1008	200	483	704	535
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			6			Free			Free
Detector Phase	5	2		1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	11.5		10.0	11.5	11.5	10.0	11.5		10.0	11.5	
Total Split (s)	32.0	44.0		17.0	29.0	29.0	25.0	37.0		22.0	34.0	
Total Split (%)	26.7%	36.7%		14.2%	24.2%	24.2%	20.8%	30.8%		18.3%	28.3%	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	5.5		4.0	5.5	5.5	4.0	5.5		4.0	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	Min		None	Min	Min	None	None		None	None	
Act Effct Green (s)	28.0	38.5	119.5	12.5	23.0	23.0	18.2	31.5	119.5	18.0	31.4	119.5
Actuated g/C Ratio	0.23	0.32	1.00	0.10	0.19	0.19	0.15	0.26	1.00	0.15	0.26	1.00
v/c Ratio	0.98	0.71	0.24	0.64	0.84	0.70	0.69	1.10	0.13	0.96	0.77	0.34
Control Delay	73.7	39.8	0.4	60.2	58.8	19.3	54.9	103.4	0.2	80.5	48.1	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.7	39.8	0.4	60.2	58.8	19.3	54.9	103.4	0.2	80.5	48.1	0.6
LOS	E	D	A	E	E	B	D	F	A	F	D	A
Approach Delay		45.7			46.5			79.2			42.4	
Approach LOS		D			D			E			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 119.5	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 53.2	Intersection LOS: D
Intersection Capacity Utilization 95.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 1: Meridian Rd & Woodmen Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	339	197	228	200	136	225	644	1246	250	100	1154	165
Future Volume (vph)	339	197	228	200	136	225	644	1246	250	100	1154	165
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8			2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	11.5	11.5	10.0	11.5	11.5
Total Split (s)	21.0	27.0	27.0	16.0	22.0	22.0	24.0	54.0	54.0	23.0	53.0	53.0
Total Split (%)	17.5%	22.5%	22.5%	13.3%	18.3%	18.3%	20.0%	45.0%	45.0%	19.2%	44.2%	44.2%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.5	4.5	3.0	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effct Green (s)	32.9	18.3	18.3	26.9	15.1	15.1	20.2	53.7	53.7	54.6	43.3	43.3
Actuated g/C Ratio	0.30	0.16	0.16	0.24	0.14	0.14	0.18	0.48	0.48	0.49	0.39	0.39
v/c Ratio	0.52	0.68	0.52	0.72	0.57	0.57	1.09	0.74	0.29	0.42	0.86	0.25
Control Delay	33.1	56.1	9.7	47.0	55.7	11.5	106.7	27.5	3.2	16.0	38.7	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.1	56.1	9.7	47.0	55.7	11.5	106.7	27.5	3.2	16.0	38.7	6.1
LOS	C	E	A	D	E	B	F	C	A	B	D	A
Approach Delay		32.0			34.9			48.9			33.1	
Approach LOS		C			C			D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 111.3	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.09	
Intersection Signal Delay: 40.0	Intersection LOS: D
Intersection Capacity Utilization 86.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 2: Meridian Rd & Eastonville Rd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	404	1630	121	99	1030	329	152	39	114	191	26	446
Future Volume (vph)	404	1630	121	99	1030	329	152	39	114	191	26	446
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2	6		6	8		8	4		Free
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.0	12.0	12.0	10.0	12.0	12.0	10.0	10.0	10.0	10.0	10.0	
Total Split (s)	25.0	75.0	75.0	10.0	60.0	60.0	20.0	17.0	17.0	18.0	15.0	
Total Split (%)	20.8%	62.5%	62.5%	8.3%	50.0%	50.0%	16.7%	14.2%	14.2%	15.0%	12.5%	
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	
Act Effct Green (s)	18.4	59.2	59.2	55.0	46.9	46.9	25.5	9.2	9.2	18.6	8.2	106.4
Actuated g/C Ratio	0.17	0.56	0.56	0.52	0.44	0.44	0.24	0.09	0.09	0.17	0.08	1.00
v/c Ratio	0.72	0.84	0.14	0.60	0.67	0.39	0.43	0.26	0.41	0.69	0.19	0.30
Control Delay	50.3	24.6	2.3	32.1	26.5	3.4	38.9	52.8	6.1	51.8	53.1	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0
Total Delay	50.3	24.6	2.3	32.1	26.5	3.4	38.9	52.8	6.1	53.2	53.1	0.5
LOS	D	C	A	C	C	A	D	D	A	D	D	A
Approach Delay		28.2			21.6			28.4			17.7	
Approach LOS		C			C			C			B	

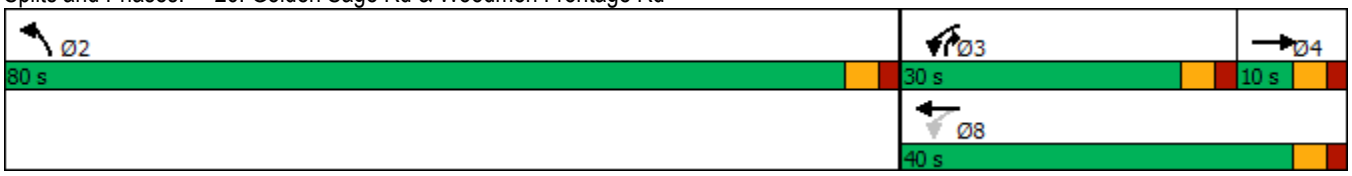
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 106.4	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 24.6	Intersection LOS: C
Intersection Capacity Utilization 79.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 25: Golden Sage Rd & Woodmen Rd

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	23	488	12	300	473
Future Volume (vph)	23	488	12	300	473
Turn Type	NA	pm+pt	NA	Prot	Over
Protected Phases	4	3	8	2	3
Permitted Phases		8			
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0
Total Split (s)	10.0	30.0	40.0	80.0	30.0
Total Split (%)	8.3%	25.0%	33.3%	66.7%	25.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0		-1.0	-1.0	-1.0
Total Lost Time (s)	4.0		4.0	4.0	4.0
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	None	None	None	Min	None
Act Effct Green (s)	23.6		36.2	21.1	8.6
Actuated g/C Ratio	0.36		0.55	0.32	0.13
v/c Ratio	0.29		0.87	0.74	0.73
Control Delay	6.1		29.5	26.6	12.0
Queue Delay	0.0		0.0	0.0	0.0
Total Delay	6.1		29.5	26.6	12.0
LOS	A		C	C	B
Approach Delay	6.1		29.5	19.7	
Approach LOS	A		C	B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 65.4	
Natural Cycle: 60	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 21.2	Intersection LOS: C
Intersection Capacity Utilization 75.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 26: Golden Sage Rd & Woodmen Frontage Rd



87: Meridian Rd & Site RIRO Performance by movement Interval #1 5:00

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	14.7	2.6	0.2	0.1	2.2

87: Meridian Rd & Site RIRO Performance by movement Interval #2 5:15

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	23.5	2.6	0.2	0.2	3.0

87: Meridian Rd & Site RIRO Performance by movement Interval #3 5:30

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	19.3	2.4	0.1	0.2	2.6

87: Meridian Rd & Site RIRO Performance by movement Interval #4 5:45

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	17.8	2.6	0.1	0.1	2.6

87: Meridian Rd & Site RIRO Performance by movement Entire Run

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	19.7	2.6	0.1	0.1	2.6

Total Zone Performance By Interval

Interval Start	5:00	5:15	5:30	5:45	All
Stop Del/Veh (s)	76.0	124.7	82.1	130.8	395.4

Intersection	
Intersection Delay, s/veh	4.1
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	269	177	9
Demand Flow Rate, veh/h	274	181	9
Vehicles Circulating, veh/h	5	0	181
Vehicles Exiting, veh/h	185	279	0
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.3	3.7	3.2
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	T	T	LR
Assumed Moves	T	T	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	274	181	9
Cap Entry Lane, veh/h	1373	1380	1147
Entry HV Adj Factor	0.980	0.980	1.000
Flow Entry, veh/h	269	177	9
Cap Entry, veh/h	1346	1353	1147
V/C Ratio	0.200	0.131	0.008
Control Delay, s/veh	4.3	3.7	3.2
LOS	A	A	A
95th %tile Queue, veh	1	0	0

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	992	599	226
Demand Flow Rate, veh/h	1012	611	230
Vehicles Circulating, veh/h	8	221	674
Vehicles Exiting, veh/h	824	683	8
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.1	10.2	9.5
Approach LOS	A	B	A

Lane	Left	Bypass	Left	Left
Designated Moves	L	R	TR	LT
Assumed Moves	L	R	TR	LT
RT Channelized		Free		
Lane Util	1.000		1.000	1.000
Follow-Up Headway, s	2.609		2.609	2.609
Critical Headway, s	4.976	338	4.976	4.976
Entry Flow, veh/h	674	1938	611	230
Cap Entry Lane, veh/h	1369	0.980	1101	694
Entry HV Adj Factor	0.981	331	0.980	0.982
Flow Entry, veh/h	661	1900	599	226
Cap Entry, veh/h	1342	0.174	1079	681
V/C Ratio	0.492	0.0	0.555	0.331
Control Delay, s/veh	7.7	A	10.2	9.5
LOS	A	1	B	A
95th %tile Queue, veh	3		4	1

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	253	167	39	39	1
Future Vol, veh/h	8	253	167	39	39	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	266	176	41	41	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	217	0	-	0	479	197
Stage 1	-	-	-	-	197	-
Stage 2	-	-	-	-	282	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1353	-	-	-	545	844
Stage 1	-	-	-	-	836	-
Stage 2	-	-	-	-	766	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	1353	-	-	-	542	844
Mov Cap-2 Maneuver	-	-	-	-	608	-
Stage 1	-	-	-	-	831	-
Stage 2	-	-	-	-	766	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1353	-	-	-	612
HCM Lane V/C Ratio	0.006	-	-	-	0.069
HCM Control Delay (s)	7.7	-	-	-	11.3
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	258	3	19	181	54	5	4	21	57	4	20
Future Vol, veh/h	31	258	3	19	181	54	5	4	21	57	4	20
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	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	272	3	20	191	57	5	4	22	60	4	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	248	0	0	275	0	0	612	628	274	613	601	220
Stage 1	-	-	-	-	-	-	340	340	-	260	260	-
Stage 2	-	-	-	-	-	-	272	288	-	353	341	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1318	-	-	1288	-	-	405	400	765	405	414	820
Stage 1	-	-	-	-	-	-	675	639	-	745	693	-
Stage 2	-	-	-	-	-	-	734	674	-	664	639	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1318	-	-	1288	-	-	379	384	765	378	397	820
Mov Cap-2 Maneuver	-	-	-	-	-	-	379	384	-	378	397	-
Stage 1	-	-	-	-	-	-	658	623	-	726	682	-
Stage 2	-	-	-	-	-	-	700	663	-	624	623	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.6	11.5	15.2
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	588	1318	-	-	1288	-	-	437
HCM Lane V/C Ratio	0.054	0.025	-	-	0.016	-	-	0.195
HCM Control Delay (s)	11.5	7.8	-	-	7.8	-	-	15.2
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.7

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	312	4	14	239	58	3	9	21	60	4	12
Future Vol, veh/h	20	312	4	14	239	58	3	9	21	60	4	12
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	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	328	4	15	252	61	3	9	22	63	4	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	313	0	0	332	0	0	693	715	330	701	687	283
Stage 1	-	-	-	-	-	-	372	372	-	313	313	-
Stage 2	-	-	-	-	-	-	321	343	-	388	374	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1247	-	-	1227	-	-	358	356	712	353	370	756
Stage 1	-	-	-	-	-	-	648	619	-	698	657	-
Stage 2	-	-	-	-	-	-	691	637	-	636	618	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1247	-	-	1227	-	-	341	346	712	328	359	756
Mov Cap-2 Maneuver	-	-	-	-	-	-	341	346	-	328	359	-
Stage 1	-	-	-	-	-	-	637	608	-	686	649	-
Stage 2	-	-	-	-	-	-	667	629	-	596	607	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.4	12.5	17.7
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	513	1247	-	-	1227	-	-	362
HCM Lane V/C Ratio	0.068	0.017	-	-	0.012	-	-	0.221
HCM Control Delay (s)	12.5	7.9	-	-	8	-	-	17.7
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.8

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	377	16	62	294	17	53
Future Vol, veh/h	377	16	62	294	17	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	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	410	17	67	320	18	58

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	427	0	873	419
Stage 1	-	-	-	-	419	-
Stage 2	-	-	-	-	454	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1132	-	321	634
Stage 1	-	-	-	-	664	-
Stage 2	-	-	-	-	640	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1132	-	302	634
Mov Cap-2 Maneuver	-	-	-	-	410	-
Stage 1	-	-	-	-	625	-
Stage 2	-	-	-	-	640	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.5	12.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	560	-	-	1132	-
HCM Lane V/C Ratio	0.136	-	-	0.06	-
HCM Control Delay (s)	12.4	-	-	8.4	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.5	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	29	424	6	20	354
Future Vol, veh/h	2	29	424	6	20	354
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	31	446	6	21	373

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	864	449	0	0	452	0
Stage 1	449	-	-	-	-	-
Stage 2	415	-	-	-	-	-
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	325	610	-	-	1109	-
Stage 1	643	-	-	-	-	-
Stage 2	666	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	319	610	-	-	1109	-
Mov Cap-2 Maneuver	437	-	-	-	-	-
Stage 1	631	-	-	-	-	-
Stage 2	666	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.4	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	595	1109	-
HCM Lane V/C Ratio	-	-	0.055	0.019	-
HCM Control Delay (s)	-	-	11.4	8.3	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Intersection Delay, s/veh	45.7
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	174	71	2	60	44	0	4	278	171	1	312	200
Future Vol, veh/h	174	71	2	60	44	0	4	278	171	1	312	200
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	183	75	2	63	46	0	4	293	180	1	328	211
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	20.1	14.5	43.9	66
HCM LOS	C	B	E	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	70%	58%	100%	0%
Vol Thru, %	0%	62%	29%	42%	0%	61%
Vol Right, %	0%	38%	1%	0%	0%	39%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	4	449	247	104	1	512
LT Vol	4	0	174	60	1	0
Through Vol	0	278	71	44	0	312
RT Vol	0	171	2	0	0	200
Lane Flow Rate	4	473	260	109	1	539
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.009	0.897	0.555	0.255	0.002	1.005
Departure Headway (Hd)	7.725	6.936	7.815	8.562	7.504	6.71
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	466	525	465	423	474	539
Service Time	5.425	4.636	5.815	6.562	5.303	4.508
HCM Lane V/C Ratio	0.009	0.901	0.559	0.258	0.002	1
HCM Control Delay	10.5	44.2	20.1	14.5	10.3	66.1
HCM Lane LOS	B	E	C	B	B	F
HCM 95th-tile Q	0	10.3	3.3	1	0	14.3

Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	149	421	31	132	497
Future Vol, veh/h	15	149	421	31	132	497
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	-	-	-	25	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	157	443	33	139	523

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1261	460	0	0	476	0
Stage 1	460	-	-	-	-	-
Stage 2	801	-	-	-	-	-
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	188	601	-	-	1086	-
Stage 1	636	-	-	-	-	-
Stage 2	442	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	164	601	-	-	1086	-
Mov Cap-2 Maneuver	243	-	-	-	-	-
Stage 1	555	-	-	-	-	-
Stage 2	442	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15	0	1.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	530	1086	-
HCM Lane V/C Ratio	-	-	0.326	0.128	-
HCM Control Delay (s)	-	-	15	8.8	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.4	0.4	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	14	9	20	550	620	14
Future Vol, veh/h	14	9	20	550	620	14
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	-	25	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	9	21	579	653	15

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1282	661	668	0	-	0
Stage 1	661	-	-	-	-	-
Stage 2	621	-	-	-	-	-
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	182	462	922	-	-	-
Stage 1	514	-	-	-	-	-
Stage 2	536	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	178	462	922	-	-	-
Mov Cap-2 Maneuver	178	-	-	-	-	-
Stage 1	502	-	-	-	-	-
Stage 2	536	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	22.2	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	922	-	234	-	-
HCM Lane V/C Ratio	0.023	-	0.103	-	-
HCM Control Delay (s)	9	-	22.2	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	48	244	270	7	18	46
Future Vol, veh/h	48	244	270	7	18	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	2	2	5	5	5
Mvmt Flow	51	257	284	7	19	48

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	291	0	-	0	647	288
Stage 1	-	-	-	-	288	-
Stage 2	-	-	-	-	359	-
Critical Hdwy	4.15	-	-	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	2.245	-	-	-	3.545	3.345
Pot Cap-1 Maneuver	1254	-	-	-	431	744
Stage 1	-	-	-	-	754	-
Stage 2	-	-	-	-	700	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1254	-	-	-	411	744
Mov Cap-2 Maneuver	-	-	-	-	411	-
Stage 1	-	-	-	-	719	-
Stage 2	-	-	-	-	700	-

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1254	-	-	-	606
HCM Lane V/C Ratio	0.04	-	-	-	0.111
HCM Control Delay (s)	8	0	-	-	11.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	31	231	259	31	18	18
Future Vol, veh/h	31	231	259	31	18	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	243	273	33	19	19

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	306	0	-	0	599	290
Stage 1	-	-	-	-	290	-
Stage 2	-	-	-	-	309	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1255	-	-	-	465	749
Stage 1	-	-	-	-	759	-
Stage 2	-	-	-	-	745	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1255	-	-	-	451	749
Mov Cap-2 Maneuver	-	-	-	-	451	-
Stage 1	-	-	-	-	736	-
Stage 2	-	-	-	-	745	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	11.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1255	-	-	-	563
HCM Lane V/C Ratio	0.026	-	-	-	0.067
HCM Control Delay (s)	7.9	0	-	-	11.9
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	21	228	278	46	28	12
Future Vol, veh/h	21	228	278	46	28	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	240	293	48	29	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	341	0	-	0	601	317
Stage 1	-	-	-	-	317	-
Stage 2	-	-	-	-	284	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1218	-	-	-	463	724
Stage 1	-	-	-	-	738	-
Stage 2	-	-	-	-	764	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1218	-	-	-	453	724
Mov Cap-2 Maneuver	-	-	-	-	541	-
Stage 1	-	-	-	-	723	-
Stage 2	-	-	-	-	764	-

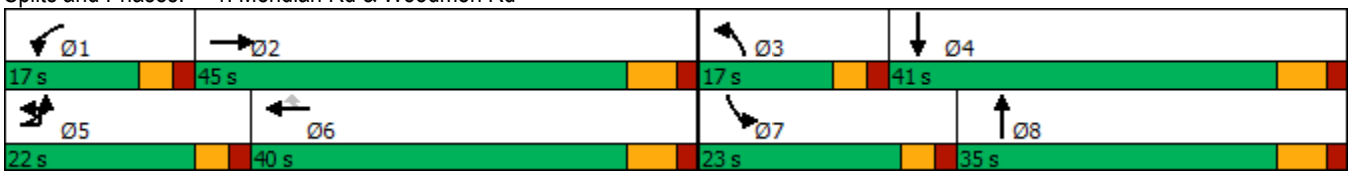
Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1218	-	-	-	585
HCM Lane V/C Ratio	0.018	-	-	-	0.072
HCM Control Delay (s)	8	0	-	-	11.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	457	520	175	150	884	168	328	344	100	294	941	1041
Future Volume (vph)	457	520	175	150	884	168	328	344	100	294	941	1041
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			6			Free			Free
Detector Phase	5	2		1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	11.5		10.0	11.5	11.5	10.0	11.5		10.0	11.5	
Total Split (s)	22.0	45.0		17.0	40.0	40.0	17.0	35.0		23.0	41.0	
Total Split (%)	18.3%	37.5%		14.2%	33.3%	33.3%	14.2%	29.2%		19.2%	34.2%	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	5.5		4.0	5.5	5.5	4.0	5.5		4.0	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	Min		None	Min	Min	None	None		None	None	
Act Effct Green (s)	18.0	40.4	118.4	11.3	33.6	33.6	13.0	31.5	118.4	16.2	34.7	118.4
Actuated g/C Ratio	0.15	0.34	1.00	0.10	0.28	0.28	0.11	0.27	1.00	0.14	0.29	1.00
v/c Ratio	0.92	0.44	0.11	0.47	0.90	0.30	0.89	0.37	0.06	0.64	0.93	0.67
Control Delay	74.5	32.1	0.1	55.7	53.5	6.6	78.3	37.5	0.1	54.9	55.9	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.5	32.1	0.1	55.7	53.5	6.6	78.3	37.5	0.1	54.9	55.9	2.3
LOS	E	C	A	E	D	A	E	D	A	D	E	A
Approach Delay		44.4			47.2			50.0			31.3	
Approach LOS		D			D			D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 118.4	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 40.3	Intersection LOS: D
Intersection Capacity Utilization 89.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Meridian Rd & Woodmen Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	73	138	250	113	125	222	596	150	100	1807	86
Future Volume (vph)	122	73	138	250	113	125	222	596	150	100	1807	86
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8			2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	11.5	11.5	10.0	11.5	11.5	10.0	11.5	11.5	10.0	11.5	11.5
Total Split (s)	15.0	17.0	17.0	18.0	20.0	20.0	16.0	75.0	75.0	10.0	69.0	69.0
Total Split (%)	12.5%	14.2%	14.2%	15.0%	16.7%	16.7%	13.3%	62.5%	62.5%	8.3%	57.5%	57.5%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.5	4.5	3.0	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effct Green (s)	20.4	10.8	10.8	28.4	15.1	15.1	11.7	69.2	69.2	71.0	63.5	63.5
Actuated g/C Ratio	0.17	0.09	0.09	0.24	0.13	0.13	0.10	0.59	0.59	0.60	0.54	0.54
v/c Ratio	0.25	0.45	0.49	0.82	0.50	0.38	0.69	0.29	0.16	0.20	0.96	0.10
Control Delay	36.3	59.3	10.7	61.4	55.8	6.3	62.5	12.6	2.1	7.8	40.3	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	36.3	59.3	10.7	61.4	55.8	6.3	62.5	12.6	2.1	7.8	40.3	0.3
LOS	D	E	B	E	E	A	E	B	A	A	D	A
Approach Delay		30.8			46.0			22.6			36.9	
Approach LOS		C			D			C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 117.5	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 33.9	Intersection LOS: C
Intersection Capacity Utilization 88.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 2: Meridian Rd & Eastonville Rd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	418	864	74	77	1730	116	150	19	48	251	21	354
Future Volume (vph)	418	864	74	77	1730	116	150	19	48	251	21	354
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2	6		6	8		8	4		Free
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.0	12.5	12.5	10.0	12.5	12.5	10.0	11.0	11.0	10.0	11.0	
Total Split (s)	20.0	74.0	74.0	10.0	64.0	64.0	20.0	13.0	13.0	23.0	16.0	
Total Split (%)	16.7%	61.7%	61.7%	8.3%	53.3%	53.3%	16.7%	10.8%	10.8%	19.2%	13.3%	
Yellow Time (s)	3.0	5.5	5.5	3.0	5.5	5.5	3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	
Total Lost Time (s)	4.0	6.5	6.5	4.0	6.5	6.5	4.0	5.0	5.0	4.0	5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	
Act Effct Green (s)	16.1	70.0	70.0	66.2	57.7	57.7	23.7	7.4	7.4	25.2	9.4	116.3
Actuated g/C Ratio	0.14	0.60	0.60	0.57	0.50	0.50	0.20	0.06	0.06	0.22	0.08	1.00
v/c Ratio	0.93	0.41	0.08	0.20	1.01	0.14	0.46	0.17	0.19	0.73	0.15	0.24
Control Delay	77.7	14.4	0.8	9.0	53.2	1.3	41.2	56.4	1.6	53.6	52.7	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3	0.0	0.0
Total Delay	77.7	14.4	0.8	9.0	53.2	1.3	41.2	56.4	1.6	63.9	52.7	0.4
LOS	E	B	A	A	D	A	D	E	A	E	D	A
Approach Delay		33.6			48.2			33.7			27.6	
Approach LOS		C			D			C			C	

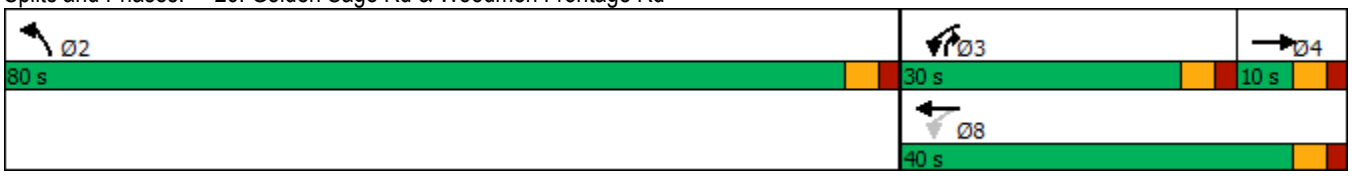
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 116.3	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 39.4	Intersection LOS: D
Intersection Capacity Utilization 93.2%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 25: Golden Sage Rd & Woodmen Rd

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	30	377	4	100	453
Future Volume (vph)	30	377	4	100	453
Turn Type	NA	pm+pt	NA	Prot	Over
Protected Phases	4	3	8	2	3
Permitted Phases		8			
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0
Total Split (s)	10.0	30.0	40.0	80.0	30.0
Total Split (%)	8.3%	25.0%	33.3%	66.7%	25.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0		-1.0	-1.0	-1.0
Total Lost Time (s)	4.0		4.0	4.0	4.0
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	None	None	None	Min	None
Act Effct Green (s)	22.0		34.0	11.6	7.9
Actuated g/C Ratio	0.41		0.63	0.22	0.15
v/c Ratio	0.36		0.64	0.63	0.62
Control Delay	4.5		10.3	16.5	9.9
Queue Delay	0.0		0.0	0.0	0.0
Total Delay	4.5		10.3	16.5	9.9
LOS	A		B	B	A
Approach Delay	4.5		10.3	13.2	
Approach LOS	A		B	B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 53.7	
Natural Cycle: 45	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.64	
Intersection Signal Delay: 10.3	Intersection LOS: B
Intersection Capacity Utilization 62.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 26: Golden Sage Rd & Woodmen Frontage Rd



87: Meridian Rd & Site RIRO Performance by movement Interval #1 7:00

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	28.2	0.8	0.1	0.1	1.5

87: Meridian Rd & Site RIRO Performance by movement Interval #2 7:15

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	16.4	0.7	0.1	0.1	1.0

87: Meridian Rd & Site RIRO Performance by movement Interval #3 7:30

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	22.8	0.8	0.1	0.1	1.3

87: Meridian Rd & Site RIRO Performance by movement Interval #4 7:45

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	16.1	0.9	0.1	0.1	1.0

87: Meridian Rd & Site RIRO Performance by movement Entire Run

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	21.2	0.8	0.1	0.1	1.2

Total Zone Performance By Interval

Interval Start	7:00	7:15	7:30	7:45	All
Stop Del/Veh (s)	87.3	39.9	68.5	61.0	219.4

Intersection	
Intersection Delay, s/veh	5.3
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	159	63	368	40
Demand Flow Rate, veh/h	162	64	375	40
Vehicles Circulating, veh/h	17	213	179	277
Vehicles Exiting, veh/h	300	341	0	0
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	3.8	6.4	3.8
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	T	T	LR	LR
Assumed Moves	T	T	LR	LR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	162	64	375	40
Cap Entry Lane, veh/h	1356	1110	1150	1040
Entry HV Adj Factor	0.980	0.980	0.981	1.000
Flow Entry, veh/h	159	63	368	40
Cap Entry, veh/h	1330	1089	1128	1040
V/C Ratio	0.119	0.058	0.326	0.038
Control Delay, s/veh	3.7	3.8	6.4	3.8
LOS	A	A	A	A
95th %tile Queue, veh	0	0	1	0

Intersection	
Intersection Delay, s/veh	3.5
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	444	278	83
Demand Flow Rate, veh/h	453	283	85
Vehicles Circulating, veh/h	3	79	264
Vehicles Exiting, veh/h	359	270	3
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	2.5	4.8	4.2
Approach LOS	A	A	A

Lane	Left	Bypass	Left	Left
Designated Moves	L	R	TR	LT
Assumed Moves	L	R	TR	LT
RT Channelized		Free		
Lane Util	1.000		1.000	1.000
Follow-Up Headway, s	2.609		2.609	2.609
Critical Headway, s	4.976	189	4.976	4.976
Entry Flow, veh/h	264	1938	283	85
Cap Entry Lane, veh/h	1376	0.980	1273	1054
Entry HV Adj Factor	0.981	185	0.982	0.975
Flow Entry, veh/h	259	1900	278	83
Cap Entry, veh/h	1350	0.097	1250	1028
V/C Ratio	0.192	0.0	0.222	0.081
Control Delay, s/veh	4.3	A	4.8	4.2
LOS	A	0	A	A
95th %tile Queue, veh	1		1	0

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	49	262	60	17	27	0
Future Vol, veh/h	49	262	60	17	27	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	52	276	63	18	28	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	81	0	-	0	452	72
Stage 1	-	-	-	-	72	-
Stage 2	-	-	-	-	380	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1517	-	-	-	565	990
Stage 1	-	-	-	-	951	-
Stage 2	-	-	-	-	691	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1517	-	-	-	546	990
Mov Cap-2 Maneuver	-	-	-	-	566	-
Stage 1	-	-	-	-	919	-
Stage 2	-	-	-	-	691	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1517	-	-	-	566
HCM Lane V/C Ratio	0.034	-	-	-	0.05
HCM Control Delay (s)	7.5	-	-	-	11.7
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	60	227	9	4	59	23	5	6	4	19	2	13
Future Vol, veh/h	60	227	9	4	59	23	5	6	4	19	2	13
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	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	63	239	9	4	62	24	5	6	4	20	2	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	86	0	0	248	0	0	460	464	244	457	456	74
Stage 1	-	-	-	-	-	-	370	370	-	82	82	-
Stage 2	-	-	-	-	-	-	90	94	-	375	374	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1510	-	-	1318	-	-	512	495	795	514	501	988
Stage 1	-	-	-	-	-	-	650	620	-	926	827	-
Stage 2	-	-	-	-	-	-	917	817	-	646	618	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1510	-	-	1318	-	-	486	473	795	489	478	988
Mov Cap-2 Maneuver	-	-	-	-	-	-	486	473	-	489	478	-
Stage 1	-	-	-	-	-	-	623	594	-	887	825	-
Stage 2	-	-	-	-	-	-	899	815	-	609	592	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	0.4	11.9	11.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	536	1510	-	-	1318	-	-	605
HCM Lane V/C Ratio	0.029	0.042	-	-	0.003	-	-	0.059
HCM Control Delay (s)	11.9	7.5	-	-	7.7	-	-	11.3
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	36	211	3	5	77	24	0	0	9	24	0	9
Future Vol, veh/h	36	211	3	5	77	24	0	0	9	24	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	222	3	5	81	25	0	0	9	25	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	106	0	0	225	0	0	408	416	224	408	405	94
Stage 1	-	-	-	-	-	-	300	300	-	104	104	-
Stage 2	-	-	-	-	-	-	108	116	-	304	301	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1485	-	-	1344	-	-	554	527	815	554	535	963
Stage 1	-	-	-	-	-	-	709	666	-	902	809	-
Stage 2	-	-	-	-	-	-	897	800	-	705	665	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1485	-	-	1344	-	-	536	511	815	535	519	963
Mov Cap-2 Maneuver	-	-	-	-	-	-	536	511	-	535	519	-
Stage 1	-	-	-	-	-	-	691	649	-	879	806	-
Stage 2	-	-	-	-	-	-	885	797	-	679	648	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.1	0.4	9.5	11.3
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	815	1485	-	-	1344	-	-	609
HCM Lane V/C Ratio	0.012	0.026	-	-	0.004	-	-	0.057
HCM Control Delay (s)	9.5	7.5	-	-	7.7	-	-	11.3
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	194	50	32	83	23	53
Future Vol, veh/h	194	50	32	83	23	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	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	211	54	35	90	25	58

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	265	0	398	238
Stage 1	-	-	-	-	238	-
Stage 2	-	-	-	-	160	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1299	-	607	801
Stage 1	-	-	-	-	802	-
Stage 2	-	-	-	-	869	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1299	-	591	801
Mov Cap-2 Maneuver	-	-	-	-	637	-
Stage 1	-	-	-	-	780	-
Stage 2	-	-	-	-	869	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.2	10.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	743	-	-	1299	-
HCM Lane V/C Ratio	0.111	-	-	0.027	-
HCM Control Delay (s)	10.5	-	-	7.8	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	9	243	4	14	114
Future Vol, veh/h	1	9	243	4	14	114
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	9	256	4	15	120

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	408	258	0	0	260	0
Stage 1	258	-	-	-	-	-
Stage 2	150	-	-	-	-	-
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	599	781	-	-	1304	-
Stage 1	785	-	-	-	-	-
Stage 2	878	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	592	781	-	-	1304	-
Mov Cap-2 Maneuver	641	-	-	-	-	-
Stage 1	776	-	-	-	-	-
Stage 2	878	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	0.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	764	1304	-
HCM Lane V/C Ratio	-	-	0.014	0.011	-
HCM Control Delay (s)	-	-	9.8	7.8	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	52	23	1	39	26	0	5	123	124	1	88	67
Future Vol, veh/h	52	23	1	39	26	0	5	123	124	1	88	67
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	55	24	1	41	27	0	5	129	131	1	93	71
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	8.9	8.8	9.9	9
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	68%	60%	100%	0%
Vol Thru, %	0%	50%	30%	40%	0%	57%
Vol Right, %	0%	50%	1%	0%	0%	43%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	5	247	76	65	1	155
LT Vol	5	0	52	39	1	0
Through Vol	0	123	23	26	0	88
RT Vol	0	124	1	0	0	67
Lane Flow Rate	5	260	80	68	1	163
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.008	0.34	0.115	0.098	0.002	0.22
Departure Headway (Hd)	5.568	4.712	5.166	5.175	5.653	4.845
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	642	762	691	690	632	739
Service Time	3.305	2.448	3.215	3.226	3.392	2.584
HCM Lane V/C Ratio	0.008	0.341	0.116	0.099	0.002	0.221
HCM Control Delay	8.4	9.9	8.9	8.8	8.4	9
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0	1.5	0.4	0.3	0	0.8

Intersection	
Int Delay, s/veh	3.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	101	162	13	100	147
Future Vol, veh/h	8	101	162	13	100	147
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	-	-	-	25	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	106	171	14	105	155

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	543	178	0	0	185	0
Stage 1	178	-	-	-	-	-
Stage 2	365	-	-	-	-	-
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	501	865	-	-	1390	-
Stage 1	853	-	-	-	-	-
Stage 2	702	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	463	865	-	-	1390	-
Mov Cap-2 Maneuver	509	-	-	-	-	-
Stage 1	788	-	-	-	-	-
Stage 2	702	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0	3.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	823	1390	-
HCM Lane V/C Ratio	-	-	0.139	0.076	-
HCM Control Delay (s)	-	-	10.1	7.8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0.2	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	2	4	259	245	5
Future Vol, veh/h	4	2	4	259	245	5
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	-	25	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	2	4	273	258	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	542	261	263	0	-	0
Stage 1	261	-	-	-	-	-
Stage 2	281	-	-	-	-	-
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	501	778	1301	-	-	-
Stage 1	783	-	-	-	-	-
Stage 2	767	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	499	778	1301	-	-	-
Mov Cap-2 Maneuver	499	-	-	-	-	-
Stage 1	781	-	-	-	-	-
Stage 2	767	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.4	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1301	-	567	-	-
HCM Lane V/C Ratio	0.003	-	0.011	-	-
HCM Control Delay (s)	7.8	-	11.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	50	91	284	19	6	14
Future Vol, veh/h	50	91	284	19	6	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	2	2	5	5	5
Mvmt Flow	53	96	299	20	6	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	319	0	-	0	511	309
Stage 1	-	-	-	-	309	-
Stage 2	-	-	-	-	202	-
Critical Hdwy	4.15	-	-	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	2.245	-	-	-	3.545	3.345
Pot Cap-1 Maneuver	1224	-	-	-	517	724
Stage 1	-	-	-	-	738	-
Stage 2	-	-	-	-	825	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1224	-	-	-	493	724
Mov Cap-2 Maneuver	-	-	-	-	493	-
Stage 1	-	-	-	-	704	-
Stage 2	-	-	-	-	825	-

Approach	EB	WB	SB
HCM Control Delay, s	2.9	0	10.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1224	-	-	-	635
HCM Lane V/C Ratio	0.043	-	-	-	0.033
HCM Control Delay (s)	8.1	0	-	-	10.9
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	88	275	9	27	28
Future Vol, veh/h	9	88	275	9	27	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	93	289	9	28	29

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	298	0	-	0	405	294
Stage 1	-	-	-	-	294	-
Stage 2	-	-	-	-	111	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1263	-	-	-	602	745
Stage 1	-	-	-	-	756	-
Stage 2	-	-	-	-	914	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1263	-	-	-	597	745
Mov Cap-2 Maneuver	-	-	-	-	597	-
Stage 1	-	-	-	-	750	-
Stage 2	-	-	-	-	914	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	10.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1263	-	-	-	664
HCM Lane V/C Ratio	0.008	-	-	-	0.087
HCM Control Delay (s)	7.9	0	-	-	10.9
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	109	266	14	41	18
Future Vol, veh/h	6	109	266	14	41	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	115	280	15	43	19

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	295	0	-	0	415	288
Stage 1	-	-	-	-	288	-
Stage 2	-	-	-	-	127	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1266	-	-	-	594	751
Stage 1	-	-	-	-	761	-
Stage 2	-	-	-	-	899	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1266	-	-	-	591	751
Mov Cap-2 Maneuver	-	-	-	-	637	-
Stage 1	-	-	-	-	757	-
Stage 2	-	-	-	-	899	-

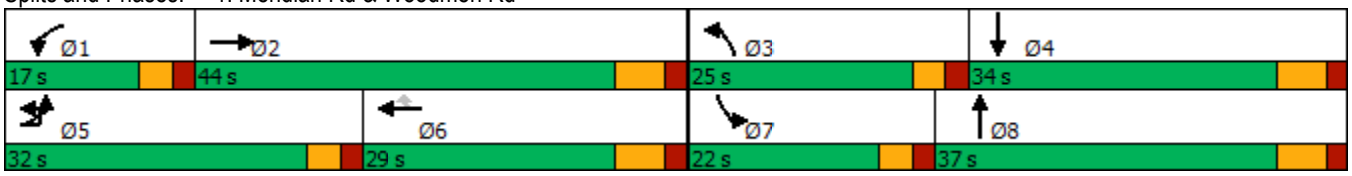
Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	10.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1266	-	-	-	668
HCM Lane V/C Ratio	0.005	-	-	-	0.093
HCM Control Delay (s)	7.9	0	-	-	10.9
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	755	794	375	225	665	262	465	893	200	483	704	602
Future Volume (vph)	755	794	375	225	665	262	465	893	200	483	704	602
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			6			Free			Free
Detector Phase	5	2		1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	11.5		10.0	11.5	11.5	10.0	11.5		10.0	11.5	
Total Split (s)	32.0	44.0		17.0	29.0	29.0	25.0	37.0		22.0	34.0	
Total Split (%)	26.7%	36.7%		14.2%	24.2%	24.2%	20.8%	30.8%		18.3%	28.3%	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	5.5		4.0	5.5	5.5	4.0	5.5		4.0	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	Min		None	Min	Min	None	None		None	None	
Act Effct Green (s)	28.0	39.0	120.0	12.5	23.5	23.5	20.3	31.5	120.0	18.0	29.2	120.0
Actuated g/C Ratio	0.23	0.32	1.00	0.10	0.20	0.20	0.17	0.26	1.00	0.15	0.24	1.00
v/c Ratio	1.00	0.70	0.24	0.64	0.98	0.51	0.82	0.98	0.13	0.96	0.83	0.39
Control Delay	78.0	39.6	0.4	60.4	77.9	8.6	60.4	69.7	0.2	81.7	53.0	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	78.0	39.6	0.4	60.4	77.9	8.6	60.4	69.7	0.2	81.7	53.0	0.7
LOS	E	D	A	E	E	A	E	E	A	F	D	A
Approach Delay		47.5			58.7			58.0			43.2	
Approach LOS		D			E			E			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.00	
Intersection Signal Delay: 50.8	Intersection LOS: D
Intersection Capacity Utilization 95.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 1: Meridian Rd & Woodmen Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	339	197	228	200	136	225	415	1246	250	100	1203	134
Future Volume (vph)	339	197	228	200	136	225	415	1246	250	100	1203	134
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8			2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	11.5	11.5	10.0	11.5	11.5
Total Split (s)	21.0	27.0	27.0	16.0	22.0	22.0	24.0	54.0	54.0	23.0	53.0	53.0
Total Split (%)	17.5%	22.5%	22.5%	13.3%	18.3%	18.3%	20.0%	45.0%	45.0%	19.2%	44.2%	44.2%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.5	4.5	3.0	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effct Green (s)	33.0	18.3	18.3	26.8	15.1	15.1	18.5	52.7	52.7	55.4	44.0	44.0
Actuated g/C Ratio	0.30	0.17	0.17	0.24	0.14	0.14	0.17	0.48	0.48	0.50	0.40	0.40
v/c Ratio	0.51	0.67	0.52	0.71	0.56	0.56	0.76	0.75	0.29	0.42	0.87	0.20
Control Delay	32.8	55.6	9.6	46.3	55.6	11.5	54.5	27.7	3.2	16.2	39.1	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.8	55.6	9.6	46.3	55.6	11.5	54.5	27.7	3.2	16.2	39.1	6.7
LOS	C	E	A	D	E	B	D	C	A	B	D	A
Approach Delay		31.8			34.6			30.4			34.4	
Approach LOS		C			C			C			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 110.4	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 32.4	Intersection LOS: C
Intersection Capacity Utilization 81.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 2: Meridian Rd & Eastonville Rd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	394	1640	121	99	1030	300	152	39	114	191	26	446
Future Volume (vph)	394	1640	121	99	1030	300	152	39	114	191	26	446
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2	6		6	8		8	4		Free
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.0	12.0	12.0	10.0	12.0	12.0	10.0	10.0	10.0	10.0	10.0	
Total Split (s)	25.0	75.0	75.0	10.0	60.0	60.0	20.0	17.0	17.0	18.0	15.0	
Total Split (%)	20.8%	62.5%	62.5%	8.3%	50.0%	50.0%	16.7%	14.2%	14.2%	15.0%	12.5%	
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	
Act Effct Green (s)	18.3	59.4	59.4	55.4	47.3	47.3	25.5	9.2	9.2	18.6	8.2	106.6
Actuated g/C Ratio	0.17	0.56	0.56	0.52	0.44	0.44	0.24	0.09	0.09	0.17	0.08	1.00
v/c Ratio	0.71	0.85	0.14	0.60	0.67	0.36	0.43	0.26	0.41	0.70	0.19	0.30
Control Delay	50.1	24.7	2.3	32.1	26.3	3.4	39.0	52.9	6.2	52.0	53.2	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0
Total Delay	50.1	24.7	2.3	32.1	26.3	3.4	39.0	52.9	6.2	53.5	53.2	0.5
LOS	D	C	A	C	C	A	D	D	A	D	D	A
Approach Delay		28.2			21.8			28.5			17.8	
Approach LOS		C			C			C			B	

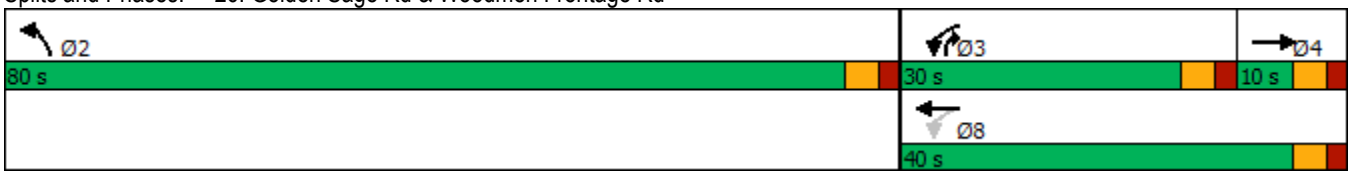
Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 106.6		
Natural Cycle: 70		
Control Type: Semi Act-Uncoord		
Maximum v/c Ratio: 0.85		
Intersection Signal Delay: 24.7	Intersection LOS: C	
Intersection Capacity Utilization 79.7%	ICU Level of Service D	
Analysis Period (min) 15		

Splits and Phases: 25: Golden Sage Rd & Woodmen Rd

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	23	488	12	300	434
Future Volume (vph)	23	488	12	300	434
Turn Type	NA	pm+pt	NA	Prot	Over
Protected Phases	4	3	8	2	3
Permitted Phases		8			
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0
Total Split (s)	10.0	30.0	40.0	80.0	30.0
Total Split (%)	8.3%	25.0%	33.3%	66.7%	25.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0		-1.0	-1.0	-1.0
Total Lost Time (s)	4.0		4.0	4.0	4.0
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	None	None	None	Min	None
Act Effct Green (s)	23.7		36.1	20.1	8.4
Actuated g/C Ratio	0.37		0.56	0.31	0.13
v/c Ratio	0.29		0.86	0.72	0.71
Control Delay	5.8		27.2	26.3	11.8
Queue Delay	0.0		0.0	0.0	0.0
Total Delay	5.8		27.2	26.4	11.8
LOS	A		C	C	B
Approach Delay	5.8		27.2	19.4	
Approach LOS	A		C	B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 64.3	
Natural Cycle: 60	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 20.3	Intersection LOS: C
Intersection Capacity Utilization 75.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 26: Golden Sage Rd & Woodmen Frontage Rd



87: Meridian Rd & Site RIRO Performance by movement Interval #1 5:00

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	15.2	2.1	0.1	0.1	2.1

87: Meridian Rd & Site RIRO Performance by movement Interval #2 5:15

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	20.7	1.9	0.1	0.1	2.3

87: Meridian Rd & Site RIRO Performance by movement Interval #3 5:30

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	16.8	2.0	0.1	0.2	2.1

87: Meridian Rd & Site RIRO Performance by movement Interval #4 5:45

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	23.2	2.2	0.1	0.1	2.7

87: Meridian Rd & Site RIRO Performance by movement Entire Run

Movement	EBR	NBT	SBT	SBR	All
Stop Del/Veh (s)	19.3	2.1	0.1	0.1	2.3

Total Zone Performance By Interval

Interval Start	5:00	5:15	5:30	5:45	All
Stop Del/Veh (s)	49.6	103.7	52.7	77.5	135.1

Intersection	
Intersection Delay, s/veh	5.6
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	264	68	353	9
Demand Flow Rate, veh/h	269	69	360	9
Vehicles Circulating, veh/h	5	168	274	237
Vehicles Exiting, veh/h	241	466	0	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.3	3.7	7.1	3.4
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	T	T	LR	LR
Assumed Moves	T	T	LR	LR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	269	69	360	9
Cap Entry Lane, veh/h	1373	1163	1043	1084
Entry HV Adj Factor	0.980	0.980	0.981	1.000
Flow Entry, veh/h	264	68	353	9
Cap Entry, veh/h	1346	1140	1023	1084
V/C Ratio	0.196	0.059	0.345	0.008
Control Delay, s/veh	4.3	3.7	7.1	3.4
LOS	A	A	A	A
95th %tile Queue, veh	1	0	2	0

Intersection	
Intersection Delay, s/veh	6.2
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	722	595	226
Demand Flow Rate, veh/h	737	607	230
Vehicles Circulating, veh/h	8	221	399
Vehicles Exiting, veh/h	820	408	8
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	2.8	10.1	6.6
Approach LOS	A	B	A

Lane	Left	Bypass	Left	Left
Designated Moves	L	R	TR	LT
Assumed Moves	L	R	TR	LT
RT Channelized		Free		
Lane Util	1.000		1.000	1.000
Follow-Up Headway, s	2.609		2.609	2.609
Critical Headway, s	4.976	338	4.976	4.976
Entry Flow, veh/h	399	1938	607	230
Cap Entry Lane, veh/h	1369	0.980	1101	919
Entry HV Adj Factor	0.980	331	0.980	0.982
Flow Entry, veh/h	391	1900	595	226
Cap Entry, veh/h	1341	0.174	1079	902
V/C Ratio	0.292	0.0	0.551	0.250
Control Delay, s/veh	5.2	A	10.1	6.6
LOS	A	1	B	A
95th %tile Queue, veh	1		3	1

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	26	409	64	21	39	1
Future Vol, veh/h	26	409	64	21	39	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	431	67	22	41	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	89	0	-	0	563	78
Stage 1	-	-	-	-	78	-
Stage 2	-	-	-	-	485	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1506	-	-	-	487	983
Stage 1	-	-	-	-	945	-
Stage 2	-	-	-	-	619	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1506	-	-	-	478	983
Mov Cap-2 Maneuver	-	-	-	-	519	-
Stage 1	-	-	-	-	928	-
Stage 2	-	-	-	-	619	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1506	-	-	-	525
HCM Lane V/C Ratio	0.018	-	-	-	0.08
HCM Control Delay (s)	7.4	-	-	-	12.5
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	96	340	12	11	60	36	5	4	21	57	4	20
Future Vol, veh/h	96	340	12	11	60	36	5	4	21	57	4	20
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	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	101	358	13	12	63	38	5	4	22	60	4	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	101	0	0	371	0	0	686	692	365	686	679	82
Stage 1	-	-	-	-	-	-	567	567	-	106	106	-
Stage 2	-	-	-	-	-	-	119	125	-	580	573	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1491	-	-	1188	-	-	362	367	680	362	374	978
Stage 1	-	-	-	-	-	-	508	507	-	900	807	-
Stage 2	-	-	-	-	-	-	885	792	-	500	504	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1491	-	-	1188	-	-	330	339	680	327	345	978
Mov Cap-2 Maneuver	-	-	-	-	-	-	330	339	-	327	345	-
Stage 1	-	-	-	-	-	-	473	473	-	839	799	-
Stage 2	-	-	-	-	-	-	853	784	-	447	470	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	0.8	12.4	16.7
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	519	1491	-	-	1188	-	-	393
HCM Lane V/C Ratio	0.061	0.068	-	-	0.01	-	-	0.217
HCM Control Delay (s)	12.4	7.6	-	-	8.1	-	-	16.7
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0.2	-	-	0	-	-	0.8

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	60	344	14	8	92	40	3	9	21	60	4	12
Future Vol, veh/h	60	344	14	8	92	40	3	9	21	60	4	12
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	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	63	362	15	8	97	42	3	9	22	63	4	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	139	0	0	377	0	0	639	651	370	645	637	118
Stage 1	-	-	-	-	-	-	496	496	-	134	134	-
Stage 2	-	-	-	-	-	-	143	155	-	511	503	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1445	-	-	1181	-	-	389	388	676	385	395	934
Stage 1	-	-	-	-	-	-	556	545	-	869	785	-
Stage 2	-	-	-	-	-	-	860	769	-	545	541	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1445	-	-	1181	-	-	366	368	676	351	375	934
Mov Cap-2 Maneuver	-	-	-	-	-	-	366	368	-	351	375	-
Stage 1	-	-	-	-	-	-	532	521	-	831	780	-
Stage 2	-	-	-	-	-	-	838	764	-	495	517	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.1	0.5	12.4	16.6
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	518	1445	-	-	1181	-	-	391
HCM Lane V/C Ratio	0.067	0.044	-	-	0.007	-	-	0.205
HCM Control Delay (s)	12.4	7.6	-	-	8.1	-	-	16.6
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.8

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	388	37	36	123	17	53
Future Vol, veh/h	388	37	36	123	17	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	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	422	40	39	134	18	58

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	462	0	654	442
Stage 1	-	-	-	-	442	-
Stage 2	-	-	-	-	212	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1099	-	431	615
Stage 1	-	-	-	-	648	-
Stage 2	-	-	-	-	823	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1099	-	416	615
Mov Cap-2 Maneuver	-	-	-	-	502	-
Stage 1	-	-	-	-	625	-
Stage 2	-	-	-	-	823	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	12.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	583	-	-	1099	-
HCM Lane V/C Ratio	0.131	-	-	0.036	-
HCM Control Delay (s)	12.1	-	-	8.4	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	29	432	9	17	157
Future Vol, veh/h	2	29	432	9	17	157
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	31	455	9	18	165

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	661	460	0	0	464	0
Stage 1	460	-	-	-	-	-
Stage 2	201	-	-	-	-	-
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	427	601	-	-	1097	-
Stage 1	636	-	-	-	-	-
Stage 2	833	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	420	601	-	-	1097	-
Mov Cap-2 Maneuver	507	-	-	-	-	-
Stage 1	626	-	-	-	-	-
Stage 2	833	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.4	0	0.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	594	1097	-
HCM Lane V/C Ratio	-	-	0.055	0.016	-
HCM Control Delay (s)	-	-	11.4	8.3	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Intersection Delay, s/veh	19.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	174	71	2	46	40	0	10	280	171	1	126	138
Future Vol, veh/h	174	71	2	46	40	0	10	280	171	1	126	138
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	183	75	2	48	42	0	11	295	180	1	133	145
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	15.3	11.6	26.9	14.5
HCM LOS	C	B	D	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	70%	53%	100%	0%
Vol Thru, %	0%	62%	29%	47%	0%	48%
Vol Right, %	0%	38%	1%	0%	0%	52%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	10	451	247	86	1	264
LT Vol	10	0	174	46	1	0
Through Vol	0	280	71	40	0	126
RT Vol	0	171	2	0	0	138
Lane Flow Rate	11	475	260	91	1	278
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.02	0.788	0.472	0.177	0.002	0.479
Departure Headway (Hd)	6.758	5.978	6.541	7.026	7.086	6.201
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	532	608	551	510	507	584
Service Time	4.468	3.689	4.588	5.084	4.8	3.915
HCM Lane V/C Ratio	0.021	0.781	0.472	0.178	0.002	0.476
HCM Control Delay	9.6	27.3	15.3	11.6	9.8	14.5
HCM Lane LOS	A	D	C	B	A	B
HCM 95th-tile Q	0.1	7.6	2.5	0.6	0	2.6

Intersection	
Int Delay, s/veh	3.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	149	423	31	132	249
Future Vol, veh/h	15	149	423	31	132	249
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	-	-	-	25	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	157	445	33	139	262

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1002	462	0	0	478	0
Stage 1	462	-	-	-	-	-
Stage 2	540	-	-	-	-	-
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	269	600	-	-	1084	-
Stage 1	634	-	-	-	-	-
Stage 2	584	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	235	600	-	-	1084	-
Mov Cap-2 Maneuver	330	-	-	-	-	-
Stage 1	553	-	-	-	-	-
Stage 2	584	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.3	0	3.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	558	1084	-
HCM Lane V/C Ratio	-	-	0.309	0.128	-
HCM Control Delay (s)	-	-	14.3	8.8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	1.3	0.4	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	14	9	20	552	372	8
Future Vol, veh/h	14	9	20	552	372	8
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	-	25	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	9	21	581	392	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1019	396	400	0	-	0
Stage 1	396	-	-	-	-	-
Stage 2	623	-	-	-	-	-
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	263	653	1159	-	-	-
Stage 1	680	-	-	-	-	-
Stage 2	535	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	258	653	1159	-	-	-
Mov Cap-2 Maneuver	258	-	-	-	-	-
Stage 1	668	-	-	-	-	-
Stage 2	535	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.5	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1159	-	338	-	-
HCM Lane V/C Ratio	0.018	-	0.072	-	-
HCM Control Delay (s)	8.2	-	16.5	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	48	234	167	7	18	46
Future Vol, veh/h	48	234	167	7	18	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	2	2	5	5	5
Mvmt Flow	51	246	176	7	19	48

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	183	0	-	0	528	180
Stage 1	-	-	-	-	180	-
Stage 2	-	-	-	-	348	-
Critical Hdwy	4.15	-	-	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	2.245	-	-	-	3.545	3.345
Pot Cap-1 Maneuver	1374	-	-	-	506	855
Stage 1	-	-	-	-	844	-
Stage 2	-	-	-	-	708	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1374	-	-	-	484	855
Mov Cap-2 Maneuver	-	-	-	-	484	-
Stage 1	-	-	-	-	808	-
Stage 2	-	-	-	-	708	-

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1374	-	-	-	703
HCM Lane V/C Ratio	0.037	-	-	-	0.096
HCM Control Delay (s)	7.7	0	-	-	10.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	31	221	156	31	18	18
Future Vol, veh/h	31	221	156	31	18	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	233	164	33	19	19

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	197	0	-	0	480	181
Stage 1	-	-	-	-	181	-
Stage 2	-	-	-	-	299	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1376	-	-	-	545	862
Stage 1	-	-	-	-	850	-
Stage 2	-	-	-	-	752	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1376	-	-	-	530	862
Mov Cap-2 Maneuver	-	-	-	-	530	-
Stage 1	-	-	-	-	826	-
Stage 2	-	-	-	-	752	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	10.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1376	-	-	-	656
HCM Lane V/C Ratio	0.024	-	-	-	0.058
HCM Control Delay (s)	7.7	0	-	-	10.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	21	218	175	46	28	12
Future Vol, veh/h	21	218	175	46	28	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	229	184	48	29	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	232	0	-	0	481	208
Stage 1	-	-	-	-	208	-
Stage 2	-	-	-	-	273	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1336	-	-	-	544	832
Stage 1	-	-	-	-	827	-
Stage 2	-	-	-	-	773	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1336	-	-	-	534	832
Mov Cap-2 Maneuver	-	-	-	-	599	-
Stage 1	-	-	-	-	811	-
Stage 2	-	-	-	-	773	-

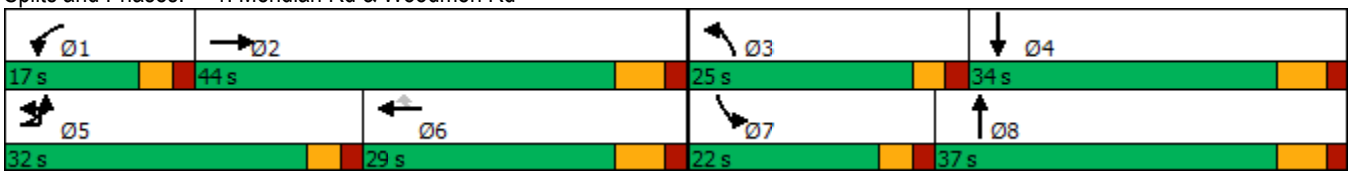
Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	10.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1336	-	-	-	654
HCM Lane V/C Ratio	0.017	-	-	-	0.064
HCM Control Delay (s)	7.7	0	-	-	10.9
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	765	794	375	225	561	367	350	1008	200	483	704	535
Future Volume (vph)	765	794	375	225	561	367	350	1008	200	483	704	535
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			6			Free			Free
Detector Phase	5	2		1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	11.5		10.0	11.5	11.5	10.0	11.5		10.0	11.5	
Total Split (s)	32.0	44.0		17.0	29.0	29.0	25.0	37.0		22.0	34.0	
Total Split (%)	26.7%	36.7%		14.2%	24.2%	24.2%	20.8%	30.8%		18.3%	28.3%	
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	4.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	5.5		4.0	5.5	5.5	4.0	5.5		4.0	5.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	Min		None	Min	Min	None	None		None	None	
Act Effct Green (s)	28.0	38.4	117.8	12.4	22.8	22.8	18.0	29.9	117.8	18.0	29.9	117.8
Actuated g/C Ratio	0.24	0.33	1.00	0.11	0.19	0.19	0.15	0.25	1.00	0.15	0.25	1.00
v/c Ratio	0.97	0.70	0.24	0.64	0.84	0.70	0.68	0.80	0.13	0.94	0.80	0.34
Control Delay	69.8	39.0	0.4	59.5	57.8	19.3	54.2	46.5	0.2	77.0	49.4	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.8	39.0	0.4	59.5	57.8	19.3	54.2	46.5	0.2	77.0	49.4	0.6
LOS	E	D	A	E	E	B	D	D	A	E	D	A
Approach Delay		43.8			45.9			42.3			42.0	
Approach LOS		D			D			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 117.8	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 43.3	Intersection LOS: D
Intersection Capacity Utilization 86.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Meridian Rd & Woodmen Rd



Weaving Level of Service Reports

FREEWAY WEAVING WORKSHEET

General Information

Analyst	KDF
Agency/Company	LSC
Date Performed	7/21/2017
Analysis Time Period	AM Peak Hour

Site Information

Freeway/Dir of Travel	Woodmen Rd
Weaving Segment Location	Meridian Rd & Right-in Only
Analysis Year	2040

Project Description Falcon Marketplace

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	3	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	885ft	Freeway maximum capacity, C_{IFL}	1900
Freeway free-flow speed, FFS	50 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	958	0.94	2	0	1.5	1.2	0.990	1.00	1029
V_{RF}	956	0.94	2	0	1.5	1.2	0.990	1.00	1027
V_{FR}	265	0.94	2	0	1.5	1.2	0.990	1.00	285
V_{RR}	85	0.94	2	0	1.5	1.2	0.990	1.00	91
V_{NW}	1120							V =	2432
V_W	1312								
VR	0.539								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	2 lc	Minimum weaving lane changes, LC_{MIN}	1312 lc/h
Interchange density, ID	1.0 int/mi	Weaving lane changes, LC_W	1460 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	133 lc/h
Minimum FR lane changes, LC_{FR}	1 lc/pc	Total lane changes, LC_{ALL}	1593 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	99

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	2409 veh/h	Weaving intensity factor, W	0.359
Weaving segment capacity, c_w	3959 veh/h	Weaving segment speed, S	38.8 mph
Weaving segment v/c ratio	0.608	Average weaving speed, S_W	40.7 mph
Weaving segment density, D	20.9 pc/mi/ln	Average non-weaving speed, S_{NW}	36.7 mph
Level of Service, LOS	C	Maximum weaving length, L_{MAX}	8291 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

FREEWAY WEAVING WORKSHEET

General Information

Analyst	
Agency/Company	LSC
Date Performed	7/21/2017
Analysis Time Period	PM Peak Hour

Site Information

Freeway/Dir of Travel	Woodmen Rd
Weaving Segment Location	Meridian Rd & Right-in Only
Analysis Year	2040

Project Description Falcon Marketplace

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	3	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	885ft	Freeway maximum capacity, C_{IFL}	1900
Freeway free-flow speed, FFS	50 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	878	0.94	2	0	1.5	1.2	0.990	1.00	943
V_{RF}	538	0.94	2	0	1.5	1.2	0.990	1.00	578
V_{FR}	272	0.94	2	0	1.5	1.2	0.990	1.00	292
V_{RR}	64	0.94	2	0	1.5	1.2	0.990	1.00	69
V_{NW}	1012							V =	1882
V_W	870								
VR	0.462								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	2 lc	Minimum weaving lane changes, LC_{MIN}	870 lc/h
Interchange density, ID	1.0 int/mi	Weaving lane changes, LC_W	1018 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	110 lc/h
Minimum FR lane changes, LC_{FR}	1 lc/pc	Total lane changes, LC_{ALL}	1128 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	90

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	1864 veh/h	Weaving intensity factor, W	0.274
Weaving segment capacity, c_w	4164 veh/h	Weaving segment speed, S	41.5 mph
Weaving segment v/c ratio	0.448	Average weaving speed, S_W	42.5 mph
Weaving segment density, D	15.1 pc/mi/ln	Average non-weaving speed, S_{NW}	40.7 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	7389 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

Queuing Level of Service Reports

TRANSPORTATION
CONSULTANTS, INC.

Queuing and Blocking Report

Intersection: 1: Meridian Rd & Woodmen Rd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	UL	L	T	T	L	L	T	T	R	L	L	T
Maximum Queue (ft)	160	168	237	265	62	108	282	286	18	142	161	187
Average Queue (ft)	81	98	132	147	23	59	188	181	1	37	90	104
95th Queue (ft)	139	152	212	231	54	101	265	263	13	102	148	169
Link Distance (ft)			1012	1012			2167	2167	2167		1181	1181
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500	500			435	435				315		
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 1: Meridian Rd & Woodmen Rd

Movement	NB	SB	SB	SB	SB
Directions Served	T	L	L	T	T
Maximum Queue (ft)	157	132	147	263	270
Average Queue (ft)	65	68	86	142	148
95th Queue (ft)	133	121	132	224	231
Link Distance (ft)	1181			635	635
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		475	475		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Queuing and Blocking Report

Intersection: 2: Meridian Rd & Eastonville Rd

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	L	T	R	L	T	T	R	L	T	T
Maximum Queue (ft)	44	29	123	64	62	58	100	118	34	58	150	242
Average Queue (ft)	12	4	48	3	25	19	25	32	6	27	55	95
95th Queue (ft)	37	20	100	37	45	44	69	84	23	52	112	196
Link Distance (ft)	261	261		796			444	444			1387	1387
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)			100		200	425			525	375		
Storage Blk Time (%)			3									
Queuing Penalty (veh)			2									

Intersection: 2: Meridian Rd & Eastonville Rd

Movement	SB
Directions Served	R
Maximum Queue (ft)	8
Average Queue (ft)	0
95th Queue (ft)	4
Link Distance (ft)	1387
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report

Intersection: 25: Golden Sage Rd & Woodmen Rd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	L
Maximum Queue (ft)	90	140	152	31	27	348	334	30	187	85	30	65
Average Queue (ft)	34	57	67	6	5	146	163	5	84	10	4	23
95th Queue (ft)	70	111	121	24	22	287	293	21	152	54	22	56
Link Distance (ft)		957	957			969	969			531		161
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	465			400	475			400	125		200	
Storage Blk Time (%)							0		5			
Queuing Penalty (veh)							0		1			

Intersection: 25: Golden Sage Rd & Woodmen Rd

Movement	SB
Directions Served	TR
Maximum Queue (ft)	115
Average Queue (ft)	43
95th Queue (ft)	83
Link Distance (ft)	161
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 26: Golden Sage Rd & Woodmen Frontage Rd

Movement	WB
Directions Served	LT
Maximum Queue (ft)	59
Average Queue (ft)	30
95th Queue (ft)	51
Link Distance (ft)	1964
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 3

Queuing and Blocking Report

Intersection: 1: Meridian Rd & Woodmen Rd

Movement	EB	EB	EB	EB	B88	B88	B88	WB	WB	WB	WB	WB
Directions Served	UL	L	T	T	T	T	T	L	L	T	T	R
Maximum Queue (ft)	356	361	282	289	128	537	290	135	160	282	280	121
Average Queue (ft)	199	206	145	161	5	24	10	42	83	186	182	24
95th Queue (ft)	300	302	231	242	94	228	152	96	130	264	264	84
Link Distance (ft)			1012	1012	715	715	715			2167	2167	2167
Upstream Blk Time (%)							0					
Queuing Penalty (veh)							0					
Storage Bay Dist (ft)	500	500						435	435			
Storage Blk Time (%)	0	0										
Queuing Penalty (veh)	0	0										

Intersection: 1: Meridian Rd & Woodmen Rd

Movement	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	L	T	T	L	L	T	T
Maximum Queue (ft)	140	176	381	364	129	137	190	208
Average Queue (ft)	42	98	243	215	51	71	120	126
95th Queue (ft)	113	162	357	331	102	113	177	185
Link Distance (ft)		1181	1181	1181			635	635
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	315				475	475		
Storage Blk Time (%)								
Queuing Penalty (veh)								

Queuing and Blocking Report

Intersection: 2: Meridian Rd & Eastonville Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	L	T	L	T	R	L	T	T	R	L	T
Maximum Queue (ft)	44	6	17	70	33	66	59	194	217	46	89	151
Average Queue (ft)	12	0	2	24	4	33	21	65	82	11	36	52
95th Queue (ft)	36	4	13	58	19	54	45	147	172	32	73	110
Link Distance (ft)	261	261	261		796			444	444			1387
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)				100		200	425			525	375	
Storage Blk Time (%)				0								
Queuing Penalty (veh)				0								

Intersection: 2: Meridian Rd & Eastonville Rd

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	182	16
Average Queue (ft)	54	2
95th Queue (ft)	125	11
Link Distance (ft)	1387	1387
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 25: Golden Sage Rd & Woodmen Rd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	L
Maximum Queue (ft)	107	206	224	52	46	264	280	34	139	63	36	61
Average Queue (ft)	43	107	117	16	11	105	123	5	69	16	14	23
95th Queue (ft)	82	189	197	42	35	218	237	23	118	46	39	52
Link Distance (ft)		957	957			969	969			531		161
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	465			400	475			400	125		200	
Storage Blk Time (%)									1	0		
Queuing Penalty (veh)									0	0		

Intersection: 25: Golden Sage Rd & Woodmen Rd

Movement	SB
Directions Served	TR
Maximum Queue (ft)	92
Average Queue (ft)	45
95th Queue (ft)	82
Link Distance (ft)	161
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 26: Golden Sage Rd & Woodmen Frontage Rd

Movement	WB
Directions Served	LT
Maximum Queue (ft)	61
Average Queue (ft)	33
95th Queue (ft)	54
Link Distance (ft)	1964
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 1

Queuing and Blocking Report

Intersection: 1: Meridian Rd & Woodmen Rd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	UL	L	T	T	L	L	T	T	R	L	L	T
Maximum Queue (ft)	193	158	246	249	61	112	289	276	60	139	167	242
Average Queue (ft)	100	93	130	142	24	57	183	176	10	34	90	147
95th Queue (ft)	165	147	211	221	59	104	257	255	46	99	149	218
Link Distance (ft)			1012	1012			2167	2167	2167		1181	1181
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500	500			435	435				315		
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 1: Meridian Rd & Woodmen Rd

Movement	NB	SB	SB	SB	SB
Directions Served	T	L	L	T	T
Maximum Queue (ft)	198	142	151	267	284
Average Queue (ft)	88	76	94	149	159
95th Queue (ft)	174	128	139	243	251
Link Distance (ft)	1181			635	635
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		475	475		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Queuing and Blocking Report

Intersection: 2: Meridian Rd & Eastonville Rd

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	L	T	R	L	T	R	L	T	T	R	L
Maximum Queue (ft)	154	125	111	100	117	108	57	357	147	153	37	76
Average Queue (ft)	92	23	41	41	56	40	29	196	33	48	7	33
95th Queue (ft)	149	86	84	76	105	84	50	335	104	119	24	66
Link Distance (ft)	261	261	261	261		796			444	444		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)					100		200	425			525	375
Storage Blk Time (%)					3	0		0				
Queuing Penalty (veh)					4	1		0				

Intersection: 2: Meridian Rd & Eastonville Rd

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	432	552	59
Average Queue (ft)	210	315	18
95th Queue (ft)	371	502	44
Link Distance (ft)	1387	1387	1387
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)	0		
Queuing Penalty (veh)	0		

Intersection: 25: Golden Sage Rd & Woodmen Rd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	L
Maximum Queue (ft)	122	137	154	42	27	368	371	33	158	88	24	81
Average Queue (ft)	52	60	69	7	5	182	197	4	84	9	3	23
95th Queue (ft)	98	118	134	27	21	344	352	21	142	40	16	60
Link Distance (ft)		957	957			969	969			531		161
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	465			400	475			400	125		200	
Storage Blk Time (%)							0		3	0		
Queuing Penalty (veh)							0		0	0		

Intersection: 25: Golden Sage Rd & Woodmen Rd

Movement	SB
Directions Served	TR
Maximum Queue (ft)	135
Average Queue (ft)	56
95th Queue (ft)	108
Link Distance (ft)	161
Upstream Blk Time (%)	1
Queuing Penalty (veh)	1
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 26: Golden Sage Rd & Woodmen Frontage Rd

Movement	WB
Directions Served	LT
Maximum Queue (ft)	68
Average Queue (ft)	39
95th Queue (ft)	62
Link Distance (ft)	1964
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 6

Queuing and Blocking Report

Intersection: 1: Meridian Rd & Woodmen Rd

Movement	EB	EB	EB	EB	B88	WB	WB	WB	WB	WB	NB	NB
Directions Served	UL	L	T	T	T	L	L	T	T	R	L	L
Maximum Queue (ft)	354	368	270	268	136	123	150	293	294	218	163	176
Average Queue (ft)	229	222	133	151	5	43	83	190	186	78	49	104
95th Queue (ft)	331	334	216	227	99	93	131	267	269	181	128	166
Link Distance (ft)			1012	1012	715			2167	2167	2167		1181
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500	500				435	435				315	
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 1: Meridian Rd & Woodmen Rd

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	T	L	L	T	T
Maximum Queue (ft)	505	463	146	152	256	266
Average Queue (ft)	328	283	83	99	160	180
95th Queue (ft)	463	424	134	145	245	265
Link Distance (ft)	1181	1181			635	635
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			475	475		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Queuing and Blocking Report

Intersection: 2: Meridian Rd & Eastonville Rd

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	L	T	R	L	T	R	L	T	T	R	L
Maximum Queue (ft)	215	162	190	96	77	118	83	415	396	364	76	93
Average Queue (ft)	130	55	77	43	29	53	35	262	170	161	22	40
95th Queue (ft)	200	146	140	80	67	104	61	431	377	322	57	78
Link Distance (ft)	261	261	261	261		796			444	444		
Upstream Blk Time (%)								1	1	0		
Queuing Penalty (veh)								0	8	0		
Storage Bay Dist (ft)					100		200	425			525	375
Storage Blk Time (%)					0	1		2	1	0		
Queuing Penalty (veh)					0	3		11	4	0		

Intersection: 2: Meridian Rd & Eastonville Rd

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	292	317	89
Average Queue (ft)	176	191	27
95th Queue (ft)	268	285	63
Link Distance (ft)	1387	1387	1387
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)	0		
Queuing Penalty (veh)	0		

Queuing and Blocking Report

Intersection: 25: Golden Sage Rd & Woodmen Rd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	L
Maximum Queue (ft)	149	242	255	52	55	331	328	40	138	53	41	68
Average Queue (ft)	64	110	119	14	11	120	135	6	68	18	10	21
95th Queue (ft)	118	199	204	41	35	247	259	24	117	48	34	55
Link Distance (ft)		957	957			969	969			531		161
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	465			400	475			400	125		200	
Storage Blk Time (%)							0		1			
Queuing Penalty (veh)							0		0			

Intersection: 25: Golden Sage Rd & Woodmen Rd

Movement	SB
Directions Served	TR
Maximum Queue (ft)	121
Average Queue (ft)	53
95th Queue (ft)	102
Link Distance (ft)	161
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 26: Golden Sage Rd & Woodmen Frontage Rd

Movement	WB
Directions Served	LT
Maximum Queue (ft)	78
Average Queue (ft)	38
95th Queue (ft)	62
Link Distance (ft)	1964
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 26

Queuing and Blocking Report

Intersection: 1: Meridian Rd & Woodmen Rd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	UL	L	T	T	L	L	T	T	R	L	L	T
Maximum Queue (ft)	173	164	254	258	77	120	341	339	22	162	196	218
Average Queue (ft)	92	104	124	139	22	56	216	217	1	70	124	115
95th Queue (ft)	151	158	206	222	59	97	309	315	12	157	184	184
Link Distance (ft)			1024	1024			2167	2167	2167		1181	1181
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500	500			435	435				315		
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 1: Meridian Rd & Woodmen Rd

Movement	NB	SB	SB	SB	SB
Directions Served	T	L	L	T	T
Maximum Queue (ft)	181	168	184	244	258
Average Queue (ft)	68	84	102	147	158
95th Queue (ft)	147	149	160	227	232
Link Distance (ft)	1181			635	635
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		475	475		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Queuing and Blocking Report

Intersection: 2: Meridian Rd & Eastonville Rd

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	L	T	R	L	T	R	L	T	T	R	L
Maximum Queue (ft)	165	125	107	90	114	86	61	128	121	138	41	75
Average Queue (ft)	79	17	42	36	51	37	28	57	38	54	7	33
95th Queue (ft)	140	74	85	65	96	78	49	110	98	120	24	65
Link Distance (ft)	261	261	261	261		796			444	444		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)					100		200	425			525	375
Storage Blk Time (%)					2	0						
Queuing Penalty (veh)					2	0						

Intersection: 2: Meridian Rd & Eastonville Rd

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	536	609	308
Average Queue (ft)	147	227	22
95th Queue (ft)	357	445	214
Link Distance (ft)	1387	1387	1387
Upstream Blk Time (%)		0	0
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)	0		
Queuing Penalty (veh)	0		

Intersection: 18: Woodmen frontage rd & Right-In Only/Site Access

Movement	NB	SB	NE
Directions Served	LR	LR	T
Maximum Queue (ft)	54	50	28
Average Queue (ft)	8	23	2
95th Queue (ft)	34	47	17
Link Distance (ft)	80	154	368
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report

Intersection: 25: Golden Sage Rd & Woodmen Rd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	L
Maximum Queue (ft)	108	135	139	36	32	349	367	37	184	130	31	73
Average Queue (ft)	53	60	69	9	5	166	180	7	84	13	5	24
95th Queue (ft)	98	114	126	30	22	311	324	26	148	64	24	60
Link Distance (ft)		957	957			969	969			531		161
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	465			400	475			400	125		200	
Storage Blk Time (%)							0		3	0		
Queuing Penalty (veh)							0		0	0		

Intersection: 25: Golden Sage Rd & Woodmen Rd

Movement	SB
Directions Served	TR
Maximum Queue (ft)	151
Average Queue (ft)	59
95th Queue (ft)	115
Link Distance (ft)	161
Upstream Blk Time (%)	2
Queuing Penalty (veh)	2
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 26: Golden Sage Rd & Woodmen Frontage Rd

Movement	WB
Directions Served	LT
Maximum Queue (ft)	86
Average Queue (ft)	41
95th Queue (ft)	71
Link Distance (ft)	1964
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 4

Queuing and Blocking Report

Intersection: 1: Meridian Rd & Woodmen Rd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	UL	L	T	T	L	L	T	T	R	L	L	T
Maximum Queue (ft)	424	443	238	261	122	146	324	342	114	220	275	404
Average Queue (ft)	242	251	134	151	43	78	219	231	16	132	179	276
95th Queue (ft)	362	377	218	228	101	132	311	317	73	230	252	387
Link Distance (ft)			1024	1024			2167	2167	2167		1181	1181
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500	500			435	435				315		
Storage Blk Time (%)	0	0									0	
Queuing Penalty (veh)	0	0									0	

Intersection: 1: Meridian Rd & Woodmen Rd

Movement	NB	SB	SB	SB	SB
Directions Served	T	L	L	T	T
Maximum Queue (ft)	372	187	202	261	295
Average Queue (ft)	245	101	115	164	187
95th Queue (ft)	361	172	190	246	269
Link Distance (ft)	1181			635	635
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		475	475		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Queuing and Blocking Report

Intersection: 2: Meridian Rd & Eastonville Rd

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	L	T	R	L	T	R	L	T	T	R	L
Maximum Queue (ft)	216	181	161	84	61	112	73	174	329	320	72	100
Average Queue (ft)	122	45	69	41	23	49	37	83	136	147	18	39
95th Queue (ft)	194	131	129	70	55	93	62	150	293	300	49	77
Link Distance (ft)	261	261	261	261		796			444	444		
Upstream Blk Time (%)	0											
Queuing Penalty (veh)	0											
Storage Bay Dist (ft)					100		200	425			525	375
Storage Blk Time (%)						0						
Queuing Penalty (veh)						1						

Intersection: 2: Meridian Rd & Eastonville Rd

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	233	312	60
Average Queue (ft)	137	156	18
95th Queue (ft)	221	262	42
Link Distance (ft)	1387	1387	1387
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: Woodmen frontage rd & Right-In Only/Site Access

Movement	NB	SB	NE	SW
Directions Served	LR	LR	T	T
Maximum Queue (ft)	111	29	16	18
Average Queue (ft)	21	6	1	1
95th Queue (ft)	66	24	10	11
Link Distance (ft)	80	154	368	203
Upstream Blk Time (%)	0			
Queuing Penalty (veh)	1			
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Intersection: 25: Golden Sage Rd & Woodmen Rd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	L
Maximum Queue (ft)	145	189	225	48	46	311	304	31	157	88	36	73
Average Queue (ft)	62	101	113	16	10	130	147	7	68	18	12	26
95th Queue (ft)	111	179	196	41	33	256	267	26	128	51	37	59
Link Distance (ft)		957	957			969	969			531		161
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	465			400	475			400	125		200	
Storage Blk Time (%)									2	0		
Queuing Penalty (veh)									1	0		

Intersection: 25: Golden Sage Rd & Woodmen Rd

Movement	SB
Directions Served	TR
Maximum Queue (ft)	150
Average Queue (ft)	56
95th Queue (ft)	105
Link Distance (ft)	161
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 26: Golden Sage Rd & Woodmen Frontage Rd

Movement	WB
Directions Served	LT
Maximum Queue (ft)	79
Average Queue (ft)	39
95th Queue (ft)	62
Link Distance (ft)	1964
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report

Intersection: 88: Woodmen Rd & Right-In Only

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Zone Summary

Zone wide Queuing Penalty: 3

Queuing and Blocking Report

Intersection: 1: Meridian Rd & Woodmen Rd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	UL	L	T	T	L	L	T	T	R	L	L	T
Maximum Queue (ft)	382	362	196	207	109	129	368	361	120	217	243	250
Average Queue (ft)	223	212	113	128	38	76	246	241	30	107	148	156
95th Queue (ft)	361	354	179	192	85	122	339	333	95	201	213	234
Link Distance (ft)	1011	1011	1011	1011			2167	2167	2167		1180	1180
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)					535	535				400		
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 1: Meridian Rd & Woodmen Rd

Movement	NB	SB	SB	SB	SB
Directions Served	T	L	L	T	T
Maximum Queue (ft)	203	160	171	312	326
Average Queue (ft)	99	92	109	207	233
95th Queue (ft)	184	144	158	301	320
Link Distance (ft)	1180			635	635
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		475	475		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Queuing and Blocking Report

Intersection: 2: Meridian Rd & Eastonville Rd

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB
Directions Served	L	L	T	R	L	T	R	L	L	T	T	R
Maximum Queue (ft)	154	112	133	153	200	563	300	254	259	219	201	62
Average Queue (ft)	81	12	64	52	157	226	78	137	148	80	97	21
95th Queue (ft)	138	57	120	103	233	585	241	231	241	166	165	49
Link Distance (ft)	261	261	261	261		796				444	444	
Upstream Blk Time (%)						4						
Queuing Penalty (veh)						0						
Storage Bay Dist (ft)					100		200	425	425			525
Storage Blk Time (%)					44	8						
Queuing Penalty (veh)					105	29						

Intersection: 2: Meridian Rd & Eastonville Rd

Movement	SB	SB	SB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	475	1417	1418	1415
Average Queue (ft)	211	1090	1116	757
95th Queue (ft)	551	1693	1693	1839
Link Distance (ft)		1380	1380	1380
Upstream Blk Time (%)		16	37	20
Queuing Penalty (veh)		0	0	0
Storage Bay Dist (ft)	375			
Storage Blk Time (%)		41		
Queuing Penalty (veh)		41		

Intersection: 25: Golden Sage Rd & Woodmen Rd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	B16	B16	NB
Directions Served	L	L	T	T	R	L	T	T	R	T	T	L
Maximum Queue (ft)	400	421	594	580	40	575	990	988	500	383	407	181
Average Queue (ft)	291	311	299	294	9	193	665	676	298	65	73	91
95th Queue (ft)	528	575	941	895	26	592	1154	1164	677	348	374	154
Link Distance (ft)			1455	1455			969	969		3861	3861	
Upstream Blk Time (%)							11	14				
Queuing Penalty (veh)							106	133				
Storage Bay Dist (ft)	450	450			400	475			400			125
Storage Blk Time (%)	16	23	0				28	36				6
Queuing Penalty (veh)	68	101	0				22	66				4

Intersection: 25: Golden Sage Rd & Woodmen Rd

Movement	NB	NB	SB	SB
Directions Served	T	R	L	T
Maximum Queue (ft)	117	48	171	59
Average Queue (ft)	17	16	144	23
95th Queue (ft)	67	35	188	54
Link Distance (ft)	526		154	154
Upstream Blk Time (%)			26	
Queuing Penalty (veh)			54	
Storage Bay Dist (ft)		200		
Storage Blk Time (%)	0			
Queuing Penalty (veh)	0			

Intersection: 26: Golden Sage Rd & Woodmen Frontage Rd

Movement	EB	WB	NB	NB
Directions Served	TR	LT	LR	R
Maximum Queue (ft)	199	566	146	135
Average Queue (ft)	81	230	68	13
95th Queue (ft)	156	532	139	83
Link Distance (ft)	1503	1983	154	154
Upstream Blk Time (%)			0	0
Queuing Penalty (veh)			0	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 729

Queuing and Blocking Report

Intersection: 1: Meridian Rd & Woodmen Rd

Movement	EB	EB	EB	EB	B88	B88	B88	B88	WB	WB	WB	WB
Directions Served	UL	L	T	T	T	T	T	T	L	L	T	T
Maximum Queue (ft)	860	865	422	340	30	35	146	152	153	177	517	524
Average Queue (ft)	556	552	212	224	4	5	5	5	78	110	316	315
95th Queue (ft)	1012	1021	334	310	35	34	107	111	142	163	554	548
Link Distance (ft)	1011	1011	1011	1011	716	716	716	716			2167	2167
Upstream Blk Time (%)	5	6					0	0				
Queuing Penalty (veh)	20	22					0	0				
Storage Bay Dist (ft)									1000	1000		
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 1: Meridian Rd & Woodmen Rd

Movement	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	L	L	T	T
Maximum Queue (ft)	328	392	929	1203	1153	391	407	368	372
Average Queue (ft)	167	134	332	730	697	276	292	235	227
95th Queue (ft)	290	273	814	1321	1281	479	512	521	410
Link Distance (ft)	2167		1851	1851	1851			635	635
Upstream Blk Time (%)								3	0
Queuing Penalty (veh)								20	1
Storage Bay Dist (ft)		400				475	475		
Storage Blk Time (%)			0			6	9	0	
Queuing Penalty (veh)			0			19	33	0	

Queuing and Blocking Report

Intersection: 25: Golden Sage Rd & Woodmen Rd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	T	R
Maximum Queue (ft)	287	297	390	387	49	130	349	367	165	187	170	131
Average Queue (ft)	158	141	221	237	14	63	186	196	74	91	39	47
95th Queue (ft)	273	252	353	365	34	114	323	330	139	158	112	101
Link Distance (ft)			944	944			969	969			525	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	450	450			400	475			400	125		200
Storage Blk Time (%)	0	0	0	0				0		5	0	
Queuing Penalty (veh)	1	0	0	0				0		8	0	

Intersection: 25: Golden Sage Rd & Woodmen Rd

Movement	SB	SB
Directions Served	L	T
Maximum Queue (ft)	166	84
Average Queue (ft)	129	25
95th Queue (ft)	185	65
Link Distance (ft)	154	154
Upstream Blk Time (%)	12	
Queuing Penalty (veh)	28	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 26: Golden Sage Rd & Woodmen Frontage Rd

Movement	EB	WB	NB	NB
Directions Served	TR	LT	LR	R
Maximum Queue (ft)	183	494	164	183
Average Queue (ft)	55	209	127	19
95th Queue (ft)	119	477	191	106
Link Distance (ft)	1503	1983	154	154
Upstream Blk Time (%)			6	0
Queuing Penalty (veh)			24	1
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 367

Queuing and Blocking Report

Intersection: 2: Meridian Rd & Eastonville Rd

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB
Directions Served	L	L	T	R	L	T	R	L	L	T	T	R
Maximum Queue (ft)	258	194	260	194	199	536	300	425	430	500	452	231
Average Queue (ft)	158	91	127	77	144	232	103	330	338	330	248	35
95th Queue (ft)	227	190	216	147	228	614	277	504	507	603	422	124
Link Distance (ft)	261	261	261	261		796				444	444	
Upstream Blk Time (%)	0		1	0		6		3	12	19	0	0
Queuing Penalty (veh)	0		0	0		0		0	0	208	4	0
Storage Bay Dist (ft)					100		200	425	425			525
Storage Blk Time (%)					44	11		11	21	12	0	0
Queuing Penalty (veh)					159	48		68	131	79	1	0

Intersection: 2: Meridian Rd & Eastonville Rd

Movement	SB	SB	SB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	274	510	506	114
Average Queue (ft)	63	311	315	50
95th Queue (ft)	177	442	457	91
Link Distance (ft)		1380	1380	1380
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	375			
Storage Blk Time (%)		3		
Queuing Penalty (veh)		3		

Queuing and Blocking Report

Intersection: 1: Meridian Rd & Woodmen Rd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	UL	L	T	T	L	L	T	T	R	L	L	T
Maximum Queue (ft)	350	358	208	205	122	217	511	498	131	281	307	228
Average Queue (ft)	219	219	116	128	49	81	337	341	10	169	207	121
95th Queue (ft)	377	383	185	197	98	155	506	504	69	269	296	192
Link Distance (ft)	1022	1022	1022	1022			2167	2167	2167		1180	1180
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)					535	535				400		
Storage Blk Time (%)							1				0	
Queuing Penalty (veh)							1				0	

Intersection: 1: Meridian Rd & Woodmen Rd

Movement	NB	SB	SB	SB	SB
Directions Served	T	L	L	T	T
Maximum Queue (ft)	178	164	170	413	436
Average Queue (ft)	69	97	113	285	301
95th Queue (ft)	143	151	168	400	415
Link Distance (ft)	1180			635	635
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		475	475		
Storage Blk Time (%)				0	
Queuing Penalty (veh)				0	

Intersection: 2: Meridian Rd & Eastonville Rd

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB
Directions Served	L	L	T	R	L	T	R	L	L	T	T	R
Maximum Queue (ft)	168	105	131	152	200	720	244	137	148	135	148	68
Average Queue (ft)	79	14	61	50	173	395	138	73	87	61	74	18
95th Queue (ft)	140	61	118	103	237	909	352	127	135	141	156	49
Link Distance (ft)	261	261	261	261		796				444	444	
Upstream Blk Time (%)						11						
Queuing Penalty (veh)						0						
Storage Bay Dist (ft)					100		200	425	425			525
Storage Blk Time (%)					63	11						
Queuing Penalty (veh)					151	40						

Intersection: 2: Meridian Rd & Eastonville Rd

Movement	SB	SB	SB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	475	1135	1279	886
Average Queue (ft)	175	855	909	356
95th Queue (ft)	501	1481	1488	1300
Link Distance (ft)		1380	1380	1380
Upstream Blk Time (%)		7	15	9
Queuing Penalty (veh)		0	0	0
Storage Bay Dist (ft)	375			
Storage Blk Time (%)		30		
Queuing Penalty (veh)		30		

Intersection: 18: Woodmen frontage rd & Right-In Only/Site Access

Movement	NB	SB	NE	SW
Directions Served	LR	LR	T	T
Maximum Queue (ft)	102	41	29	36
Average Queue (ft)	26	25	1	6
95th Queue (ft)	72	46	13	27
Link Distance (ft)	80	154	368	203
Upstream Blk Time (%)	1			
Queuing Penalty (veh)	2			
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 25: Golden Sage Rd & Woodmen Rd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	B16	B16	NB
Directions Served	L	L	T	T	R	L	T	T	R	T	T	L
Maximum Queue (ft)	426	437	280	293	42	571	900	923	500	117	120	203
Average Queue (ft)	276	287	102	116	9	123	558	573	176	20	21	91
95th Queue (ft)	433	442	214	210	29	448	996	1006	535	147	153	164
Link Distance (ft)			1455	1455			969	969		3861	3861	
Upstream Blk Time (%)							5	5				
Queuing Penalty (veh)							45	51				
Storage Bay Dist (ft)	450	450			400	475			400			125
Storage Blk Time (%)	0	0	0				20	28				5
Queuing Penalty (veh)	1	1	0				16	32				4

Intersection: 25: Golden Sage Rd & Woodmen Rd

Movement	NB	NB	SB	SB
Directions Served	T	R	L	T
Maximum Queue (ft)	157	45	165	70
Average Queue (ft)	18	14	146	20
95th Queue (ft)	74	34	188	53
Link Distance (ft)	526		154	154
Upstream Blk Time (%)			31	
Queuing Penalty (veh)			64	
Storage Bay Dist (ft)		200		
Storage Blk Time (%)	0			
Queuing Penalty (veh)	0			

Intersection: 26: Golden Sage Rd & Woodmen Frontage Rd

Movement	EB	WB	NB	NB
Directions Served	TR	LT	LR	R
Maximum Queue (ft)	220	903	154	170
Average Queue (ft)	87	422	74	11
95th Queue (ft)	180	1115	141	79
Link Distance (ft)	1503	1983	154	154
Upstream Blk Time (%)			0	0
Queuing Penalty (veh)			1	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 438

Queuing and Blocking Report

Intersection: 1: Meridian Rd & Woodmen Rd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	UL	L	T	T	L	L	T	T	R	L	L	T
Maximum Queue (ft)	805	840	326	334	173	318	511	516	230	346	391	725
Average Queue (ft)	532	534	210	217	90	124	344	349	98	167	215	463
95th Queue (ft)	804	810	285	287	164	209	516	523	198	282	305	769
Link Distance (ft)	1022	1022	1022	1022			2167	2167	2167		1180	1180
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)					1000	1000				400		
Storage Blk Time (%)											0	
Queuing Penalty (veh)											0	

Intersection: 1: Meridian Rd & Woodmen Rd

Movement	NB	SB	SB	SB	SB
Directions Served	T	L	L	T	T
Maximum Queue (ft)	708	440	434	350	372
Average Queue (ft)	421	292	305	223	239
95th Queue (ft)	719	416	429	335	350
Link Distance (ft)	1180			635	635
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		475	475		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Queuing and Blocking Report

Intersection: 2: Meridian Rd & Eastonville Rd

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB
Directions Served	L	L	T	R	L	T	R	L	L	T	T	R
Maximum Queue (ft)	276	219	258	178	194	244	73	222	236	330	352	112
Average Queue (ft)	163	102	143	80	121	106	42	126	141	176	184	38
95th Queue (ft)	241	202	225	151	195	181	67	203	211	285	295	84
Link Distance (ft)	261	261	261	261		796				444	444	
Upstream Blk Time (%)	1		0									
Queuing Penalty (veh)	0		0									
Storage Bay Dist (ft)					100		200	425	425			525
Storage Blk Time (%)					22	10						
Queuing Penalty (veh)					80	43						

Intersection: 2: Meridian Rd & Eastonville Rd

Movement	SB	SB	SB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	284	559	534	95
Average Queue (ft)	70	325	331	35
95th Queue (ft)	204	496	510	70
Link Distance (ft)		1380	1380	1380
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	375			
Storage Blk Time (%)		6		
Queuing Penalty (veh)		5		

Intersection: 18: Woodmen frontage rd & Right-In Only/Site Access

Movement	NB	SB	NE	SW
Directions Served	LR	LR	T	T
Maximum Queue (ft)	119	29	16	30
Average Queue (ft)	39	9	1	7
95th Queue (ft)	92	31	7	27
Link Distance (ft)	80	154	368	203
Upstream Blk Time (%)	1			
Queuing Penalty (veh)	5			
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Intersection: 25: Golden Sage Rd & Woodmen Rd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	T	R
Maximum Queue (ft)	238	221	348	384	49	156	378	360	206	192	164	157
Average Queue (ft)	149	120	205	218	16	61	188	197	72	94	43	50
95th Queue (ft)	220	186	316	323	37	117	328	334	155	168	111	105
Link Distance (ft)			944	944			969	969			525	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	450	450			400	475			400	125		200
Storage Blk Time (%)				0						4	0	
Queuing Penalty (veh)				0						6	0	

Intersection: 25: Golden Sage Rd & Woodmen Rd

Movement	SB	SB
Directions Served	L	T
Maximum Queue (ft)	167	90
Average Queue (ft)	130	29
95th Queue (ft)	187	66
Link Distance (ft)	154	154
Upstream Blk Time (%)	16	
Queuing Penalty (veh)	36	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 26: Golden Sage Rd & Woodmen Frontage Rd

Movement	EB	WB	NB	NB
Directions Served	TR	LT	LR	R
Maximum Queue (ft)	140	641	170	173
Average Queue (ft)	50	258	115	17
95th Queue (ft)	101	527	194	99
Link Distance (ft)	1503	1983	154	154
Upstream Blk Time (%)			5	0
Queuing Penalty (veh)			20	1
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 197