

# TRAFFIC IMPACT STUDY

*For*

**Mavis Tire Supply LLC  
Proposed Automotive Service and Retail Center**

*Property Located at:*

**460 Prospect Avenue (CR 577)  
Block 105 – Lot 64.01  
Township of West Orange, Essex County, NJ**

**Prepared by:**



**826 Newtown Yardley Road, Suite 201  
Newtown, PA 18940  
445-202-5400**

**Patrick Downey, PE, PTOE  
NJ PE License #55686**

**Justin Taylor, PE, PTOE  
NJ PE License #45988**

**July 21, 2025  
Last Revised: June 26, 2026**

**DT# 1956 24-04212**

[www.dynamictraffic.com](http://www.dynamictraffic.com)

Offices conveniently located throughout the United States:  
New Jersey | Delaware | Florida | Maryland | Pennsylvania | Texas

## INTRODUCTION

It is proposed to construct a Mavis automotive service and retail center on a parcel of land currently developed with an office building, located along the northbound side of Prospect Avenue (CR 577) in West Orange Township, Essex County, New Jersey (see Figure 1 in Appendix A). The site is designated as Block 105 – Lot 64.01 on the Township of West Orange Tax Maps. It is proposed to raze the existing site and construct a 6,205 SF Mavis Tire store (inclusive of 1,142 SF of retail space) with 7 service bays (“The Project”). It is noted that the proposed Mavis is being relocated from its prior location within the West Orange Plaza located at 235 Prospect Avenue. Access to the site is currently provided via a right in/right out driveway along Prospect Avenue and a shared driveway with the neighboring property to the south, known as Blueberry Bend which also provides access to Prospect Avenue. It is proposed to reconstruct the existing Prospect Avenue driveway and it is anticipated that Essex County will ultimately require signage and striping improvements at Blueberry Bend to further delineate it as a right-in/right-out access point.

Dynamic Traffic LLC has been retained to prepare this study to assess the traffic impact associated with the construction of The Project on the adjacent roadway network. This study documents the methodology, analyses, findings and conclusions of our study and includes:

- A detailed inspection was conducted to obtain an inventory of existing roadway geometry, traffic control, and location and geometry of existing driveways and intersections.
- Existing traffic data was collected via turning movement counts (TMC) during the weekday morning, weekday evening, and Saturday midday peak periods at the intersections of:
  - Prospect Avenue (CR 577) and Rooney Circle / Shopping Center Driveway
  - Prospect Avenue (CR 577) and Blueberry Bend Driveway
  - Prospect Avenue (CR 577) and Site Driveway
- Projections of traffic to be generated by the proposed development were prepared utilizing trip generation data as published by the Institute of Transportation Engineers. Site traffic was then assigned to the adjacent street system based upon the anticipated directional distribution.
- Capacity analyses were conducted for the Existing, No Build, and Build conditions for the study intersections.
- The proposed points of ingress and egress were inspected for adequacy of geometric design, spacing and/or alignment to streets and driveways on the opposite side of the street, relationship to other driveways adjacent to the development, and conformance with accepted design standards.
- The site plan as designed was reviewed for sufficiency in accommodating large wheel base vehicles such as delivery trucks, refuse trucks, and emergency vehicles.
- The parking layout and supply was assessed based on accepted design standards, local requirements, and demand experienced at similar developments.

## **EXISTING CONDITIONS**

A review of the existing roadway conditions near the proposed site was conducted to provide the basis for assessing the traffic impact of the development. This included field investigations of the surrounding roadways and intersections, collection of traffic volume data, and extensive analyses.

### **Existing Roadway Conditions**

The following are descriptions of the roadways in the study area:

Prospect Avenue (CR 577) is an Urban Principal Arterial roadway under Essex County jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 35 MPH and the roadway provides two travel lanes in each direction separated by a concrete median between Rooney Circle and Guerino Drive with additional turning lanes at signalized intersections. Curb and sidewalk are generally provided along both sides of the roadway in the vicinity of the site. Prospect Avenue provides a straight horizontal alignment along the site frontage with a slight horizontal curve just south of Rooney Circle and an uphill grade from south to north. The land uses along Prospect Avenue in the vicinity of The Project are a mix of commercial and residential.

Rooney Circle is a local roadway under the Township of West Orange Jurisdiction with a general east/west orientation. In the vicinity of the site the speed limit is not posted and the roadway provides one travel lane in each direction. On-street parking is not permitted along either side of the roadway. Curb is provided along both sides of the roadway, while sidewalk is not provided along either side of the roadway. Rooney Circle provides a curved horizontal alignment to the north and a downhill grade from east to west. The land uses along Rooney Circle in the vicinity of The Project are a mix of commercial and residential.

### **Existing Traffic Volumes**

Turning movement counts (TMC) were conducted on Tuesday, June 17, 2025 from 7:00 AM to 9:00 AM and from 4:30 PM to 6:30 PM as well as Saturday, June 21, 2025 from 11:00 AM to 2:00 PM at the following intersections:

- Prospect Avenue (CR 577) and Rooney Circle / Shopping Center Driveway (*Saturday only*)
- Prospect Avenue (CR 577) and Blueberry Bend Driveway
- Prospect Avenue (CR 577) and Site Driveway

It should be noted that additional TMCs were subsequently conducted on Thursday May 28, 2026 from 7:00 AM to 9:00 AM and from 4:00 PM to 6:30 PM while schools were in session at the intersection of Prospect Avenue and Rooney Circle / Shopping Center Driveway. These were found to be higher in the morning peak hour and substantially similar in the evening peak hour compared to the 2025 counts. Thus, these newer counts were utilized and the through movement traffic volumes at the driveway intersections were factored accordingly in the morning peak hour to consistently utilize the conservative volumes.

Note that the 2025 counts that are still utilized were increased to better represent existing 2026 traffic volumes by applying a growth rate of 2.0% per year obtained from the NJDOT Annual Background Growth Rate Table for a period of one (1) year. Figure 2, located in the Appendix, shows the existing peak hour traffic volumes at the study intersections.

## Existing Capacity Analysis

The methodology utilized in the capacity analyses is described in the *Highway Capacity Manual*, published by the Transportation Research Board. In general, the term Level of Service (LOS) is used to provide a “qualitative” evaluation of capacity based upon certain “quantitative” calculations related to empirical values, such as traffic volume and intersection control.

At signalized intersections, factors that affect the various approach capacities include width of approach, number of lanes, signal “green time”, turning percentages, truck volumes, etc. However, delays cannot be related to capacity in a simple one-to-one fashion. For example, it is possible to have delays in the Level of Service “F” range without exceeding roadway capacity. Substantial delays can exist without exceeding capacity if one or more of the following conditions exist: long signal cycle lengths; a particular traffic movement experiences a long red time; or progressive movement for a particular lane group is poor. Table 1 describes the level of service ranges for signalized intersections.

An unsignalized (STOP sign controlled) driveway or side street along a through route is seldom critical from an overall capacity standpoint, however, it may be of great significance to the capacity of the minor cross-route, and it may influence the quality of traffic flow on both. When analyzing an unsignalized intersection, it is assumed that both the major street through and right turn movements are unimpeded and have the right-of-way over all side street traffic and left turns from the major street. All other turning movements in the intersection cross, merge with, or are otherwise impeded by major street movements. Traffic delays at unsignalized intersections are determined by sequentially processing these impeded movements. Table 2 describes the level of service ranges for unsignalized (stop controlled) intersections.

**Table 1**  
**Level of Service Criteria**  
**for Signalized Intersections**

| Level of Service | Average Control Delay (seconds per vehicle) |
|------------------|---------------------------------------------|
| A                | 0.0 to 10.0                                 |
| B                | 10.1 to 20.0                                |
| C                | 20.1 to 35.0                                |
| D                | 35.1 to 55.0                                |
| E                | 55.1 to 80.0                                |
| F                | greater than 80.0                           |

**Table 2**  
**Level of Service Criteria**  
**for Unsignalized Intersections**

| Level of Service | Average Control Delay (seconds per vehicle) |
|------------------|---------------------------------------------|
| a                | 0.0 to 10.0                                 |
| b                | 10.1 to 15.0                                |
| c                | 15.1 to 25.0                                |
| d                | 25.1 to 35.0                                |
| e                | 35.1 to 50.0                                |
| f                | greater than 50.0                           |

Analyses within the *Highway Capacity Manual* assume a random arrival for all the movements, which may not be the case if an adjacent traffic signal is present that platoons vehicles, such as the signalized intersection of Prospect Avenue (CR 577) and Rooney Circle / Shopping Center Driveway.

All capacity analyses were performed utilizing Synchro 12 software. It should be noted that the existing percentage of trucks and peak hour factors were used in the existing analysis. Table 3 summarizes the existing levels of service (LOS) and delays. All capacity analysis calculation worksheets are contained in Appendix C.

**Table 3  
Existing Levels of Service**

| Intersection                                                          | Direction/<br>Movement |     | AM PSH       | PM PSH        | Sat PSH       |
|-----------------------------------------------------------------------|------------------------|-----|--------------|---------------|---------------|
| Prospect Avenue (CR 577) and Rooney Circle / Shopping Center Driveway | EB                     | L   | D (36)       | C (34)        | C (33)        |
|                                                                       |                        | TR  | A (0)        | A (1)         | A (1)         |
|                                                                       | WB                     | LTR | D (40)       | D (35)        | C (35)        |
|                                                                       | NB                     | L   | A (5)        | A (7)         | A (7)         |
|                                                                       |                        | TR  | A (5)        | A (8)         | A (7)         |
|                                                                       | SB                     | LT  | A (9)        | B (14)        | B (14)        |
|                                                                       |                        | R   | A (3)        | A (4)         | A (4)         |
|                                                                       | <b>Overall</b>         |     | <b>A (8)</b> | <b>B (11)</b> | <b>B (11)</b> |
| Prospect Avenue (CR 577) and Blueberry Bend Driveway                  | WB                     | LR  | a (10)       | b (12)        | a (10)        |
|                                                                       | SB                     | L   | a (8)        | a (10)        | a (8)         |
| Prospect Avenue (CR 577) and Site Driveway                            | WB                     | R   | a (10)       | b (11)        | a (10)        |

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)

A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

The following are discussions pertaining to each of the existing intersections analyzed.

***Prospect Avenue (CR 577) and Rooney Circle / Shopping Center Driveway***

Rooney Circle and the Shopping Center Driveway intersect Prospect Avenue to form a four-leg intersection controlled by a traffic signal. The signal timing directive was obtained from Essex County which indicates that a four-phase 90-second background cycle is utilized (the traffic signal timing directive is included in Appendix B).

The northbound approach of Prospect Avenue provides one left turn lane, one dedicated through lane, and one shared through/right turn lane, while the southbound approach provides one shared left turn/through lane, one dedicated through lane, and one right turn lane. The eastbound approach of Rooney Circle provides one left turn lane and one shared through/right turn lane. The westbound approach of the shopping center driveway provides one shared lane for all movements. Right turn on red is only allowed for the eastbound approach of Rooney Circle and the southbound approach of Prospect Avenue.

A review of the existing analysis reveals that the intersection operates at overall levels of service "B" or better and all movements operate at levels of service "D" or better during the analyzed peak periods. See Table 3 for the individual movement levels of service and delays.

***Prospect Avenue (CR 577) and Blueberry Bend Driveway***

The Blueberry Bend driveway intersects Prospect Avenue to form an unsignalized T-intersection with the westbound approach of the driveway operating under stop control. Based on traffic counts and observations conducted by our office, the driveway is operating as a full movement in the existing condition. However, based upon preliminary discussions with Essex County, it is intended to function as right-in/right-out only. The existing analysis herein reflects the existing full movement operation that has been taking place. The northbound approach of Prospect Avenue provides one dedicated through lane and one shared through/right turn lane, while the southbound approach provides one shared left turn/through lane and two dedicated through lanes. The westbound approach of the Blueberry Bend driveway provides one shared lane for all turning movements.

A review of the existing analysis reveals that the individual intersection movements operate at levels of service “B” or better during the analyzed peak periods. See Table 3 for the individual movement levels of service and delays.

***Prospect Avenue (CR 577) and Site Driveway***

The site driveway intersects Prospect Avenue to form an unsignalized T-intersection with the westbound approach of the site driveway operating under stop control. The northbound approach provides one dedicated through lane and one shared through/right turn lane, while the southbound approach is separated by a concrete median. The westbound approach of the site driveway provides one right turn lane.

A review of the existing analysis reveals that the individual intersection movements operate at levels of service “B” or better during the analyzed peak periods. See Table 3 for the individual movement levels of service and delays.

## FUTURE CONDITIONS

Traffic volumes and operational analyses were developed for both the future No Build and Build conditions. The No Build conditions provide a baseline for assessing the impact of the site development traffic on the roadway system. The process of developing the No Build and Build traffic volumes and the subsequent analyses is outlined below.

Regardless of whether the subject site is developed or not, traffic volumes on the surrounding roadways are expected to increase as a result of developments throughout the region. A growth rate for roadways within the study area was obtained from the NJDOT Annual Background Growth Rate Table, which indicates a growth rate of 2.0% per year.

Through consultation with the Township of West Orange, there are two developments in the immediate vicinity of the site that have been approved but not yet constructed that are identified as potential significant traffic generators, shown below. The Adjacent Development Traffic Volumes passing the sites are shown on Figures 3 and 4, while the Total Adjacent Development Traffic Volumes are shown on Figure 5. It was assumed that the background growth rate was adequate to account for the traffic associated with all developments not listed hereafter.

- Fast Food-Restaurant with Drive-Through and Strip Retail Plaza – 495 Prospect Avenue – Block 155.21 – Lot 40: A 15,000 SF building consisting of approximately 5,000 SF fast-food restaurant with drive-through and 10,000 SF of retail, located within the Essex Green Shopping Center along Rooney Circle near the intersection with Prospect Avenue, has been approved. Projections of the associated traffic volumes were developed using the Institute of Transportation Engineers (ITE) publication *Trip Generation, 11th Edition* for Land Use Code (LUC) 934 – Fast Food Restaurant with Drive Through Window and LUC 822 – Strip Retail Plaza.
- Shopping Center Expansion and Fulfillment Center – 235 Prospect Avenue – Block 152.01 – Lots 1445 and 1445.05: The expansion of an existing shopping center from 297,448 SF to 335,199 SF and the addition of a 50,000 SF Target fulfillment center, located within West Orange Plaza at 235 Prospect Avenue, has been approved. Projections of the associated traffic volumes were referenced from the *Traffic Impact Assessment for West Orange Plaza*, prepared by Dolan and Dean Consulting Engineers, LLC dated May 17, 2023.

Future 2028 No Build traffic volumes were developed by applying the background growth rate of 2.0% for two (2) years to the study area roadways existing traffic volumes and adding the adjacent development traffic volumes. Figure 6, in Appendix A, shows the 2028 No Build traffic volumes.

## Redistributed Traffic Volumes

As discussed previously, the intersection of Prospect Avenue and Blueberry Bend currently functions as a full movement intersection. Through preliminary discussions with Essex County, the operational intent for the driveway is to function as a right-in/right-out only intersection. As such, as part of the Project, the County is anticipated to require signage and striping improvements at Blueberry Bend to further delineate the right-in/right-out restriction. Therefore, existing left turn traffic volumes currently occurring at this intersection were redistributed to the nearest logical alternative, which is the adjacent intersection of Prospect Avenue and Rooney Circle / Shopping Center driveway to the south.

## Traffic Generation

Trip generation projections for The Project were prepared utilizing trip generation research data as published under Land Use Code 848 – Tire Store in the Institute of Transportation Engineers' (ITE) publication, *Trip Generation Manual, 12<sup>th</sup> Edition*. This publication sets forth trip generation rates based on empirical traffic count data conducted at numerous research sites.

### Passby Traffic

According to studies conducted by ITE, traffic associated with LUC 848 is not 100% newly generated. Rather, a portion of the traffic is diverted from the existing traffic stream on the adjacent roadway network. This is because the Mavis Tire store is not exclusively a destination land use, instead patrons stop on their way to/from other locations such as home or work. ITE identifies a 25% passby traffic percentage for the evening peak hour. It should be noted that there will realistically be passby traffic during the weekday morning and Saturday midday peak periods as well even though there is no data published by ITE, however conservatively no credit was taken for this effect. Table 4 below details the traffic volumes associated with the subject project taking into account the passby credits.

**Table 4**  
**Trip Generation Considering Passby Traffic**

| Land Use               | Trip Type            | AM PSH    |          |           | PM PSH   |           |           | SAT PSH   |           |           |
|------------------------|----------------------|-----------|----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|
|                        |                      | In        | Out      | Total     | In       | Out       | Total     | In        | Out       | Total     |
| 6,205 SF<br>Mavis Tire | Total                | 11        | 6        | 17        | 10       | 14        | 24        | 15        | 16        | 31        |
|                        | Passby               | -         | -        | -         | 3        | 3         | 6         | -         | -         | -         |
|                        | <b>New (Primary)</b> | <b>11</b> | <b>6</b> | <b>17</b> | <b>7</b> | <b>11</b> | <b>18</b> | <b>15</b> | <b>16</b> | <b>31</b> |

As can be seen above, the proposed site is projected to generate 17 trips during the weekday morning peak hour, 18 trips during the weekday evening peak hour, and 31 trips during the midday Saturday peak hour. It should be noted that the number of new trips falls below the industry accepted standard of a significant increase in traffic of 50 trips. Based on *Transportation Impact Analysis for Site Development*, published by the ITE "it is suggested that a transportation impact study be conducted whenever a proposed development will generate 50 or more added (new) trips during the adjacent roadways' peak hour or the development's peak hour." As such, it is not anticipated that the change in use will result in a significant degradation of operating conditions.

### Trip Generation Comparison

As previously noted, the site is currently occupied by an office building which has an existing trip generation. Trip generation projections for the office building were prepared utilizing trip generation research data as published under Land Use Code 712 – Small Office Building in the Institute of Transportation Engineers' (ITE) publication, *Trip Generation Manual, 12<sup>th</sup> Edition*. The table below provides a comparison between the trips associated with the existing site and the trips projected for the proposed redevelopment.

**Table 5**  
**Existing vs. Proposed Primary Trip Generation Comparison**

| Land Use                                      | AM PSH    |           |           | PM PSH    |           |           | SAT PSH    |            |            |
|-----------------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|
|                                               | In        | Out       | Total     | In        | Out       | Total     | In         | Out        | Total      |
| 6,668 SF Office Building ( <i>Existing</i> )  | 9         | 2         | 11        | 5         | 9         | 14        | 4          | 3          | 7          |
| 6,205 SF Mavis Tire Store ( <i>Proposed</i> ) | 11        | 6         | 17        | 7         | 11        | 18        | 15         | 16         | 31         |
| <b>Difference</b>                             | <b>+2</b> | <b>+4</b> | <b>+6</b> | <b>+2</b> | <b>+2</b> | <b>+4</b> | <b>+11</b> | <b>+13</b> | <b>+24</b> |

As shown in the table above, it is anticipated that 6 additional trips during the weekday morning peak hour, 4 additional trips during the weekday evening peak hour, and 24 additional trips during the Saturday midday peak hour are anticipated to access the site from the adjacent roadway network with the proposed redevelopment. However, in order to perform a conservative analysis, no credit was taken for the existing trip generation of the office building. Rather the trip generation of the proposed Mavis Tire store was surcharged over vacant land in order to perform the “worst case scenario” from a traffic perspective.

#### *Trip Distribution*

Once the magnitude of traffic to be generated by the site is known, it is necessary to assign that traffic to the adjacent street system. The distribution of new traffic to the surrounding roadways is based on the location of primary arterial roadways, major signalized intersections and existing traffic patterns. Figures 7-11, located in Appendix A, illustrate the Primary Traffic Trip Distribution, Primary Site Generated Volumes, Passby Traffic Trip Distribution, Passby Site Generated Volumes, and the Total Site Generated Volumes, respectively. The Total Site Generated Volumes assigned to the study area network were added to the 2028 No Build traffic volumes to generate the 2028 Build traffic volumes, which are shown in Figure 12.

## Future Capacity Analysis

Operational conditions at the study intersections were analyzed under the No Build and Build conditions and are summarized in the table below.

**Table 6  
Future Levels of Service**

| Intersection                                                                | Direction/<br>Movement |      | AM PSH       |              | PM PSH        |               | Sat PSH       |               |
|-----------------------------------------------------------------------------|------------------------|------|--------------|--------------|---------------|---------------|---------------|---------------|
|                                                                             |                        |      | No<br>Build  | Build        | No<br>Build   | Build         | No<br>Build   | Build         |
| Prospect Avenue (CR 577)<br>and Rooney Circle /<br>Shopping Center Driveway | EB                     | L    | D (38)       | D (38)       | C (35)        | D (35)        | C (34)        | C (35)        |
|                                                                             |                        | TR   | A (1)        | A (1)        | A (1)         | A (1)         | A (1)         | A (1)         |
|                                                                             | WB                     | LTR  | D (41)       | D (41)       | D (36)        | D (36)        | D (35)        | D (36)        |
|                                                                             | NB                     | L    | A (6)        | A (6)        | A (8)         | A (8)         | A (8)         | A (8)         |
|                                                                             |                        | TR   | A (6)        | A (6)        | A (8)         | A (8)         | A (7)         | A (8)         |
|                                                                             | SB                     | LT   | B (10)       | B (10)       | B (15)        | B (15)        | B (16)        | B (16)        |
|                                                                             |                        | R    | A (3)        | A (3)        | A (4)         | A (4)         | A (5)         | A (5)         |
|                                                                             | <b>Overall</b>         |      | <b>A (9)</b> | <b>A (9)</b> | <b>B (12)</b> | <b>B (12)</b> | <b>B (12)</b> | <b>B (12)</b> |
| Prospect Avenue (577) and<br>Blueberry Bend Driveway                        | WB                     | LR/R | a (10)       | a (10)       | b (13)        | b (12)        | b (10)        | b (11)        |
|                                                                             | SB                     | L    | a (8)        | -            | b (11)        | -             | a (9)         | -             |
| Prospect Avenue (CR 577)<br>and Site Driveway                               | WB                     | R    | a (10)       | a (10)       | b (11)        | b (12)        | b (10)        | b (11)        |

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)

A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

### ***Prospect Avenue (CR 577) and Rooney Circle / Shopping Center Driveway***

With the addition of site generated traffic, the intersection is projected to operate at overall No Build intersection levels of service “B” or better during the analyzed peak hours. Additionally, each movement is anticipated to operate at levels of service “D” or better with minimal increases in delays from the No Build condition. See Table 6 for the individual movement levels of service and delays.

### ***Prospect Avenue (CR 577) and Blueberry Bend Driveway***

With the addition of site generated traffic and the anticipated Essex County restriction of left turns at the driveway with additional signage and striping, the right turn movement is projected to operate at No Build levels of service “B” or better during the analyzed peak hours. See Table 6 for the individual movement levels of service and delays.

### ***Prospect Avenue (CR 577) and Site Driveway***

With the addition of site generated traffic, the individual intersection movements are projected to operate at No Build levels of service “B” or better during the analyzed peak hours. See Table 6 for the individual movement levels of service and delays.

## SITE PLAN

### Site Access and Circulation

The site plan was reviewed with respect to the site access and on-site circulation design. As noted previously, access to The Project will continue to be provided via a right in/right out driveway along Prospect Avenue and a shared right-in/right-out driveway with the neighboring property to the south, known as Blueberry Bend, which also provides access to Prospect Avenue.

The parking lot will be serviced by parking aisles with widths between 24' and 30', which satisfy the Ordinance's minimum requirement of 24'. These aisles will allow for two-way circulation and 90-degree parking. Review of the site plan design indicates that the site can sufficiently accommodate a large wheel base vehicle, such as a single unit truck (SU) and emergency vehicles, along with the automobile traffic anticipated.

### Parking

The Township of West Orange Ordinance sets forth a parking requirement of 5 parking spaces plus 2 parking spaces for each service bay and 1 for each 200 square feet of gross floor area of retail space for motor vehicle service stations. This equates to 25 spaces for the proposed Mavis Tire store with 7 service bays and 1,142 SF of retail space. The site as proposed provides 22 parking spaces, inclusive of two ADA-accessible spaces, which does not meet the Ordinance requirement. It is noted that the site provides one Make-Ready Electrical Charging space which per the New Jersey Electric Vehicle Supply/Service Equipment (EVSE) requirements counts as two spaces for the purposes of complying with the parking supply requirements. As such, the effective parking requirement for the Project is 24 spaces, including the EVSE reduction, and thus relief is required for the difference of 2 spaces.

ITE identifies a typical peak parking demand of 1.66 spaces per employee for LUC 848 in their publication *Parking Generation Manual, 6<sup>th</sup> Edition*. This equates to a total anticipated demand for The Project of 12 spaces for the proposed 7 employees on maximum shift, which is exceeded as designed. As such, the Board can feel comfortable granting the requisite relief.

It is proposed to provide parking stalls with dimensions of 9'x18', which satisfy the Ordinance minimum requirement of 9'x18'. It should be noted that industry standards recommend stall widths of between 8'9" and 9' and a length of 18' for high-turnover land uses such as The Project, which is satisfied as designed.

## **FINDINGS & CONCLUSIONS**

### **Findings**

Based upon the detailed analyses as documented herein, the following findings are noted:

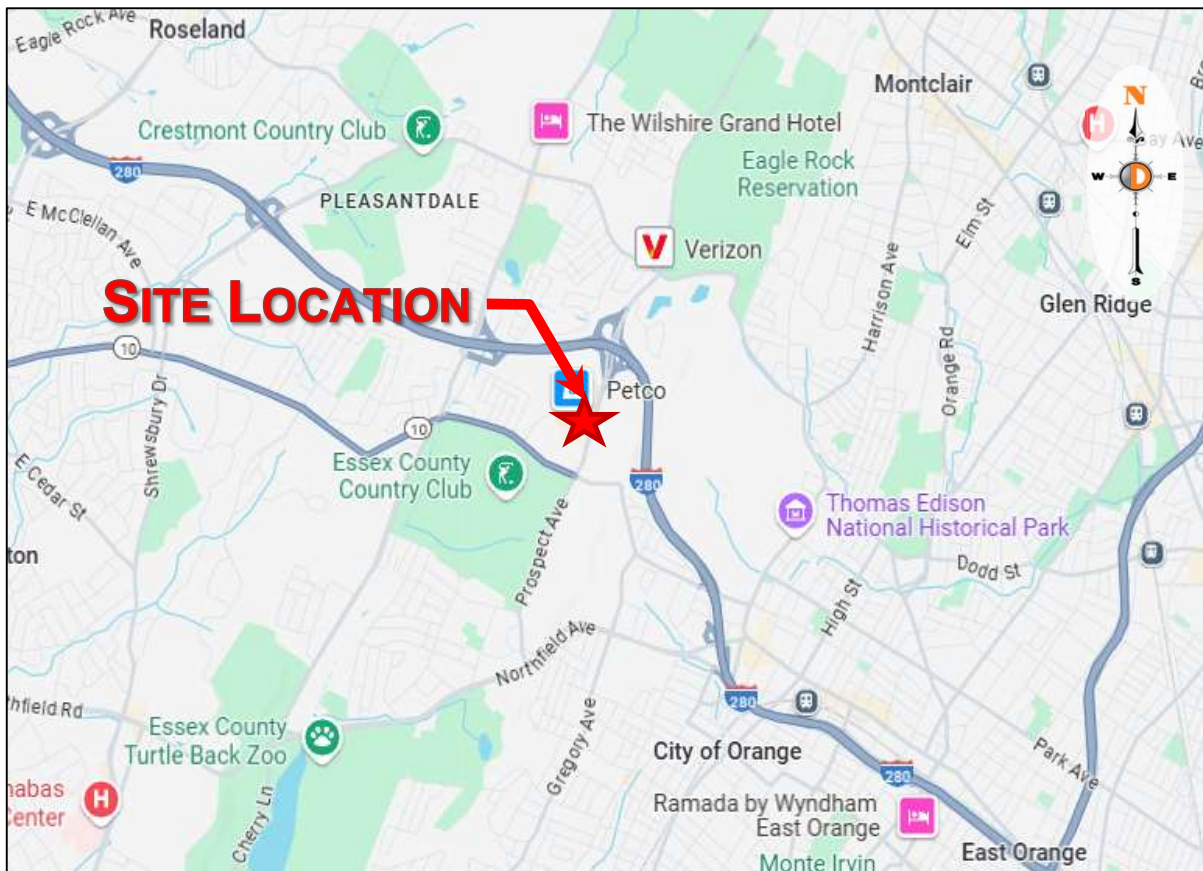
- The proposed 6,205 SF Mavis Tire store is projected to generate 11 entering trips and 6 exiting trips during the weekday morning peak hour, 7 entering trips and 11 exiting trips during the evening peak hour, and 15 entering trips and 16 exiting trips during the Saturday peak hour that are “new” to the adjacent roadway network. It should be noted that the effective number of “new” trips is even less, considering that the Mavis is replacing an existing office use.
- Access to the site is proposed to be provided via a right in/right out driveway along Prospect Avenue and a shared right-in/right-out driveway with the neighboring property to the south, known as Blueberry Bend, which also provides access to Prospect Avenue..
- With the addition of site generated traffic, the intersection of Prospect Avenue (CR 577) and Rooney Circle / Shopping Center Driveway is projected to operate at overall No Build intersection levels of service “B” or better during the analyzed peak hours. Additionally, each movement is anticipated to operate at levels of service “D” or better with minimal increases in delays from the No Build condition.
- With the addition of site generated traffic, the intersection of Prospect Avenue (CR 577) and Blueberry Bend driveway is projected to operate at No Build levels of service “B” or better during the analyzed peak periods.
- With the addition of site generated traffic, the intersection of Prospect Avenue (CR 577) and the site driveway is projected to operate at No Build levels of service “B” or better during the analyzed peak periods.
- As proposed, The Project’s site driveways and internal circulation have been designed to provide for safe and efficient movement of the anticipated vehicle mix.
- The proposed parking supply and design is sufficient to support the projected demand.

### **Conclusions**

Based upon our Traffic Impact Study as detailed in the body of this report, it is the professional opinion of Dynamic Traffic LLC that the adjacent street system of Essex County and the Township of West Orange will not experience any significant degradation in operating conditions with the redevelopment of The Project. The site driveways are located to provide safe and efficient access to the adjacent roadway system. The site plan as proposed provides for good circulation throughout the site and provides adequate parking to accommodate The Project’s needs.

## **Appendix A**

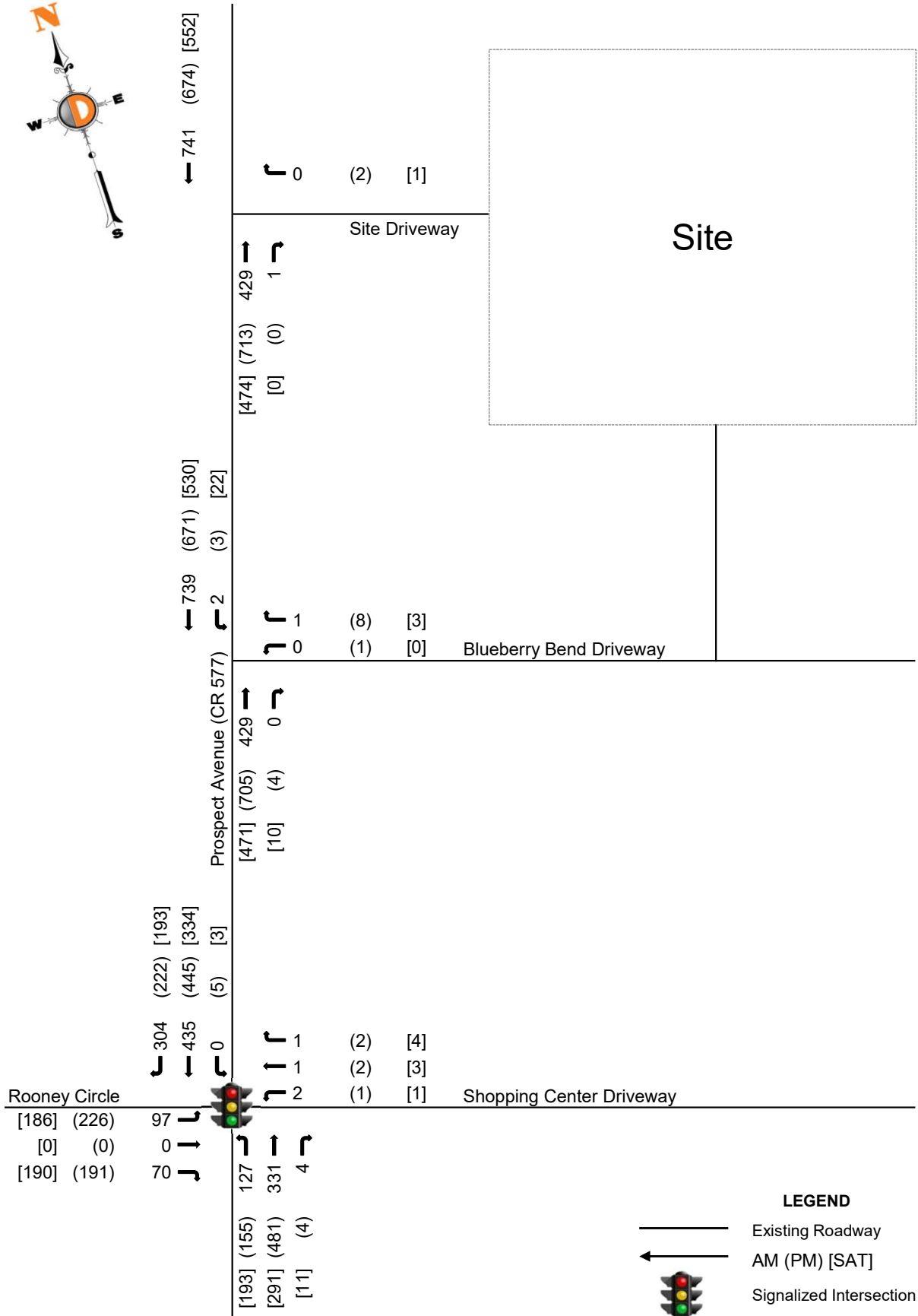
### **Traffic Volume Figures**



Proposed Automotive Service and Retail Center  
 Traffic Impact Study  
 1956 24-04212

Figure 1

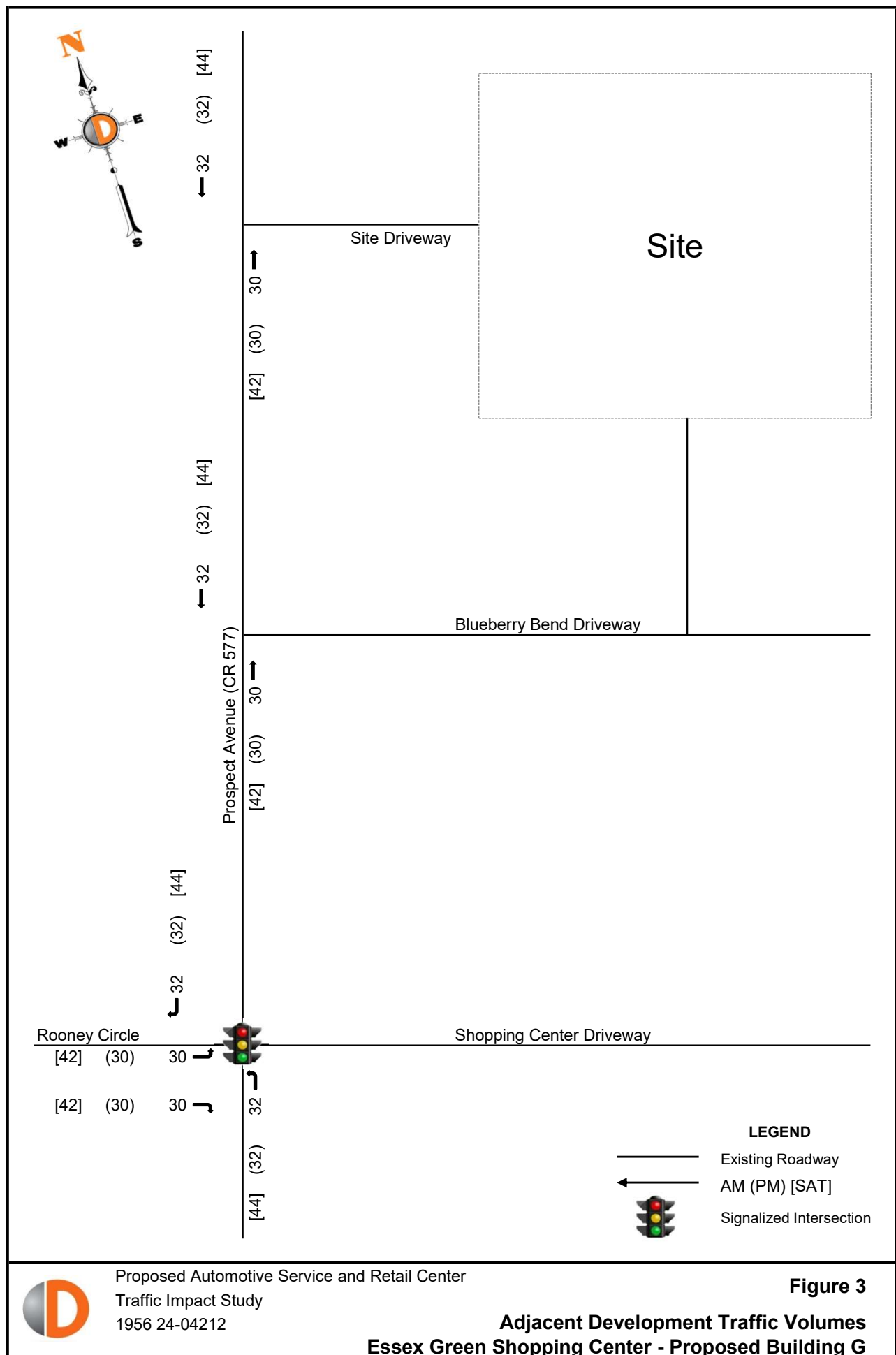
Site Location Map



Proposed Automotive Service and Retail Center  
Traffic Impact Study  
1956 24-04212

**Figure 2**

**Existing Traffic Volumes**





**Figure 4**

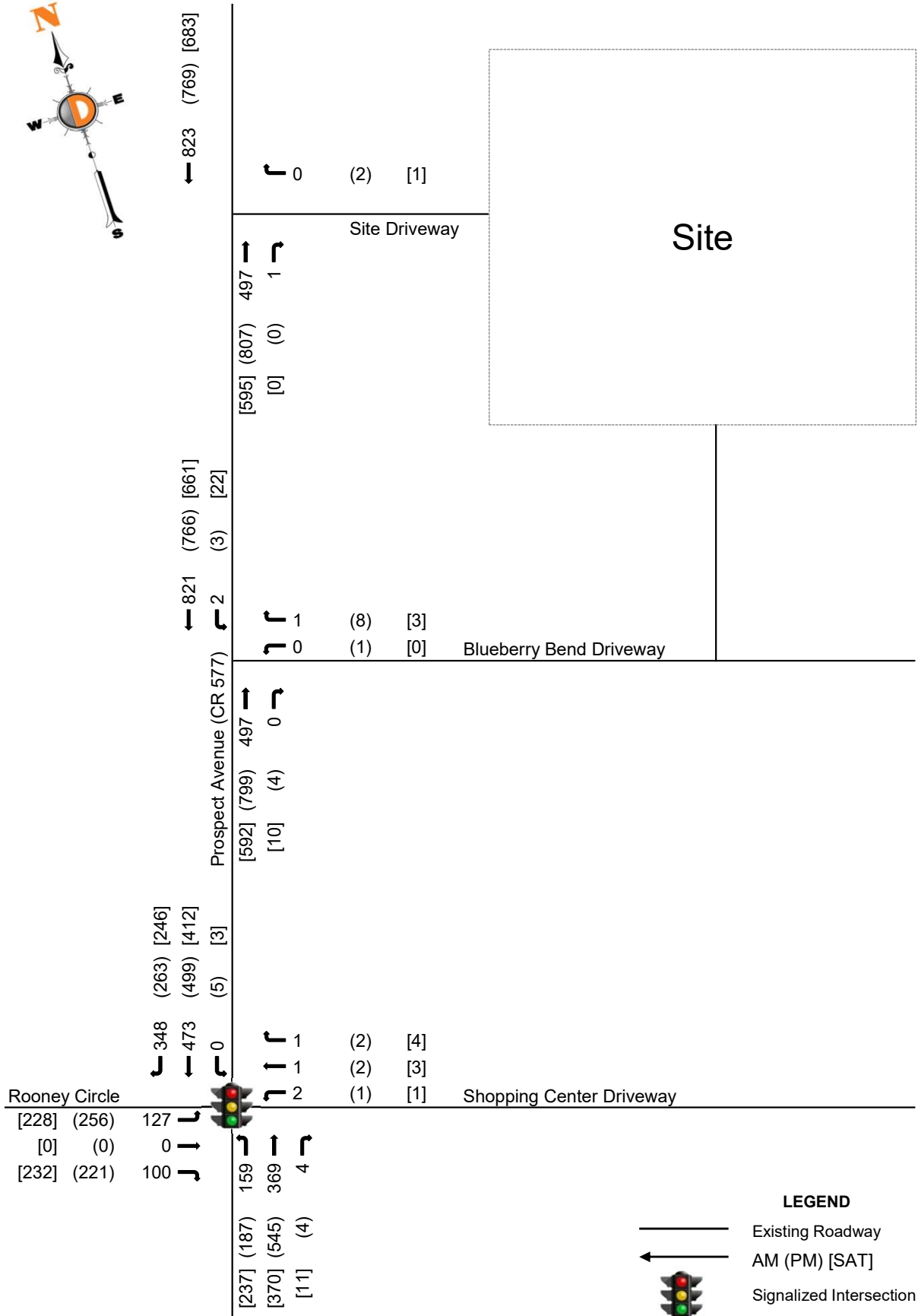
**Adjacent Development Traffic Volumes  
West Orange Plaza**



Proposed Automotive Service and Retail Center  
 Traffic Impact Study  
 1956 24-04212

**Figure 5**

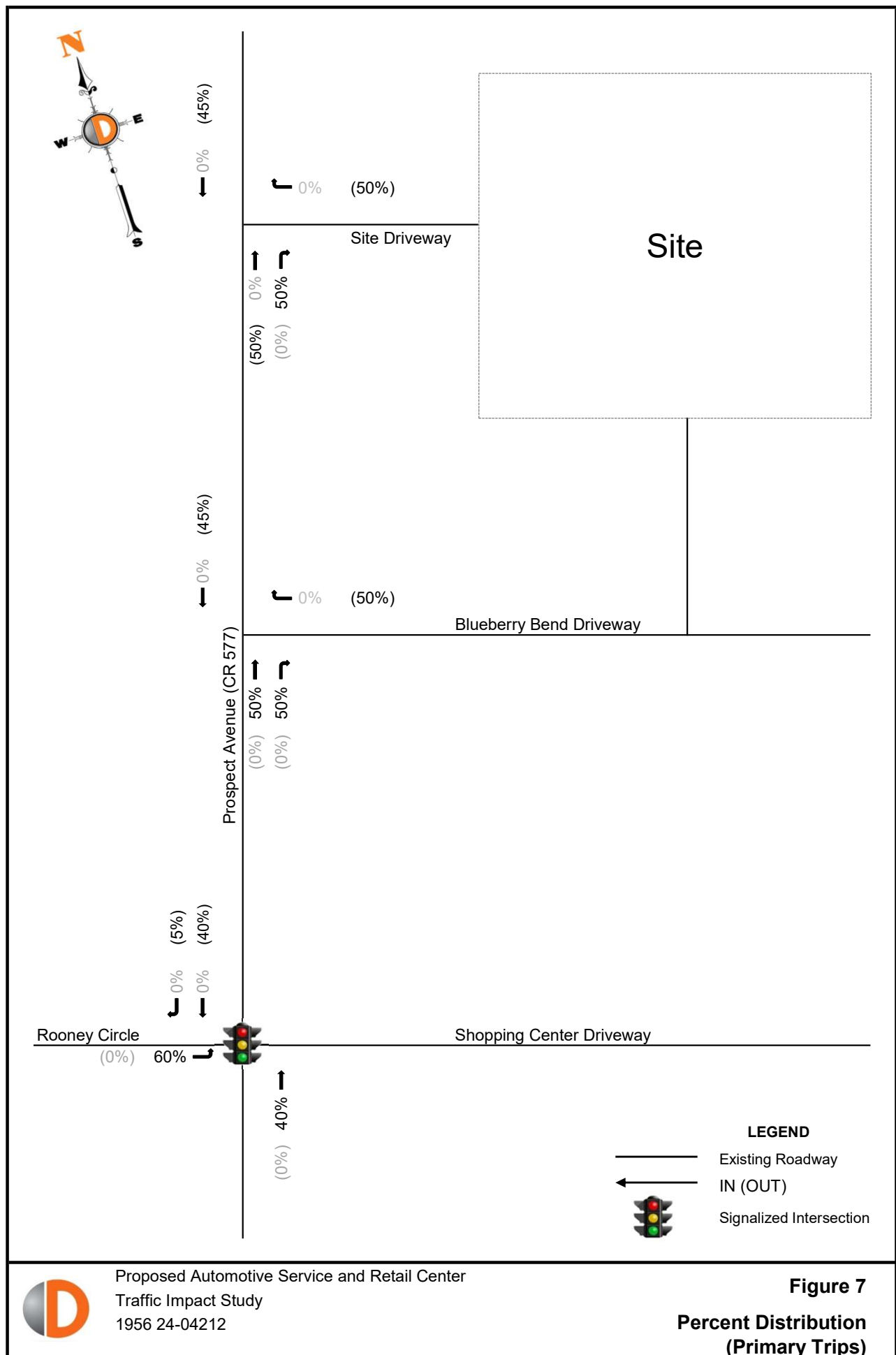
**Total Adjacent Development Traffic Volumes**

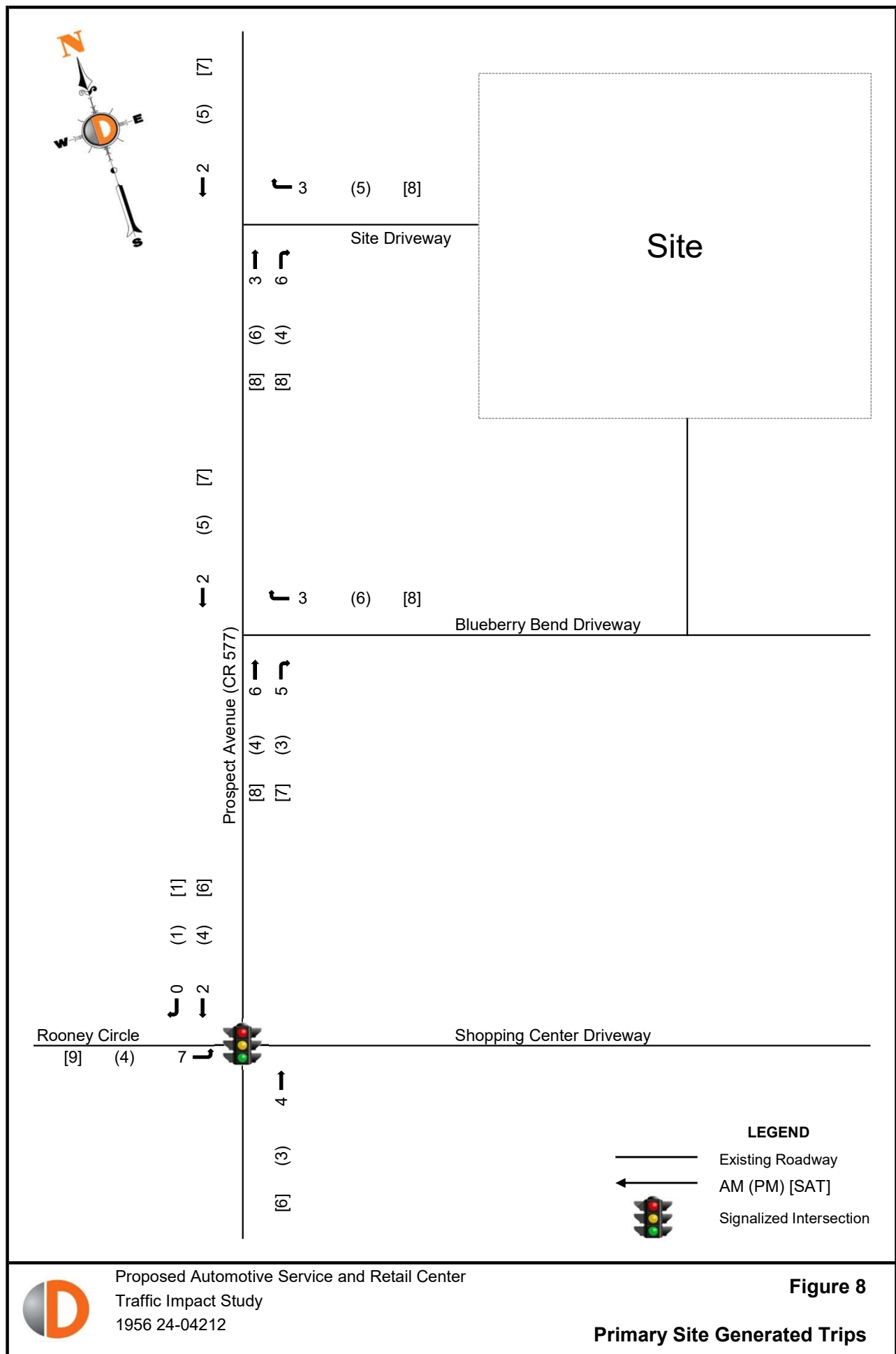


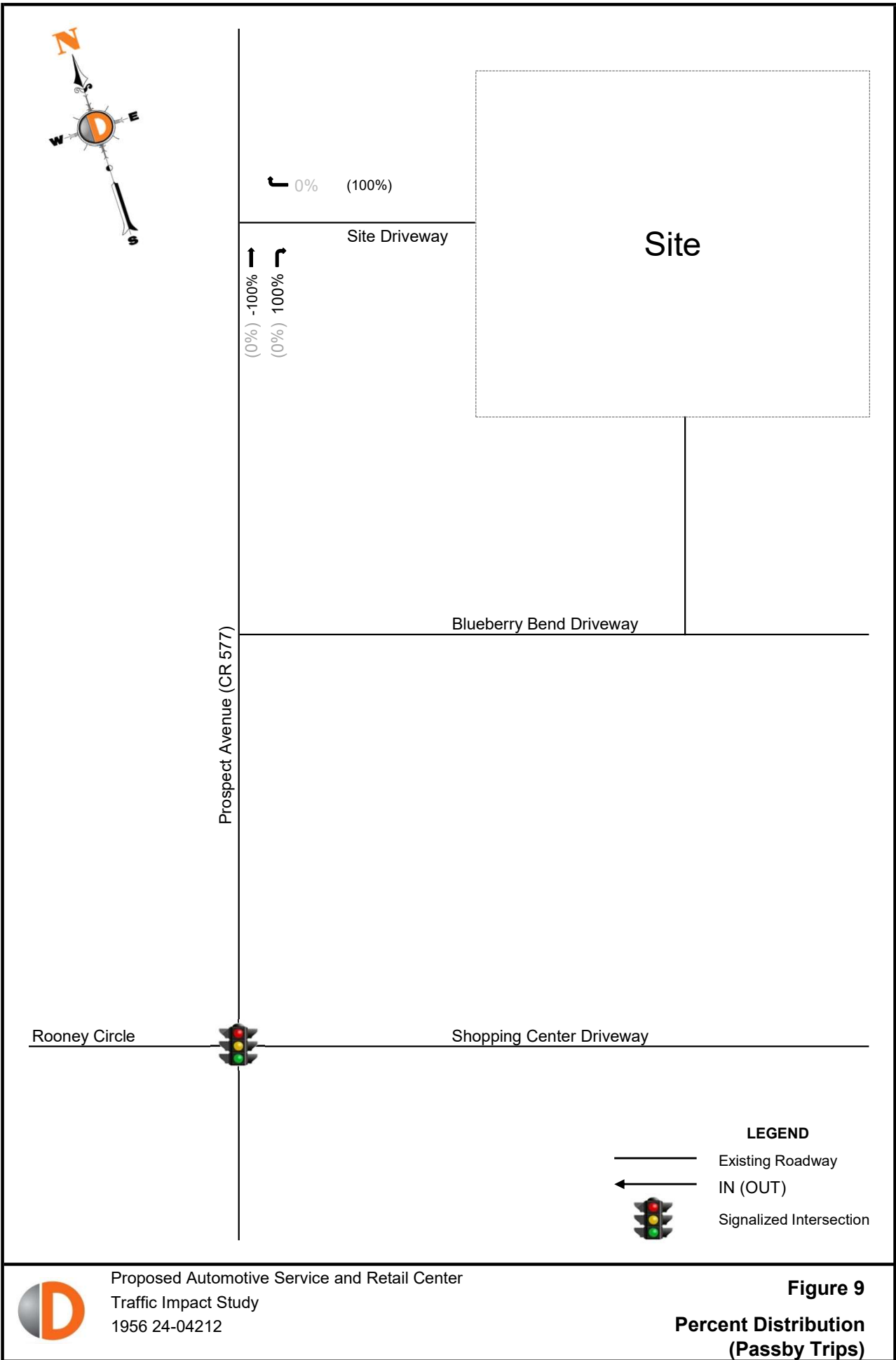
Proposed Automotive Service and Retail Center  
Traffic Impact Study  
1956 24-04212

**Figure 6**

**No Build Traffic Volumes**

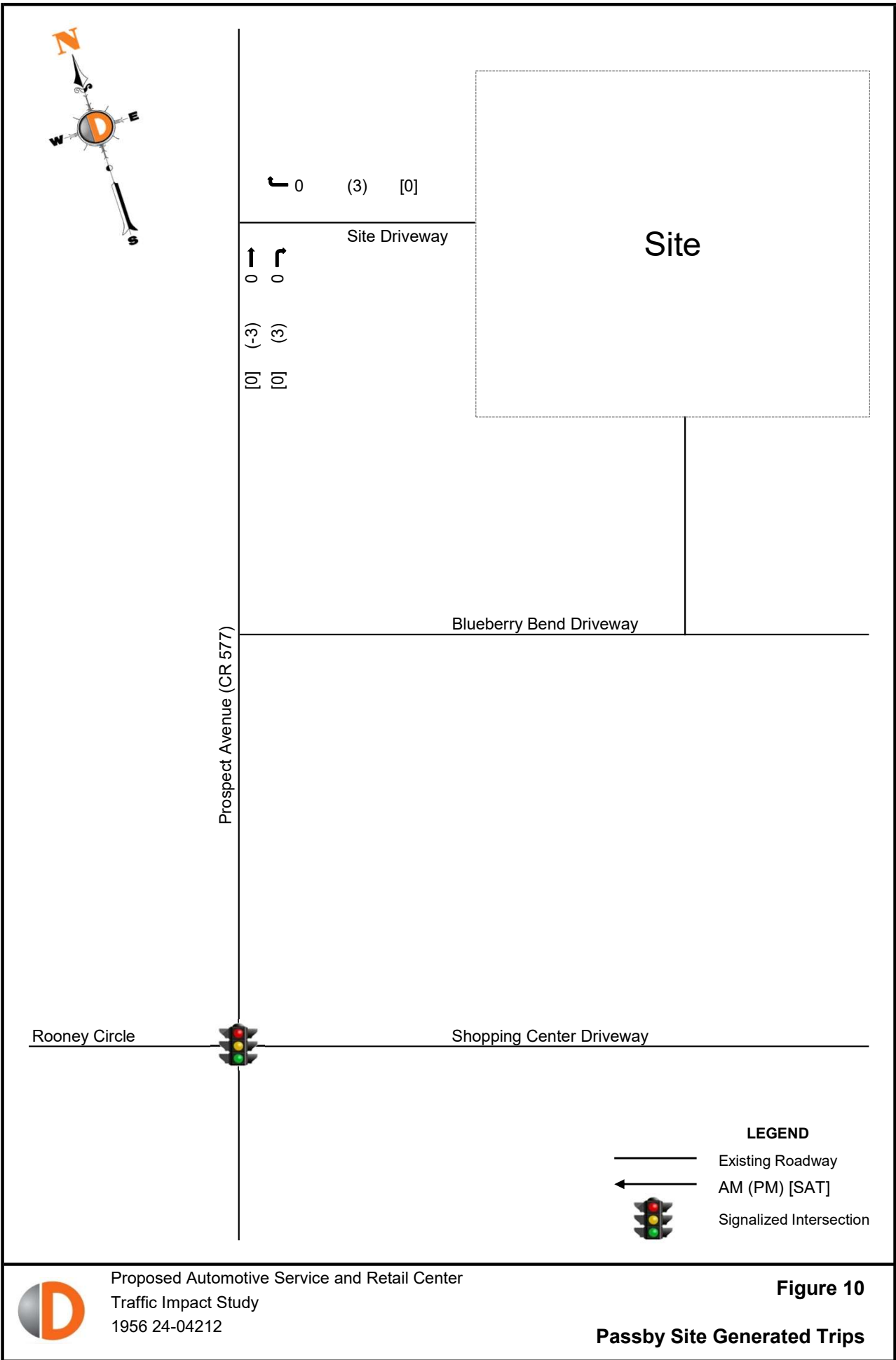


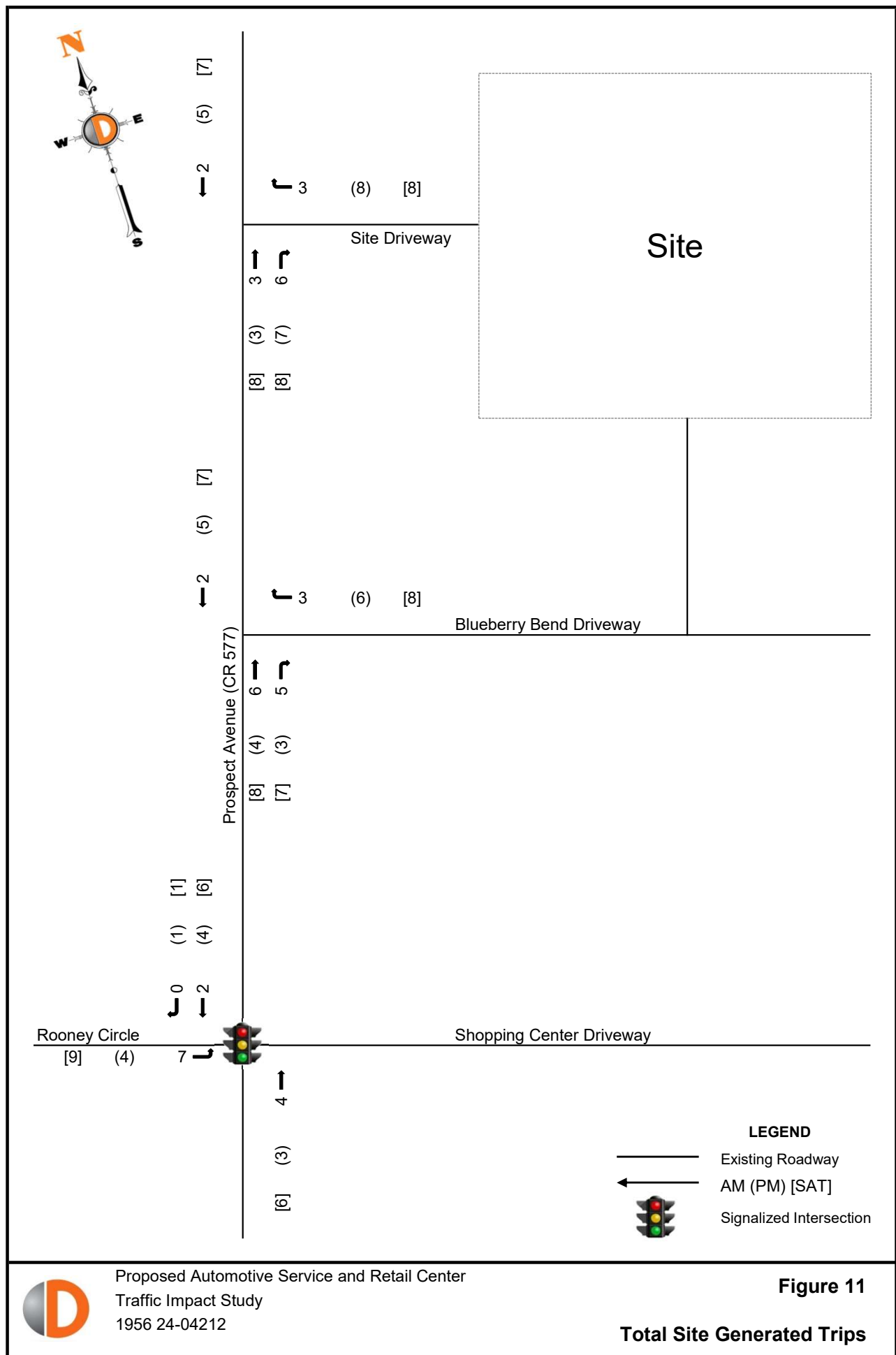


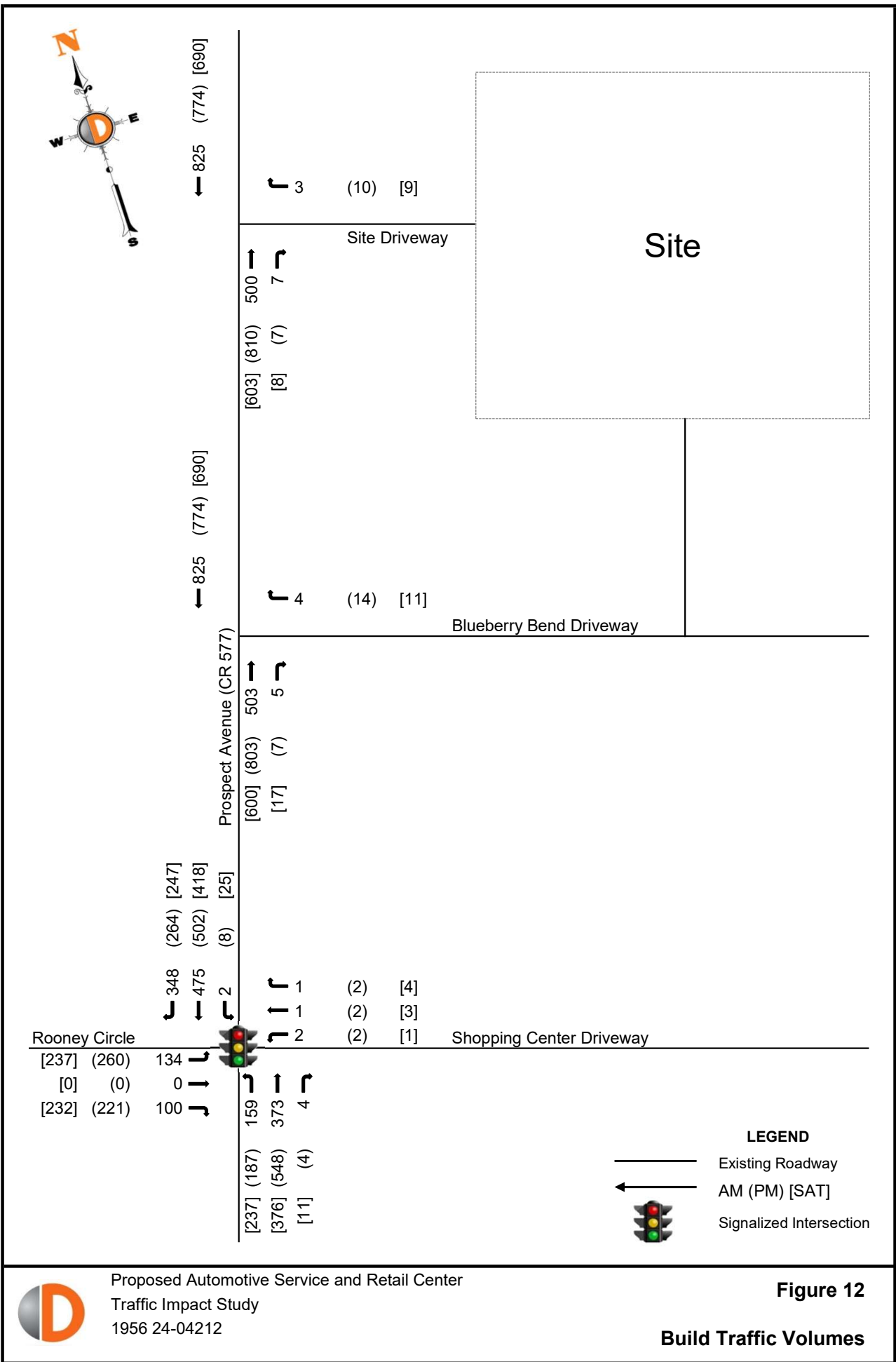


**Figure 9**

**Percent Distribution  
(Passby Trips)**







## **Appendix B**

### **Project Information**

# Dynamic Traffic, LLC

www.dynamictraffic.com

732-681-0760

E/W: Rooney Circle/Driveway  
N/S: Prospect Street (CR 577)  
Town/County: West Orange/Essex  
Job #: 1956 24-04212

File Name : Prospect Ave (CR 577) & Rooney Circle - AMPM  
Site Code : 00000000  
Start Date : 5/27/2026  
Page No : 1

Groups Printed- Cars - Trucks (SU) - Trucks (TT)

|               | Rooney Circle<br>Eastbound |      |       |      |            | Driveway<br>Westbound |      |       |      |            | Prospect Avenue (CR 577)<br>Northbound |      |       |      |            | Prospect Avenue (CR 577)<br>Southbound |      |       |      |            |            |
|---------------|----------------------------|------|-------|------|------------|-----------------------|------|-------|------|------------|----------------------------------------|------|-------|------|------------|----------------------------------------|------|-------|------|------------|------------|
| Start Time    | Left                       | Thru | Right | Peds | App. Total | Left                  | Thru | Right | Peds | App. Total | Left                                   | Thru | Right | Peds | App. Total | Left                                   | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 24                         | 0    | 13    | 0    | 37         | 1                     | 0    | 0     | 0    | 1          | 18                                     | 54   | 0     | 0    | 72         | 0                                      | 56   | 43    | 0    | 99         | 209        |
| 07:15 AM      | 25                         | 0    | 15    | 2    | 42         | 0                     | 0    | 0     | 0    | 0          | 16                                     | 80   | 0     | 0    | 96         | 0                                      | 78   | 49    | 0    | 127        | 265        |
| 07:30 AM      | 32                         | 0    | 26    | 1    | 59         | 1                     | 0    | 1     | 1    | 3          | 17                                     | 75   | 1     | 0    | 93         | 2                                      | 87   | 49    | 0    | 138        | 293        |
| 07:45 AM      | 30                         | 0    | 25    | 0    | 55         | 0                     | 0    | 0     | 0    | 0          | 21                                     | 76   | 0     | 0    | 97         | 0                                      | 114  | 67    | 0    | 181        | 333        |
| Total         | 111                        | 0    | 79    | 3    | 193        | 2                     | 0    | 1     | 1    | 4          | 72                                     | 285  | 1     | 0    | 358        | 2                                      | 335  | 208   | 0    | 545        | 1100       |
| 08:00 AM      | 22                         | 0    | 17    | 3    | 42         | 0                     | 0    | 0     | 0    | 0          | 22                                     | 86   | 0     | 0    | 108        | 0                                      | 111  | 74    | 0    | 185        | 335        |
| 08:15 AM      | 30                         | 0    | 21    | 1    | 52         | 0                     | 0    | 0     | 0    | 0          | 33                                     | 73   | 1     | 0    | 107        | 0                                      | 111  | 77    | 0    | 188        | 347        |
| 08:30 AM      | 18                         | 0    | 18    | 1    | 37         | 0                     | 0    | 0     | 0    | 0          | 30                                     | 80   | 1     | 0    | 111        | 0                                      | 110  | 83    | 0    | 193        | 341        |
| 08:45 AM      | 27                         | 0    | 14    | 1    | 42         | 2                     | 1    | 1     | 1    | 5          | 42                                     | 92   | 2     | 0    | 136        | 0                                      | 103  | 70    | 0    | 173        | 356        |
| Total         | 97                         | 0    | 70    | 6    | 173        | 2                     | 1    | 1     | 1    | 5          | 127                                    | 331  | 4     | 0    | 462        | 0                                      | 435  | 304   | 0    | 739        | 1379       |
| *** BREAK *** |                            |      |       |      |            |                       |      |       |      |            |                                        |      |       |      |            |                                        |      |       |      |            |            |
| 04:00 PM      | 47                         | 0    | 45    | 1    | 93         | 0                     | 0    | 0     | 0    | 0          | 44                                     | 102  | 0     | 0    | 146        | 1                                      | 102  | 47    | 0    | 150        | 389        |
| 04:15 PM      | 41                         | 0    | 43    | 3    | 87         | 0                     | 0    | 0     | 0    | 0          | 28                                     | 88   | 2     | 0    | 118        | 0                                      | 95   | 57    | 0    | 152        | 357        |
| 04:30 PM      | 54                         | 0    | 51    | 1    | 106        | 0                     | 1    | 1     | 0    | 2          | 38                                     | 98   | 0     | 0    | 136        | 0                                      | 111  | 44    | 0    | 155        | 399        |
| 04:45 PM      | 66                         | 0    | 42    | 1    | 109        | 0                     | 1    | 0     | 0    | 1          | 43                                     | 113  | 1     | 0    | 157        | 0                                      | 89   | 48    | 0    | 137        | 404        |
| Total         | 208                        | 0    | 181   | 6    | 395        | 0                     | 2    | 1     | 0    | 3          | 153                                    | 401  | 3     | 0    | 557        | 1                                      | 397  | 196   | 0    | 594        | 1549       |
| 05:00 PM      | 70                         | 0    | 58    | 1    | 129        | 0                     | 1    | 0     | 0    | 1          | 43                                     | 104  | 0     | 0    | 147        | 2                                      | 108  | 60    | 0    | 170        | 447        |
| 05:15 PM      | 62                         | 0    | 50    | 0    | 112        | 0                     | 0    | 0     | 0    | 0          | 35                                     | 107  | 0     | 0    | 142        | 2                                      | 103  | 52    | 0    | 157        | 411        |
| 05:30 PM      | 48                         | 0    | 49    | 0    | 97         | 0                     | 1    | 0     | 0    | 1          | 40                                     | 133  | 1     | 0    | 174        | 0                                      | 116  | 56    | 0    | 172        | 444        |
| 05:45 PM      | 46                         | 0    | 34    | 1    | 81         | 1                     | 0    | 2     | 0    | 3          | 37                                     | 137  | 3     | 0    | 177        | 1                                      | 118  | 54    | 0    | 173        | 434        |
| Total         | 226                        | 0    | 191   | 2    | 419        | 1                     | 2    | 2     | 0    | 5          | 155                                    | 481  | 4     | 0    | 640        | 5                                      | 445  | 222   | 0    | 672        | 1736       |
| 06:00 PM      | 49                         | 0    | 35    | 0    | 84         | 1                     | 0    | 0     | 0    | 1          | 55                                     | 136  | 1     | 0    | 192        | 0                                      | 109  | 50    | 0    | 159        | 436        |
| 06:15 PM      | 39                         | 0    | 55    | 1    | 95         | 0                     | 0    | 1     | 1    | 2          | 43                                     | 131  | 0     | 0    | 174        | 1                                      | 91   | 41    | 0    | 133        | 404        |
| Grand Total   | 730                        | 0    | 611   | 18   | 1359       | 6                     | 5    | 6     | 3    | 20         | 605                                    | 1765 | 13    | 0    | 2383       | 9                                      | 1812 | 1021  | 0    | 2842       | 6604       |
| Apprch %      | 53.7                       | 0    | 45    | 1.3  |            | 30                    | 25   | 30    | 15   |            | 25.4                                   | 74.1 | 0.5   | 0    |            | 0.3                                    | 63.8 | 35.9  | 0    |            |            |
| Total %       | 11.1                       | 0    | 9.3   | 0.3  | 20.6       | 0.1                   | 0.1  | 0.1   | 0    | 0.3        | 9.2                                    | 26.7 | 0.2   | 0    | 36.1       | 0.1                                    | 27.4 | 15.5  | 0    | 43         |            |
| Cars          | 725                        | 0    | 610   | 18   | 1353       | 6                     | 5    | 6     | 3    | 20         | 597                                    | 1712 | 13    | 0    | 2322       | 9                                      | 1771 | 1016  | 0    | 2796       | 6491       |
| % Cars        | 99.3                       | 0    | 99.8  | 100  | 99.6       | 100                   | 100  | 100   | 100  | 100        | 98.7                                   | 97   | 100   | 0    | 97.4       | 100                                    | 97.7 | 99.5  | 0    | 98.4       | 98.3       |
| Trucks (SU)   | 4                          | 0    | 1     | 0    | 5          | 0                     | 0    | 0     | 0    | 0          | 8                                      | 50   | 0     | 0    | 58         | 0                                      | 41   | 5     | 0    | 46         | 109        |
| % Trucks (SU) | 0.5                        | 0    | 0.2   | 0    | 0.4        | 0                     | 0    | 0     | 0    | 0          | 1.3                                    | 2.8  | 0     | 0    | 2.4        | 0                                      | 2.3  | 0.5   | 0    | 1.6        | 1.7        |
| Trucks (TT)   | 1                          | 0    | 0     | 0    | 1          | 0                     | 0    | 0     | 0    | 0          | 0                                      | 3    | 0     | 0    | 3          | 0                                      | 0    | 0     | 0    | 0          | 4          |
| % Trucks (TT) | 0.1                        | 0    | 0     | 0    | 0.1        | 0                     | 0    | 0     | 0    | 0          | 0                                      | 0.2  | 0     | 0    | 0.1        | 0                                      | 0    | 0     | 0    | 0          | 0.1        |

# Dynamic Traffic, LLC

www.dynamictraffic.com

732-681-0760

E/W: Rooney Circle/Driveway  
N/S: Prospect Street (CR 577)  
Town/County: West Orange/Essex  
Job #: 1956 24-04212

File Name : Prospect Ave (CR 577) & Rooney Circle - AMPM  
Site Code : 00000000  
Start Date : 5/27/2026  
Page No : 2

|            | Rooney Circle<br>Eastbound |      |       |      |            | Driveway<br>Westbound |      |       |      |            | Prospect Avenue (CR 577)<br>Northbound |      |       |      |            | Prospect Avenue (CR 577)<br>Southbound |      |       |      |            |            |
|------------|----------------------------|------|-------|------|------------|-----------------------|------|-------|------|------------|----------------------------------------|------|-------|------|------------|----------------------------------------|------|-------|------|------------|------------|
| Start Time | Left                       | Thru | Right | Peds | App. Total | Left                  | Thru | Right | Peds | App. Total | Left                                   | Thru | Right | Peds | App. Total | Left                                   | Thru | Right | Peds | App. Total | Int. Total |

Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 08:00 AM

|               |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 08:00 AM      | 22   | 0    | 17   | 3    | 42   | 0    | 0    | 0    | 0    | 0    | 22   | 86   | 0    | 0    | 108  | 0    | 111  | 74   | 0    | 185  | 335  |
| 08:15 AM      | 30   | 0    | 21   | 1    | 52   | 0    | 0    | 0    | 0    | 0    | 33   | 73   | 1    | 0    | 107  | 0    | 111  | 77   | 0    | 188  | 347  |
| 08:30 AM      | 18   | 0    | 18   | 1    | 37   | 0    | 0    | 0    | 0    | 0    | 30   | 80   | 1    | 0    | 111  | 0    | 110  | 83   | 0    | 193  | 341  |
| 08:45 AM      | 27   | 0    | 14   | 1    | 42   | 2    | 1    | 1    | 1    | 5    | 42   | 92   | 2    | 0    | 136  | 0    | 103  | 70   | 0    | 173  | 356  |
| Total Volume  | 97   | 0    | 70   | 6    | 173  | 2    | 1    | 1    | 1    | 5    | 127  | 331  | 4    | 0    | 462  | 0    | 435  | 304  | 0    | 739  | 1379 |
| % App. Total  | 56.1 | 0    | 40.5 | 3.5  |      | 40   | 20   | 20   | 20   |      | 27.5 | 71.6 | 0.9  | 0    |      | 0    | 58.9 | 41.1 | 0    |      |      |
| PHF           | .808 | .000 | .833 | .500 | .832 | .250 | .250 | .250 | .250 | .250 | .756 | .899 | .500 | .000 | .849 | .000 | .980 | .916 | .000 | .957 | .968 |
| Cars          | 95   | 0    | 70   | 6    | 171  | 2    | 1    | 1    | 1    | 5    | 125  | 313  | 4    | 0    | 442  | 0    | 417  | 304  | 0    | 721  | 1339 |
| % Cars        | 97.9 | 0    | 100  | 100  | 98.8 | 100  | 100  | 100  | 100  | 100  | 98.4 | 94.6 | 100  | 0    | 95.7 | 0    | 95.9 | 100  | 0    | 97.6 | 97.1 |
| Trucks (SU)   | 2    | 0    | 0    | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 2    | 17   | 0    | 0    | 19   | 0    | 18   | 0    | 0    | 18   | 39   |
| % Trucks (SU) | 2.1  | 0    | 0    | 0    | 1.2  | 0    | 0    | 0    | 0    | 0    | 1.6  | 5.1  | 0    | 0    | 4.1  | 0    | 4.1  | 0    | 0    | 2.4  | 2.8  |
| Trucks (TT)   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 1    |
| % Trucks (TT) | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0.3  | 0    | 0    | 0.2  | 0    | 0    | 0    | 0    | 0    | 0.1  |

Peak Hour Analysis From 12:00 PM to 06:15 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 05:00 PM

|               |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 05:00 PM      | 70   | 0    | 58   | 1    | 129  | 0    | 1    | 0    | 0    | 1    | 43   | 104  | 0    | 0    | 147  | 2    | 108  | 60   | 0    | 170  | 447  |
| 05:15 PM      | 62   | 0    | 50   | 0    | 112  | 0    | 0    | 0    | 0    | 0    | 35   | 107  | 0    | 0    | 142  | 2    | 103  | 52   | 0    | 157  | 411  |
| 05:30 PM      | 48   | 0    | 49   | 0    | 97   | 0    | 1    | 0    | 0    | 1    | 40   | 133  | 1    | 0    | 174  | 0    | 116  | 56   | 0    | 172  | 444  |
| 05:45 PM      | 46   | 0    | 34   | 1    | 81   | 1    | 0    | 2    | 0    | 3    | 37   | 137  | 3    | 0    | 177  | 1    | 118  | 54   | 0    | 173  | 434  |
| Total Volume  | 226  | 0    | 191  | 2    | 419  | 1    | 2    | 2    | 0    | 5    | 155  | 481  | 4    | 0    | 640  | 5    | 445  | 222  | 0    | 672  | 1736 |
| % App. Total  | 53.9 | 0    | 45.6 | 0.5  |      | 20   | 40   | 40   | 0    |      | 24.2 | 75.2 | 0.6  | 0    |      | 0.7  | 66.2 | 33   | 0    |      |      |
| PHF           | .807 | .000 | .823 | .500 | .812 | .250 | .500 | .250 | .000 | .417 | .901 | .878 | .333 | .000 | .904 | .625 | .943 | .925 | .000 | .971 | .971 |
| Cars          | 226  | 0    | 191  | 2    | 419  | 1    | 2    | 2    | 0    | 5    | 153  | 475  | 4    | 0    | 632  | 5    | 440  | 222  | 0    | 667  | 1723 |
| % Cars        | 100  | 0    | 100  | 100  | 100  | 100  | 100  | 100  | 0    | 100  | 98.7 | 98.8 | 100  | 0    | 98.8 | 100  | 98.9 | 100  | 0    | 99.3 | 99.3 |
| Trucks (SU)   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 2    | 5    | 0    | 0    | 7    | 0    | 5    | 0    | 0    | 5    | 12   |
| % Trucks (SU) | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1.3  | 1.0  | 0    | 0    | 1.1  | 0    | 1.1  | 0    | 0    | 0.7  | 0.7  |
| Trucks (TT)   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 1    |
| % Trucks (TT) | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0.2  | 0    | 0    | 0.2  | 0    | 0    | 0    | 0    | 0    | 0.1  |

# Dynamic Traffic, LLC

www.dynamictraffic.com

732-681-0760

E/W: Rooney Circle/Driveway  
N/S: Prospect Street (CR 577)  
Town/County: West Orange/Essex  
Job #: 1956 24-04212

File Name : Prospect Ave (CR 577) & Rooney Circle - SAT  
Site Code : 00000000  
Start Date : 6/21/2025  
Page No : 1

Groups Printed- Cars - Trucks (SU) - Trucks (TT)

|               | Rooney Circle<br>Eastbound |      |       |      |            | Driveway<br>Westbound |      |       |      |            | Prospect Avenue (CR 577)<br>Northbound |      |       |      |            | Prospect Avenue (CR 577)<br>Southbound |      |       |      |            |            |
|---------------|----------------------------|------|-------|------|------------|-----------------------|------|-------|------|------------|----------------------------------------|------|-------|------|------------|----------------------------------------|------|-------|------|------------|------------|
| Start Time    | Left                       | Thru | Right | Peds | App. Total | Left                  | Thru | Right | Peds | App. Total | Left                                   | Thru | Right | Peds | App. Total | Left                                   | Thru | Right | Peds | App. Total | Int. Total |
| 11:00 AM      | 48                         | 0    | 43    | 5    | 96         | 0                     | 0    | 2     | 0    | 2          | 44                                     | 66   | 6     | 2    | 118        | 2                                      | 89   | 54    | 0    | 145        | 361        |
| 11:15 AM      | 51                         | 0    | 47    | 1    | 99         | 0                     | 1    | 0     | 0    | 1          | 53                                     | 69   | 1     | 1    | 124        | 0                                      | 62   | 38    | 0    | 100        | 324        |
| 11:30 AM      | 44                         | 0    | 41    | 0    | 85         | 0                     | 1    | 1     | 0    | 2          | 49                                     | 73   | 1     | 0    | 123        | 1                                      | 82   | 49    | 0    | 132        | 342        |
| 11:45 AM      | 43                         | 0    | 59    | 0    | 102        | 1                     | 1    | 1     | 0    | 3          | 47                                     | 73   | 3     | 0    | 123        | 0                                      | 90   | 52    | 0    | 142        | 370        |
| Total         | 186                        | 0    | 190   | 6    | 382        | 1                     | 3    | 4     | 0    | 8          | 193                                    | 281  | 11    | 3    | 488        | 3                                      | 323  | 193   | 0    | 519        | 1397       |
| 12:00 PM      | 58                         | 0    | 43    | 0    | 101        | 2                     | 0    | 4     | 0    | 6          | 27                                     | 55   | 1     | 0    | 83         | 3                                      | 78   | 40    | 0    | 121        | 311        |
| 12:15 PM      | 44                         | 0    | 50    | 0    | 94         | 0                     | 0    | 2     | 1    | 3          | 30                                     | 72   | 2     | 1    | 105        | 1                                      | 94   | 52    | 0    | 147        | 349        |
| 12:30 PM      | 50                         | 0    | 61    | 0    | 111        | 1                     | 0    | 3     | 0    | 4          | 39                                     | 69   | 4     | 0    | 112        | 4                                      | 70   | 40    | 0    | 114        | 341        |
| 12:45 PM      | 58                         | 0    | 48    | 2    | 108        | 0                     | 2    | 1     | 0    | 3          | 49                                     | 73   | 2     | 0    | 124        | 2                                      | 76   | 43    | 0    | 121        | 356        |
| Total         | 210                        | 0    | 202   | 2    | 414        | 3                     | 2    | 10    | 1    | 16         | 145                                    | 269  | 9     | 1    | 424        | 10                                     | 318  | 175   | 0    | 503        | 1357       |
| 01:00 PM      | 46                         | 0    | 51    | 0    | 97         | 0                     | 0    | 0     | 0    | 0          | 20                                     | 43   | 3     | 0    | 66         | 3                                      | 77   | 57    | 0    | 137        | 300        |
| 01:15 PM      | 41                         | 0    | 45    | 0    | 86         | 0                     | 1    | 0     | 0    | 1          | 37                                     | 72   | 3     | 0    | 112        | 1                                      | 94   | 50    | 0    | 145        | 344        |
| 01:30 PM      | 42                         | 0    | 55    | 2    | 99         | 1                     | 0    | 1     | 0    | 2          | 42                                     | 73   | 2     | 3    | 120        | 0                                      | 74   | 61    | 0    | 135        | 356        |
| 01:45 PM      | 35                         | 0    | 52    | 0    | 87         | 0                     | 0    | 4     | 0    | 4          | 36                                     | 86   | 0     | 0    | 122        | 1                                      | 85   | 50    | 0    | 136        | 349        |
| Total         | 164                        | 0    | 203   | 2    | 369        | 1                     | 1    | 5     | 0    | 7          | 135                                    | 274  | 8     | 3    | 420        | 5                                      | 330  | 218   | 0    | 553        | 1349       |
| Grand Total   | 560                        | 0    | 595   | 10   | 1165       | 5                     | 6    | 19    | 1    | 31         | 473                                    | 824  | 28    | 7    | 1332       | 18                                     | 971  | 586   | 0    | 1575       | 4103       |
| Apprch %      | 48.1                       | 0    | 51.1  | 0.9  |            | 16.1                  | 19.4 | 61.3  | 3.2  |            | 35.5                                   | 61.9 | 2.1   | 0.5  |            | 1.1                                    | 61.7 | 37.2  | 0    |            |            |
| Total %       | 13.6                       | 0    | 14.5  | 0.2  | 28.4       | 0.1                   | 0.1  | 0.5   | 0    | 0.8        | 11.5                                   | 20.1 | 0.7   | 0.2  | 32.5       | 0.4                                    | 23.7 | 14.3  | 0    | 38.4       |            |
| Cars          | 557                        | 0    | 594   | 10   | 1161       | 5                     | 6    | 19    | 1    | 31         | 472                                    | 816  | 28    | 7    | 1323       | 18                                     | 964  | 583   | 0    | 1565       | 4080       |
| % Cars        | 99.5                       | 0    | 99.8  | 100  | 99.7       | 100                   | 100  | 100   | 100  | 100        | 99.8                                   | 99   | 100   | 100  | 99.3       | 100                                    | 99.3 | 99.5  | 0    | 99.4       | 99.4       |
| Trucks (SU)   | 3                          | 0    | 1     | 0    | 4          | 0                     | 0    | 0     | 0    | 0          | 1                                      | 8    | 0     | 0    | 9          | 0                                      | 6    | 2     | 0    | 8          | 21         |
| % Trucks (SU) | 0.5                        | 0    | 0.2   | 0    | 0.3        | 0                     | 0    | 0     | 0    | 0          | 0.2                                    | 1    | 0     | 0    | 0.7        | 0                                      | 0.6  | 0.3   | 0    | 0.5        | 0.5        |
| Trucks (TT)   | 0                          | 0    | 0     | 0    | 0          | 0                     | 0    | 0     | 0    | 0          | 0                                      | 0    | 0     | 0    | 0          | 0                                      | 1    | 1     | 0    | 2          | 2          |
| % Trucks (TT) | 0                          | 0    | 0     | 0    | 0          | 0                     | 0    | 0     | 0    | 0          | 0                                      | 0    | 0     | 0    | 0          | 0                                      | 0.1  | 0.2   | 0    | 0.1        | 0          |

# Dynamic Traffic, LLC

www.dynamictraffic.com

732-681-0760

E/W: Rooney Circle/Driveway  
N/S: Prospect Street (CR 577)  
Town/County: West Orange/Essex  
Job #: 1956 24-04212

File Name : Prospect Ave (CR 577) & Rooney Circle - SAT  
Site Code : 00000000  
Start Date : 6/21/2025  
Page No : 2

|                                                            | Rooney Circle<br>Eastbound |      |       |      |            | Driveway<br>Westbound |      |       |      |            | Prospect Avenue (CR 577)<br>Northbound |      |       |      |            | Prospect Avenue (CR 577)<br>Southbound |      |       |      |            |            |
|------------------------------------------------------------|----------------------------|------|-------|------|------------|-----------------------|------|-------|------|------------|----------------------------------------|------|-------|------|------------|----------------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                       | Thru | Right | Peds | App. Total | Left                  | Thru | Right | Peds | App. Total | Left                                   | Thru | Right | Peds | App. Total | Left                                   | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1 |                            |      |       |      |            |                       |      |       |      |            |                                        |      |       |      |            |                                        |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 11:00 AM       |                            |      |       |      |            |                       |      |       |      |            |                                        |      |       |      |            |                                        |      |       |      |            |            |
| 11:00 AM                                                   | 48                         | 0    | 43    | 5    | 96         | 0                     | 0    | 2     | 0    | 2          | 44                                     | 66   | 6     | 2    | 118        | 2                                      | 89   | 54    | 0    | 145        | 361        |
| 11:15 AM                                                   | 51                         | 0    | 47    | 1    | 99         | 0                     | 1    | 0     | 0    | 1          | 53                                     | 69   | 1     | 1    | 124        | 0                                      | 62   | 38    | 0    | 100        | 324        |
| 11:30 AM                                                   | 44                         | 0    | 41    | 0    | 85         | 0                     | 1    | 1     | 0    | 2          | 49                                     | 73   | 1     | 0    | 123        | 1                                      | 82   | 49    | 0    | 132        | 342        |
| 11:45 AM                                                   | 43                         | 0    | 59    | 0    | 102        | 1                     | 1    | 1     | 0    | 3          | 47                                     | 73   | 3     | 0    | 123        | 0                                      | 90   | 52    | 0    | 142        | 370        |
| Total Volume                                               | 186                        | 0    | 190   | 6    | 382        | 1                     | 3    | 4     | 0    | 8          | 193                                    | 281  | 11    | 3    | 488        | 3                                      | 323  | 193   | 0    | 519        | 1397       |
| % App. Total                                               | 48.7                       | 0    | 49.7  | 1.6  |            | 12.5                  | 37.5 | 50    | 0    |            | 39.5                                   | 57.6 | 2.3   | 0.6  |            | 0.6                                    | 62.2 | 37.2  | 0    |            |            |
| PHF                                                        | .912                       | .000 | .805  | .300 | .936       | .250                  | .750 | .500  | .000 | .667       | .910                                   | .962 | .458  | .375 | .984       | .375                                   | .897 | .894  | .000 | .895       | .944       |
| Cars                                                       | 185                        | 0    | 189   | 6    | 380        | 1                     | 3    | 4     | 0    | 8          | 193                                    | 277  | 11    | 3    | 484        | 3                                      | 320  | 193   | 0    | 516        | 1388       |
| % Cars                                                     | 99.5                       | 0    | 99.5  | 100  | 99.5       | 100                   | 100  | 100   | 0    | 100        | 100                                    | 98.6 | 100   | 100  | 99.2       | 100                                    | 99.1 | 100   | 0    | 99.4       | 99.4       |
| Trucks (SU)                                                | 1                          | 0    | 1     | 0    | 2          | 0                     | 0    | 0     | 0    | 0          | 0                                      | 4    | 0     | 0    | 4          | 0                                      | 2    | 0     | 0    | 2          | 8          |
| % Trucks (SU)                                              | 0.5                        | 0    | 0.5   | 0    | 0.5        | 0                     | 0    | 0     | 0    | 0          | 0                                      | 1.4  | 0     | 0    | 0.8        | 0                                      | 0.6  | 0     | 0    | 0.4        | 0.6        |
| Trucks (TT)                                                | 0                          | 0    | 0     | 0    | 0          | 0                     | 0    | 0     | 0    | 0          | 0                                      | 0    | 0     | 0    | 0          | 0                                      | 1    | 0     | 0    | 1          | 1          |
| % Trucks (TT)                                              | 0                          | 0    | 0     | 0    | 0          | 0                     | 0    | 0     | 0    | 0          | 0                                      | 0    | 0     | 0    | 0          | 0                                      | 0.3  | 0     | 0    | 0.2        | 0.1        |

www.dynamictraffic.com  
732-681-0760

File Name : Prospect Ave (CR 577) & Driveways - AM  
Site Code : 00000000  
Start Date : 6/17/2025  
Page No : 1

[illegible]

www.dynamictraffic.com  
732-681-0760

File Name : Prospect Ave (CR 577) & Driveways - AM  
Site Code : 00000000  
Start Date : 6/17/2025  
Page No : 2

[illegible]

www.dynamictraffic.com  
732-681-0760

File Name : Prospect Ave (CR 577) & Driveways - PM  
Site Code : 00000000  
Start Date : 6/17/2025  
Page No : 1

[illegible]

www.dynamictraffic.com  
732-681-0760

File Name : Prospect Ave (CR 577) & Driveways - PM  
Site Code : 00000000  
Start Date : 6/17/2025  
Page No : 2

[illegible]

www.dynamictraffic.com  
732-681-0760

File Name : Prospect Ave (CR 577) & Driveways - SAT  
Site Code : 00000000  
Start Date : 6/21/2025  
Page No : 1

[illegible]

www.dynamictraffic.com  
732-681-0760

File Name : Prospect Ave (CR 577) & Driveways - SAT  
Site Code : 00000000  
Start Date : 6/21/2025  
Page No : 2

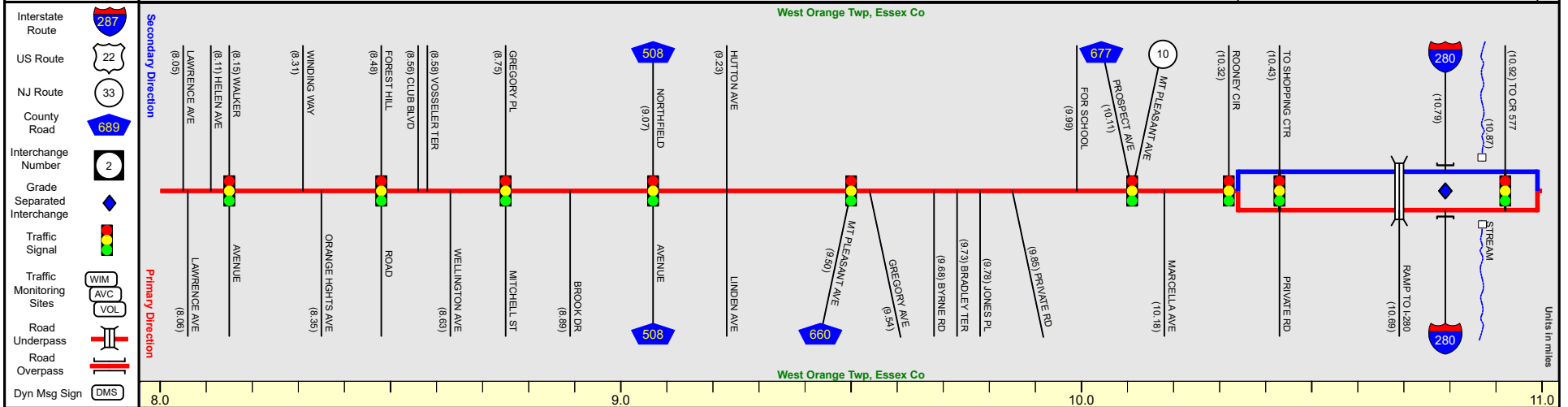
[illegible]

# ROUTE 577 (South to North)

Mile Posts: 8.000 - 11.000



|                 |  |                 |    |  |
|-----------------|--|-----------------|----|--|
| Pavement        |  | 30              | 26 |  |
| Shoulder        |  |                 |    |  |
| Number of Lanes |  | 3               | 2  |  |
| Speed Limit     |  |                 | 40 |  |
| Street Name     |  | Prospect Avenue |    |  |



|                      |                                |                    |                    |
|----------------------|--------------------------------|--------------------|--------------------|
| Street Name          | North - Gregory Avenue         | Mt Pleasant Avenue | Prospect Avenue    |
| Jurisdiction         | County                         |                    |                    |
| Functional Class     | Urban Minor Arterial           |                    |                    |
| Federal Aid - NHS Sy | STP                            |                    |                    |
| Control Section      |                                |                    |                    |
| Speed Limit          | 25                             | 40                 | 40                 |
| Number of Lanes      | 2                              | 4                  | 2                  |
| Med. Type            | None                           |                    |                    |
| Med. Width           | VAR                            |                    |                    |
| Pavement             | 24                             | 40                 | 34                 |
| Shoulder             | 2                              | 6                  | 2                  |
| Traffic Volume       | 22,103 (2019)<br>23,300 (2016) |                    |                    |
| Traffic Sta. ID      | 90727<br>140701                |                    |                    |
| Structure No.        |                                |                    | 0730151<br>0730150 |
| Enlarged Views       |                                |                    |                    |

SRI = 00000577\_\_

Date last inventoried: June 2012

# ASIF MAHMOOD

## PAGE 2. BY-PHASE TIMING DATA

|                      | Ring 1 : |     |     |     | Ring 2 : |     |     |     | Direction: |     |     |     | PHASE |     |     |     |
|----------------------|----------|-----|-----|-----|----------|-----|-----|-----|------------|-----|-----|-----|-------|-----|-----|-----|
|                      | 1        | 2   | 3   | 4   | 1        | 2   | 3   | 4   | 1          | 2   | 3   | 4   | 1     | 2   | 3   | 4   |
| MINIMUM GREEN.       | 5        | 9   | 5   | 5   | 5        | 5   | 5   | 5   | 5          | 5   | 5   | 5   | 5     | 5   | 5   | 5   |
| BIKE MINIMUM GREEN.  | 0        | 0   | 0   | 0   | 0        | 0   | 0   | 0   | 0          | 0   | 0   | 0   | 0     | 0   | 0   | 0   |
| COND SERV MIN GREEN. | 0        | 0   | 0   | 0   | 0        | 0   | 0   | 0   | 0          | 0   | 0   | 0   | 0     | 0   | 0   | 0   |
| WALK                 | 0        | 9   | 7   | 0   | 0        | 10  | 0   | 10  | 0          | 10  | 0   | 10  | 0     | 10  | 0   | 10  |
| PED CLEARANCE.       | 0        | 15  | 17  | 7   | 0        | 16  | 0   | 16  | 0          | 16  | 0   | 16  | 0     | 16  | 0   | 16  |
| VEHICLE EXTENSION.   | 2.0      | 2.0 | 2.0 | 2.0 | 5.0      | 5.0 | 5.0 | 5.0 | 5.0        | 5.0 | 5.0 | 5.0 | 5.0   | 5.0 | 5.0 | 5.0 |
| ALT VEH EXTENSION.   | 0.0      | 0.0 | 0.0 | 0.0 | 0.0      | 0.0 | 0.0 | 0.0 | 0.0        | 0.0 | 0.0 | 0.0 | 0.0   | 0.0 | 0.0 | 0.0 |
| MAX EXTENSION.       | 0        | 0   | 0   | 0   | 0        | 0   | 0   | 0   | 0          | 0   | 0   | 0   | 0     | 0   | 0   | 0   |
| MAX 1.               | 7        | 45  | 12  | 7   | 35       | 35  | 35  | 35  | 35         | 35  | 35  | 35  | 35    | 35  | 35  | 35  |
| MAX 2.               | 10       | 30  | 24  | 7   | 40       | 40  | 40  | 40  | 40         | 40  | 40  | 40  | 40    | 40  | 40  | 40  |
| MAX 3.               | 16       | 24  | 24  | 7   | 0        | 0   | 0   | 0   | 0          | 0   | 0   | 0   | 0     | 0   | 0   | 0   |
| DETECTOR FAIL MAX.   | 0        | 0   | 0   | 0   | 0        | 0   | 0   | 0   | 0          | 0   | 0   | 0   | 0     | 0   | 0   | 0   |
| YELLOW CHANGE.       | 3.0      | 4.0 | 3.0 | 3.0 | 3.0      | 3.0 | 3.0 | 3.0 | 3.0        | 3.0 | 3.0 | 3.0 | 3.0   | 3.0 | 3.0 | 3.0 |
| RED CLEARANCE.       | 0.0      | 2.0 | 2.0 | 2.0 | 1.0      | 1.0 | 1.0 | 1.0 | 1.0        | 1.0 | 1.0 | 1.0 | 1.0   | 1.0 | 1.0 | 1.0 |
| RED REVERT           | 2.0      | 2.0 | 2.0 | 2.0 | 2.0      | 2.0 | 2.0 | 2.0 | 2.0        | 2.0 | 2.0 | 2.0 | 2.0   | 2.0 | 2.0 | 2.0 |

04-29-1997 20:46:10 INTERSECTION NO. 24-02 PROSPECT AVE & ROONEY CIRCLE

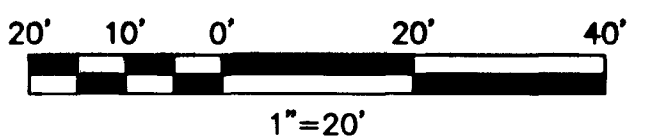
## PAGE 3. BY-PHASE DENSITY TIMING DATA

|                    | Ring 1 : |     |     |     | Ring 2 : |     |     |     | Direction: |     |     |     | PHASE |     |     |     |
|--------------------|----------|-----|-----|-----|----------|-----|-----|-----|------------|-----|-----|-----|-------|-----|-----|-----|
|                    | 1        | 2   | 3   | 4   | 1        | 2   | 3   | 4   | 1          | 2   | 3   | 4   | 1     | 2   | 3   | 4   |
| ACTUATIONS B4 INIT | 0        | 0   | 0   | 0   | 0        | 0   | 0   | 0   | 0          | 0   | 0   | 0   | 0     | 0   | 0   | 0   |
| SECONDS/ACTUATION  | 0.0      | 0.0 | 0.0 | 0.0 | 0.0      | 0.0 | 0.0 | 0.0 | 0.0        | 0.0 | 0.0 | 0.0 | 0.0   | 0.0 | 0.0 | 0.0 |
| MAX INITIAL.       | 30       | 30  | 30  | 30  | 30       | 30  | 30  | 30  | 30         | 30  | 30  | 30  | 30    | 30  | 30  | 30  |
| TIME B4 REDUCTION. | 0        | 0   | 0   | 0   | 0        | 0   | 0   | 0   | 0          | 0   | 0   | 0   | 0     | 0   | 0   | 0   |
| CARS WAITING       | 0        | 0   | 0   | 0   | 0        | 0   | 0   | 0   | 0          | 0   | 0   | 0   | 0     | 0   | 0   | 0   |
| TIME TO REDUCE     | 0        | 0   | 0   | 0   | 0        | 0   | 0   | 0   | 0          | 0   | 0   | 0   | 0     | 0   | 0   | 0   |
| MINIMUM GAP.       | 0.0      | 0.0 | 0.0 | 0.0 | 0.0      | 0.0 | 0.0 | 0.0 | 0.0        | 0.0 | 0.0 | 0.0 | 0.0   | 0.0 | 0.0 | 0.0 |

04-29-1997 20:46:10 INTERSECTION NO. 24-02 PROSPECT AVE & ROONEY CIRCLE

445





**29-F-1**

## **Appendix C**

### **Capacity Analysis**

## 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations     |  |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)    | 97                                                                                | 0                                                                                 | 70                                                                                | 2                                                                                 | 1                                                                                 | 1                                                                                 | 127                                                                                 | 331                                                                                 | 4                                                                                   | 0                                                                                   | 435                                                                                 | 304                                                                                 |
| Future Volume (vph)     | 97                                                                                | 0                                                                                 | 70                                                                                | 2                                                                                 | 1                                                                                 | 1                                                                                 | 127                                                                                 | 331                                                                                 | 4                                                                                   | 0                                                                                   | 435                                                                                 | 304                                                                                 |
| Ideal Flow (vphpl)      | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                |
| Lane Width (ft)         | 12                                                                                | 12                                                                                | 12                                                                                | 10                                                                                | 10                                                                                | 10                                                                                | 10                                                                                  | 10                                                                                  | 10                                                                                  | 13                                                                                  | 11                                                                                  | 12                                                                                  |
| Grade (%)               |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -2%                                                                               |                                                                                   |                                                                                     | -3%                                                                                 |                                                                                     |                                                                                     | 3%                                                                                  |                                                                                     |
| Storage Length (ft)     | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Lanes           | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)       | 25                                                                                |                                                                                   | 25                                                                                | 25                                                                                |                                                                                   | 25                                                                                | 75                                                                                  |                                                                                     | 25                                                                                  | 25                                                                                  |                                                                                     | 25                                                                                  |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                |
| Ped Bike Factor         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 0.99                                                                                | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     | 0.99                                                                                |
| Frt                     |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.966                                                                             |                                                                                   |                                                                                     | 0.998                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected           | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.976                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)       | 1936                                                                              | 1767                                                                              | 0                                                                                 | 0                                                                                 | 1866                                                                              | 0                                                                                 | 1853                                                                                | 3595                                                                                | 0                                                                                   | 0                                                                                   | 3653                                                                                | 1758                                                                                |
| Flt Permitted           | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.976                                                                             |                                                                                   | 0.465                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)       | 1936                                                                              | 1767                                                                              | 0                                                                                 | 0                                                                                 | 1866                                                                              | 0                                                                                 | 902                                                                                 | 3595                                                                                | 0                                                                                   | 0                                                                                   | 3653                                                                                | 1738                                                                                |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | No                                                                                |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | No                                                                                  |
| Satd. Flow (RTOR)       |                                                                                   | 606                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)        |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 35                                                                                  |                                                                                     |                                                                                     | 35                                                                                  |                                                                                     |
| Link Distance (ft)      |                                                                                   | 277                                                                               |                                                                                   |                                                                                   | 225                                                                               |                                                                                   |                                                                                     | 325                                                                                 |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Travel Time (s)         |                                                                                   | 7.6                                                                               |                                                                                   |                                                                                   | 6.1                                                                               |                                                                                   |                                                                                     | 6.3                                                                                 |                                                                                     |                                                                                     | 1.8                                                                                 |                                                                                     |
| Confl. Peds. (#/hr)     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 6                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 6                                                                                   |
| Peak Hour Factor        | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                |
| Heavy Vehicles (%)      | 2%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 2%                                                                                  | 5%                                                                                  | 0%                                                                                  | 0%                                                                                  | 4%                                                                                  | 0%                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 100                                                                               | 72                                                                                | 0                                                                                 | 0                                                                                 | 4                                                                                 | 0                                                                                 | 131                                                                                 | 345                                                                                 | 0                                                                                   | 0                                                                                   | 448                                                                                 | 313                                                                                 |
| Turn Type               | Prot                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     |                                                                                     | NA                                                                                  | pm+ov                                                                               |
| Protected Phases        | 4                                                                                 |                                                                                   |                                                                                   |                                                                                   | 10                                                                                |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 4                                                                                   |
| Permitted Phases        |                                                                                   |                                                                                   |                                                                                   | 10                                                                                |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase          | 4                                                                                 |                                                                                   |                                                                                   | 10                                                                                | 10                                                                                |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 9.0                                                                                 |                                                                                     | 9.0                                                                                 | 9.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)       | 10.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 8.0                                                                                 | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 10.0                                                                                |
| Total Split (s)         | 17.0                                                                              |                                                                                   |                                                                                   | 12.0                                                                              | 12.0                                                                              |                                                                                   | 10.0                                                                                | 61.0                                                                                |                                                                                     | 51.0                                                                                | 51.0                                                                                | 17.0                                                                                |
| Total Split (%)         | 18.9%                                                                             |                                                                                   |                                                                                   | 13.3%                                                                             | 13.3%                                                                             |                                                                                   | 11.1%                                                                               | 67.8%                                                                               |                                                                                     | 56.7%                                                                               | 56.7%                                                                               | 18.9%                                                                               |
| Maximum Green (s)       | 12.0                                                                              |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                 | 55.0                                                                                |                                                                                     | 45.0                                                                                | 45.0                                                                                | 12.0                                                                                |
| Yellow Time (s)         | 3.0                                                                               |                                                                                   |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 | 3.0                                                                                 |
| All-Red Time (s)        | 2.0                                                                               |                                                                                   |                                                                                   | 2.0                                                                               | 2.0                                                                               |                                                                                   | 0.0                                                                                 | 2.0                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   | 3.0                                                                                 | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 | 5.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                                |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 2.0                                                                               |                                                                                   |                                                                                   | 2.0                                                                               | 2.0                                                                               |                                                                                   | 2.0                                                                                 | 2.0                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Recall Mode             | None                                                                              |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                                | Max                                                                                 |                                                                                     | Max                                                                                 | Max                                                                                 | None                                                                                |
| Walk Time (s)           | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 9.0                                                                                 |                                                                                     | 9.0                                                                                 | 9.0                                                                                 | 7.0                                                                                 |
| Flash Don't Walk (s)    | 17.0                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 17.0                                                                                |
| Pedestrian Calls (#/hr) | 4                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 4                                                                                   |
| Act Effct Green (s)     | 10.4                                                                              | 0.0                                                                               |                                                                                   |                                                                                   | 5.2                                                                               |                                                                                   | 62.0                                                                                | 60.2                                                                                |                                                                                     |                                                                                     | 49.9                                                                                | 60.1                                                                                |
| Actuated g/C Ratio      | 0.13                                                                              | 0.00                                                                              |                                                                                   |                                                                                   | 0.07                                                                              |                                                                                   | 0.78                                                                                | 0.75                                                                                |                                                                                     |                                                                                     | 0.62                                                                                | 0.75                                                                                |

## 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| v/c Ratio               | 0.40                                                                              | 0.12                                                                              |                                                                                   |                                                                                   | 0.03                                                                              |                                                                                   | 0.17                                                                               | 0.13                                                                                |                                                                                     |                                                                                     | 0.20                                                                                | 0.24                                                                                |
| Control Delay (s/veh)   | 36.1                                                                              | 0.4                                                                               |                                                                                   |                                                                                   | 40.3                                                                              |                                                                                   | 5.2                                                                                | 5.2                                                                                 |                                                                                     |                                                                                     | 9.3                                                                                 | 3.0                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay (s/veh)     | 36.1                                                                              | 0.4                                                                               |                                                                                   |                                                                                   | 40.3                                                                              |                                                                                   | 5.2                                                                                | 5.2                                                                                 |                                                                                     |                                                                                     | 9.3                                                                                 | 3.0                                                                                 |
| LOS                     | D                                                                                 | A                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   | A                                                                                   |
| Approach Delay (s/veh)  |                                                                                   | 21.2                                                                              |                                                                                   |                                                                                   | 40.3                                                                              |                                                                                   |                                                                                    | 5.2                                                                                 |                                                                                     |                                                                                     | 6.7                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Queue Length 50th (ft)  | 45                                                                                | 0                                                                                 |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   | 10                                                                                 | 19                                                                                  |                                                                                     |                                                                                     | 43                                                                                  | 21                                                                                  |
| Queue Length 95th (ft)  | 98                                                                                | 0                                                                                 |                                                                                   |                                                                                   | 14                                                                                |                                                                                   | 65                                                                                 | 82                                                                                  |                                                                                     |                                                                                     | 132                                                                                 | 80                                                                                  |
| Internal Link Dist (ft) |                                                                                   | 197                                                                               |                                                                                   |                                                                                   | 145                                                                               |                                                                                   |                                                                                    | 245                                                                                 |                                                                                     |                                                                                     | 14                                                                                  |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 100                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     | 340                                                                               | 606                                                                               |                                                                                   |                                                                                   | 165                                                                               |                                                                                   | 783                                                                                | 2706                                                                                |                                                                                     |                                                                                     | 2278                                                                                | 1308                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.29                                                                              | 0.12                                                                              |                                                                                   |                                                                                   | 0.02                                                                              |                                                                                   | 0.17                                                                               | 0.13                                                                                |                                                                                     |                                                                                     | 0.20                                                                                | 0.24                                                                                |

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 80

Natural Cycle: 45

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.40

Intersection Signal Delay (s/veh): 8.1

Intersection LOS: A

Intersection Capacity Utilization 61.9%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                                                                                                   |                                                                                                   |                                                                                                     |  |                                                                                                      |  |
|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------|--|
| <br>Ø2<br>61 s |                                                                                                   | <br>Ø4<br>17 s |  | <br>Ø10<br>12 s |  |
| <br>Ø5<br>10 s | <br>Ø6<br>51 s |                                                                                                     |  |                                                                                                      |  |

## 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations     |  |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)    | 226                                                                               | 0                                                                                 | 191                                                                               | 1                                                                                 | 2                                                                                 | 2                                                                                 | 155                                                                                 | 481                                                                                 | 4                                                                                   | 5                                                                                   | 445                                                                                 | 222                                                                                 |
| Future Volume (vph)     | 226                                                                               | 0                                                                                 | 191                                                                               | 1                                                                                 | 2                                                                                 | 2                                                                                 | 155                                                                                 | 481                                                                                 | 4                                                                                   | 5                                                                                   | 445                                                                                 | 222                                                                                 |
| Ideal Flow (vphpl)      | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                |
| Lane Width (ft)         | 12                                                                                | 12                                                                                | 12                                                                                | 10                                                                                | 10                                                                                | 10                                                                                | 10                                                                                  | 10                                                                                  | 10                                                                                  | 13                                                                                  | 11                                                                                  | 12                                                                                  |
| Grade (%)               |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -2%                                                                               |                                                                                   |                                                                                     | -3%                                                                                 |                                                                                     |                                                                                     | 3%                                                                                  |                                                                                     |
| Storage Length (ft)     | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Lanes           | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)       | 25                                                                                |                                                                                   | 25                                                                                | 25                                                                                |                                                                                   | 25                                                                                | 75                                                                                  |                                                                                     | 25                                                                                  | 25                                                                                  |                                                                                     | 25                                                                                  |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                |
| Ped Bike Factor         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 1.00                                                                                |
| Frt                     |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.946                                                                             |                                                                                   |                                                                                     | 0.999                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected           | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.990                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.999                                                                               |                                                                                     |
| Satd. Flow (prot)       | 1975                                                                              | 1767                                                                              | 0                                                                                 | 0                                                                                 | 1854                                                                              | 0                                                                                 | 1871                                                                                | 3739                                                                                | 0                                                                                   | 0                                                                                   | 3758                                                                                | 1758                                                                                |
| Flt Permitted           | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.990                                                                             |                                                                                   | 0.442                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (perm)       | 1975                                                                              | 1767                                                                              | 0                                                                                 | 0                                                                                 | 1854                                                                              | 0                                                                                 | 869                                                                                 | 3739                                                                                | 0                                                                                   | 0                                                                                   | 3574                                                                                | 1752                                                                                |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | No                                                                                |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | No                                                                                  |
| Satd. Flow (RTOR)       |                                                                                   | 703                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)        |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 35                                                                                  |                                                                                     |                                                                                     | 35                                                                                  |                                                                                     |
| Link Distance (ft)      |                                                                                   | 277                                                                               |                                                                                   |                                                                                   | 225                                                                               |                                                                                   |                                                                                     | 325                                                                                 |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Travel Time (s)         |                                                                                   | 7.6                                                                               |                                                                                   |                                                                                   | 6.1                                                                               |                                                                                   |                                                                                     | 6.3                                                                                 |                                                                                     |                                                                                     | 1.8                                                                                 |                                                                                     |
| Confl. Peds. (#/hr)     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 2                                                                                   |
| Peak Hour Factor        | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                |
| Heavy Vehicles (%)      | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 1%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 233                                                                               | 197                                                                               | 0                                                                                 | 0                                                                                 | 5                                                                                 | 0                                                                                 | 160                                                                                 | 500                                                                                 | 0                                                                                   | 0                                                                                   | 464                                                                                 | 229                                                                                 |
| Turn Type               | Prot                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  | pm+ov                                                                               |
| Protected Phases        | 4                                                                                 |                                                                                   |                                                                                   |                                                                                   | 10                                                                                |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 4                                                                                   |
| Permitted Phases        |                                                                                   |                                                                                   |                                                                                   | 10                                                                                |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase          | 4                                                                                 |                                                                                   |                                                                                   | 10                                                                                | 10                                                                                |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 9.0                                                                                 |                                                                                     | 9.0                                                                                 | 9.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)       | 10.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 8.0                                                                                 | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 10.0                                                                                |
| Total Split (s)         | 29.0                                                                              |                                                                                   |                                                                                   | 12.0                                                                              | 12.0                                                                              |                                                                                   | 13.0                                                                                | 49.0                                                                                |                                                                                     | 36.0                                                                                | 36.0                                                                                | 29.0                                                                                |
| Total Split (%)         | 32.2%                                                                             |                                                                                   |                                                                                   | 13.3%                                                                             | 13.3%                                                                             |                                                                                   | 14.4%                                                                               | 54.4%                                                                               |                                                                                     | 40.0%                                                                               | 40.0%                                                                               | 32.2%                                                                               |
| Maximum Green (s)       | 24.0                                                                              |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 10.0                                                                                | 43.0                                                                                |                                                                                     | 30.0                                                                                | 30.0                                                                                | 24.0                                                                                |
| Yellow Time (s)         | 3.0                                                                               |                                                                                   |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 | 3.0                                                                                 |
| All-Red Time (s)        | 2.0                                                                               |                                                                                   |                                                                                   | 2.0                                                                               | 2.0                                                                               |                                                                                   | 0.0                                                                                 | 2.0                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   | 3.0                                                                                 | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 | 5.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                                |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 2.0                                                                               |                                                                                   |                                                                                   | 2.0                                                                               | 2.0                                                                               |                                                                                   | 2.0                                                                                 | 2.0                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Recall Mode             | None                                                                              |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                                | Max                                                                                 |                                                                                     | Max                                                                                 | Max                                                                                 | None                                                                                |
| Walk Time (s)           | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 9.0                                                                                 |                                                                                     | 9.0                                                                                 | 9.0                                                                                 | 7.0                                                                                 |
| Flash Don't Walk (s)    | 17.0                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 17.0                                                                                |
| Pedestrian Calls (#/hr) | 9                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 3                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 9                                                                                   |
| Act Effct Green (s)     | 13.3                                                                              | 0.0                                                                               |                                                                                   |                                                                                   | 5.2                                                                               |                                                                                   | 46.8                                                                                | 43.7                                                                                |                                                                                     |                                                                                     | 33.6                                                                                | 48.0                                                                                |
| Actuated g/C Ratio      | 0.19                                                                              | 0.00                                                                              |                                                                                   |                                                                                   | 0.07                                                                              |                                                                                   | 0.67                                                                                | 0.63                                                                                |                                                                                     |                                                                                     | 0.48                                                                                | 0.69                                                                                |

## 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| v/c Ratio               | 0.62                                                                              | 0.28                                                                              |                                                                                   |                                                                                   | 0.04                                                                              |                                                                                   | 0.23                                                                                | 0.21                                                                                |                                                                                     |                                                                                     | 0.27                                                                                | 0.19                                                                                |
| Control Delay (s/veh)   | 33.7                                                                              | 1.0                                                                               |                                                                                   |                                                                                   | 35.2                                                                              |                                                                                   | 7.1                                                                                 | 7.5                                                                                 |                                                                                     |                                                                                     | 13.6                                                                                | 3.7                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay (s/veh)     | 33.7                                                                              | 1.0                                                                               |                                                                                   |                                                                                   | 35.2                                                                              |                                                                                   | 7.1                                                                                 | 7.5                                                                                 |                                                                                     |                                                                                     | 13.6                                                                                | 3.7                                                                                 |
| LOS                     | C                                                                                 | A                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   | A                                                                                   | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   | A                                                                                   |
| Approach Delay (s/veh)  |                                                                                   | 18.7                                                                              |                                                                                   |                                                                                   | 35.2                                                                              |                                                                                   |                                                                                     | 7.4                                                                                 |                                                                                     |                                                                                     | 10.3                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                     | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Queue Length 50th (ft)  | 88                                                                                | 0                                                                                 |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   | 17                                                                                  | 36                                                                                  |                                                                                     |                                                                                     | 53                                                                                  | 16                                                                                  |
| Queue Length 95th (ft)  | 176                                                                               | 0                                                                                 |                                                                                   |                                                                                   | 14                                                                                |                                                                                   | 79                                                                                  | 117                                                                                 |                                                                                     |                                                                                     | 146                                                                                 | 69                                                                                  |
| Internal Link Dist (ft) |                                                                                   | 197                                                                               |                                                                                   |                                                                                   | 145                                                                               |                                                                                   |                                                                                     | 245                                                                                 |                                                                                     |                                                                                     | 14                                                                                  |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     | 689                                                                               | 703                                                                               |                                                                                   |                                                                                   | 188                                                                               |                                                                                   | 727                                                                                 | 2338                                                                                |                                                                                     |                                                                                     | 1719                                                                                | 1203                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.34                                                                              | 0.28                                                                              |                                                                                   |                                                                                   | 0.03                                                                              |                                                                                   | 0.22                                                                                | 0.21                                                                                |                                                                                     |                                                                                     | 0.27                                                                                | 0.19                                                                                |

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 69.9

Natural Cycle: 50

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.62

Intersection Signal Delay (s/veh): 11.3

Intersection LOS: B

Intersection Capacity Utilization 63.5%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                                                                                                          |                                                                                                          |                                                                                                             |
|----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| #10<br><br>Ø2<br>49 s | #10<br><br>Ø4<br>29 s | #10<br><br>Ø10<br>12 s |
| #10<br><br>Ø5<br>13 s | #10<br><br>Ø6<br>36 s |                                                                                                             |

## 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations     |  |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)    | 186                                                                               | 0                                                                                 | 190                                                                               | 1                                                                                 | 3                                                                                 | 4                                                                                 | 193                                                                                 | 291                                                                                 | 11                                                                                  | 3                                                                                   | 334                                                                                 | 193                                                                                 |
| Future Volume (vph)     | 186                                                                               | 0                                                                                 | 190                                                                               | 1                                                                                 | 3                                                                                 | 4                                                                                 | 193                                                                                 | 291                                                                                 | 11                                                                                  | 3                                                                                   | 334                                                                                 | 193                                                                                 |
| Ideal Flow (vphpl)      | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                |
| Lane Width (ft)         | 12                                                                                | 12                                                                                | 12                                                                                | 10                                                                                | 10                                                                                | 10                                                                                | 10                                                                                  | 10                                                                                  | 10                                                                                  | 13                                                                                  | 11                                                                                  | 12                                                                                  |
| Grade (%)               |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -2%                                                                               |                                                                                   |                                                                                     | -3%                                                                                 |                                                                                     |                                                                                     | 3%                                                                                  |                                                                                     |
| Storage Length (ft)     | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Lanes           | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)       | 25                                                                                |                                                                                   | 25                                                                                | 25                                                                                |                                                                                   | 25                                                                                | 75                                                                                  |                                                                                     | 25                                                                                  | 25                                                                                  |                                                                                     | 25                                                                                  |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                |
| Ped Bike Factor         |                                                                                   | 0.92                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   | 0.99                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 0.99                                                                                |
| Frt                     |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.932                                                                             |                                                                                   |                                                                                     | 0.994                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected           | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.994                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)       | 1955                                                                              | 1608                                                                              | 0                                                                                 | 0                                                                                 | 1834                                                                              | 0                                                                                 | 1890                                                                                | 3721                                                                                | 0                                                                                   | 0                                                                                   | 3762                                                                                | 1758                                                                                |
| Flt Permitted           | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.994                                                                             |                                                                                   | 0.493                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.953                                                                               |                                                                                     |
| Satd. Flow (perm)       | 1955                                                                              | 1608                                                                              | 0                                                                                 | 0                                                                                 | 1832                                                                              | 0                                                                                 | 975                                                                                 | 3721                                                                                | 0                                                                                   | 0                                                                                   | 3585                                                                                | 1738                                                                                |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | No                                                                                |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | No                                                                                  |
| Satd. Flow (RTOR)       |                                                                                   | 782                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)        |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 35                                                                                  |                                                                                     |                                                                                     | 35                                                                                  |                                                                                     |
| Link Distance (ft)      |                                                                                   | 277                                                                               |                                                                                   |                                                                                   | 225                                                                               |                                                                                   |                                                                                     | 325                                                                                 |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Travel Time (s)         |                                                                                   | 7.6                                                                               |                                                                                   |                                                                                   | 6.1                                                                               |                                                                                   |                                                                                     | 6.3                                                                                 |                                                                                     |                                                                                     | 1.8                                                                                 |                                                                                     |
| Confl. Peds. (#/hr)     |                                                                                   |                                                                                   | 3                                                                                 | 3                                                                                 |                                                                                   |                                                                                   | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Peak Hour Factor        | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                |
| Heavy Vehicles (%)      | 1%                                                                                | 0%                                                                                | 1%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 198                                                                               | 202                                                                               | 0                                                                                 | 0                                                                                 | 8                                                                                 | 0                                                                                 | 205                                                                                 | 322                                                                                 | 0                                                                                   | 0                                                                                   | 358                                                                                 | 205                                                                                 |
| Turn Type               | Prot                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  | pm+ov                                                                               |
| Protected Phases        | 4                                                                                 |                                                                                   |                                                                                   |                                                                                   | 10                                                                                |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 4                                                                                   |
| Permitted Phases        |                                                                                   |                                                                                   |                                                                                   | 10                                                                                |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase          | 4                                                                                 |                                                                                   |                                                                                   | 10                                                                                | 10                                                                                |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 9.0                                                                                 |                                                                                     | 9.0                                                                                 | 9.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)       | 10.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 8.0                                                                                 | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 10.0                                                                                |
| Total Split (s)         | 29.0                                                                              |                                                                                   |                                                                                   | 12.0                                                                              | 12.0                                                                              |                                                                                   | 19.0                                                                                | 49.0                                                                                |                                                                                     | 30.0                                                                                | 30.0                                                                                | 29.0                                                                                |
| Total Split (%)         | 32.2%                                                                             |                                                                                   |                                                                                   | 13.3%                                                                             | 13.3%                                                                             |                                                                                   | 21.1%                                                                               | 54.4%                                                                               |                                                                                     | 33.3%                                                                               | 33.3%                                                                               | 32.2%                                                                               |
| Maximum Green (s)       | 24.0                                                                              |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 16.0                                                                                | 43.0                                                                                |                                                                                     | 24.0                                                                                | 24.0                                                                                | 24.0                                                                                |
| Yellow Time (s)         | 3.0                                                                               |                                                                                   |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 | 3.0                                                                                 |
| All-Red Time (s)        | 2.0                                                                               |                                                                                   |                                                                                   | 2.0                                                                               | 2.0                                                                               |                                                                                   | 0.0                                                                                 | 2.0                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   | 3.0                                                                                 | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 | 5.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                                |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 2.0                                                                               |                                                                                   |                                                                                   | 2.0                                                                               | 2.0                                                                               |                                                                                   | 2.0                                                                                 | 2.0                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Recall Mode             | None                                                                              |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                                | Max                                                                                 |                                                                                     | Max                                                                                 | Max                                                                                 | None                                                                                |
| Walk Time (s)           | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 9.0                                                                                 |                                                                                     | 9.0                                                                                 | 9.0                                                                                 | 7.0                                                                                 |
| Flash Don't Walk (s)    | 17.0                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 17.0                                                                                |
| Pedestrian Calls (#/hr) | 6                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 3                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 6                                                                                   |
| Act Effct Green (s)     | 12.4                                                                              | 0.0                                                                               |                                                                                   |                                                                                   | 5.4                                                                               |                                                                                   | 46.9                                                                                | 43.8                                                                                |                                                                                     |                                                                                     | 32.9                                                                                | 46.3                                                                                |
| Actuated g/C Ratio      | 0.18                                                                              | 0.00                                                                              |                                                                                   |                                                                                   | 0.08                                                                              |                                                                                   | 0.68                                                                                | 0.63                                                                                |                                                                                     |                                                                                     | 0.48                                                                                | 0.67                                                                                |

## 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| v/c Ratio               | 0.57                                                                              | 0.26                                                                              |                                                                                   |                                                                                   | 0.06                                                                              |                                                                                   | 0.27                                                                               | 0.14                                                                                |                                                                                     |                                                                                     | 0.21                                                                                | 0.18                                                                                |
| Control Delay (s/veh)   | 32.5                                                                              | 0.8                                                                               |                                                                                   |                                                                                   | 34.9                                                                              |                                                                                   | 7.0                                                                                | 6.9                                                                                 |                                                                                     |                                                                                     | 13.9                                                                                | 4.3                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay (s/veh)     | 32.5                                                                              | 0.8                                                                               |                                                                                   |                                                                                   | 34.9                                                                              |                                                                                   | 7.0                                                                                | 6.9                                                                                 |                                                                                     |                                                                                     | 13.9                                                                                | 4.3                                                                                 |
| LOS                     | C                                                                                 | A                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   | A                                                                                   |
| Approach Delay (s/veh)  |                                                                                   | 16.5                                                                              |                                                                                   |                                                                                   | 34.9                                                                              |                                                                                   |                                                                                    | 6.9                                                                                 |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Queue Length 50th (ft)  | 74                                                                                | 0                                                                                 |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   | 21                                                                                 | 20                                                                                  |                                                                                     |                                                                                     | 38                                                                                  | 15                                                                                  |
| Queue Length 95th (ft)  | 153                                                                               | 0                                                                                 |                                                                                   |                                                                                   | 19                                                                                |                                                                                   | 100                                                                                | 76                                                                                  |                                                                                     |                                                                                     | 121                                                                                 | 73                                                                                  |
| Internal Link Dist (ft) |                                                                                   | 197                                                                               |                                                                                   |                                                                                   | 145                                                                               |                                                                                   |                                                                                    | 245                                                                                 |                                                                                     |                                                                                     | 14                                                                                  |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 100                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     | 691                                                                               | 782                                                                               |                                                                                   |                                                                                   | 189                                                                               |                                                                                   | 876                                                                                | 2360                                                                                |                                                                                     |                                                                                     | 1705                                                                                | 1166                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.29                                                                              | 0.26                                                                              |                                                                                   |                                                                                   | 0.04                                                                              |                                                                                   | 0.23                                                                               | 0.14                                                                                |                                                                                     |                                                                                     | 0.21                                                                                | 0.18                                                                                |

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 69.1

Natural Cycle: 45

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.57

Intersection Signal Delay (s/veh): 10.9

Intersection LOS: B

Intersection Capacity Utilization 59.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                                                                                                  |                                                                                                  |                                                                                                     |
|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| #10<br><br>Ø2 | #10<br><br>Ø4 | #10<br><br>Ø10 |
| 49 s                                                                                             | 29 s                                                                                             | 12 s                                                                                                |
| #10<br><br>Ø5 | #10<br><br>Ø6 |                                                                                                     |
| 19 s                                                                                             | 30 s                                                                                             |                                                                                                     |

## 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations     |  |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)    | 127                                                                               | 0                                                                                 | 100                                                                               | 2                                                                                 | 1                                                                                 | 1                                                                                 | 159                                                                                 | 369                                                                                 | 4                                                                                   | 0                                                                                   | 473                                                                                 | 348                                                                                 |
| Future Volume (vph)     | 127                                                                               | 0                                                                                 | 100                                                                               | 2                                                                                 | 1                                                                                 | 1                                                                                 | 159                                                                                 | 369                                                                                 | 4                                                                                   | 0                                                                                   | 473                                                                                 | 348                                                                                 |
| Ideal Flow (vphpl)      | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                |
| Lane Width (ft)         | 12                                                                                | 12                                                                                | 12                                                                                | 10                                                                                | 10                                                                                | 10                                                                                | 10                                                                                  | 10                                                                                  | 10                                                                                  | 13                                                                                  | 11                                                                                  | 12                                                                                  |
| Grade (%)               |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -2%                                                                               |                                                                                   |                                                                                     | -3%                                                                                 |                                                                                     |                                                                                     | 3%                                                                                  |                                                                                     |
| Storage Length (ft)     | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Lanes           | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)       | 25                                                                                |                                                                                   | 25                                                                                | 25                                                                                |                                                                                   | 25                                                                                | 75                                                                                  |                                                                                     | 25                                                                                  | 25                                                                                  |                                                                                     | 25                                                                                  |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                |
| Ped Bike Factor         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 0.99                                                                                | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     | 0.99                                                                                |
| Frt                     |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.966                                                                             |                                                                                   |                                                                                     | 0.998                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected           | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.976                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)       | 1936                                                                              | 1767                                                                              | 0                                                                                 | 0                                                                                 | 1866                                                                              | 0                                                                                 | 1853                                                                                | 3594                                                                                | 0                                                                                   | 0                                                                                   | 3653                                                                                | 1758                                                                                |
| Flt Permitted           | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.976                                                                             |                                                                                   | 0.444                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)       | 1936                                                                              | 1767                                                                              | 0                                                                                 | 0                                                                                 | 1866                                                                              | 0                                                                                 | 861                                                                                 | 3594                                                                                | 0                                                                                   | 0                                                                                   | 3653                                                                                | 1738                                                                                |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | No                                                                                |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | No                                                                                  |
| Satd. Flow (RTOR)       |                                                                                   | 585                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)        |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 35                                                                                  |                                                                                     |                                                                                     | 35                                                                                  |                                                                                     |
| Link Distance (ft)      |                                                                                   | 277                                                                               |                                                                                   |                                                                                   | 225                                                                               |                                                                                   |                                                                                     | 325                                                                                 |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Travel Time (s)         |                                                                                   | 7.6                                                                               |                                                                                   |                                                                                   | 6.1                                                                               |                                                                                   |                                                                                     | 6.3                                                                                 |                                                                                     |                                                                                     | 1.8                                                                                 |                                                                                     |
| Confl. Peds. (#/hr)     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 6                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 6                                                                                   |
| Peak Hour Factor        | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                |
| Heavy Vehicles (%)      | 2%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 2%                                                                                  | 5%                                                                                  | 0%                                                                                  | 0%                                                                                  | 4%                                                                                  | 0%                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 131                                                                               | 103                                                                               | 0                                                                                 | 0                                                                                 | 4                                                                                 | 0                                                                                 | 164                                                                                 | 384                                                                                 | 0                                                                                   | 0                                                                                   | 488                                                                                 | 359                                                                                 |
| Turn Type               | Prot                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     |                                                                                     | NA                                                                                  | pm+ov                                                                               |
| Protected Phases        | 4                                                                                 |                                                                                   |                                                                                   |                                                                                   | 10                                                                                |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 4                                                                                   |
| Permitted Phases        |                                                                                   |                                                                                   |                                                                                   | 10                                                                                |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase          | 4                                                                                 |                                                                                   |                                                                                   | 10                                                                                | 10                                                                                |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 9.0                                                                                 |                                                                                     | 9.0                                                                                 | 9.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)       | 10.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 8.0                                                                                 | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 10.0                                                                                |
| Total Split (s)         | 17.0                                                                              |                                                                                   |                                                                                   | 12.0                                                                              | 12.0                                                                              |                                                                                   | 10.0                                                                                | 61.0                                                                                |                                                                                     | 51.0                                                                                | 51.0                                                                                | 17.0                                                                                |
| Total Split (%)         | 18.9%                                                                             |                                                                                   |                                                                                   | 13.3%                                                                             | 13.3%                                                                             |                                                                                   | 11.1%                                                                               | 67.8%                                                                               |                                                                                     | 56.7%                                                                               | 56.7%                                                                               | 18.9%                                                                               |
| Maximum Green (s)       | 12.0                                                                              |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                 | 55.0                                                                                |                                                                                     | 45.0                                                                                | 45.0                                                                                | 12.0                                                                                |
| Yellow Time (s)         | 3.0                                                                               |                                                                                   |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 | 3.0                                                                                 |
| All-Red Time (s)        | 2.0                                                                               |                                                                                   |                                                                                   | 2.0                                                                               | 2.0                                                                               |                                                                                   | 0.0                                                                                 | 2.0                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   | 3.0                                                                                 | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 | 5.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                                |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 2.0                                                                               |                                                                                   |                                                                                   | 2.0                                                                               | 2.0                                                                               |                                                                                   | 2.0                                                                                 | 2.0                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Recall Mode             | None                                                                              |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                                | Max                                                                                 |                                                                                     | Max                                                                                 | Max                                                                                 | None                                                                                |
| Walk Time (s)           | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 9.0                                                                                 |                                                                                     | 9.0                                                                                 | 9.0                                                                                 | 7.0                                                                                 |
| Flash Don't Walk (s)    | 17.0                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 17.0                                                                                |
| Pedestrian Calls (#/hr) | 4                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 4                                                                                   |
| Act Effct Green (s)     | 11.4                                                                              | 0.0                                                                               |                                                                                   |                                                                                   | 5.2                                                                               |                                                                                   | 60.4                                                                                | 57.4                                                                                |                                                                                     |                                                                                     | 47.9                                                                                | 60.3                                                                                |
| Actuated g/C Ratio      | 0.14                                                                              | 0.00                                                                              |                                                                                   |                                                                                   | 0.06                                                                              |                                                                                   | 0.74                                                                                | 0.70                                                                                |                                                                                     |                                                                                     | 0.59                                                                                | 0.74                                                                                |

## 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| v/c Ratio               | 0.49                                                                              | 0.18                                                                              |                                                                                   |                                                                                   | 0.03                                                                              |                                                                                   | 0.23                                                                                | 0.15                                                                                |                                                                                     |                                                                                     | 0.23                                                                                | 0.28                                                                                |
| Control Delay (s/veh)   | 38.0                                                                              | 0.7                                                                               |                                                                                   |                                                                                   | 40.5                                                                              |                                                                                   | 5.7                                                                                 | 5.7                                                                                 |                                                                                     |                                                                                     | 10.1                                                                                | 3.3                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay (s/veh)     | 38.0                                                                              | 0.7                                                                               |                                                                                   |                                                                                   | 40.5                                                                              |                                                                                   | 5.7                                                                                 | 5.7                                                                                 |                                                                                     |                                                                                     | 10.1                                                                                | 3.3                                                                                 |
| LOS                     | D                                                                                 | A                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   | A                                                                                   | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   | A                                                                                   |
| Approach Delay (s/veh)  |                                                                                   | 21.6                                                                              |                                                                                   |                                                                                   | 40.5                                                                              |                                                                                   |                                                                                     | 5.7                                                                                 |                                                                                     |                                                                                     | 7.2                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                     | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Queue Length 50th (ft)  | 59                                                                                | 0                                                                                 |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   | 15                                                                                  | 23                                                                                  |                                                                                     |                                                                                     | 51                                                                                  | 26                                                                                  |
| Queue Length 95th (ft)  | 124                                                                               | 0                                                                                 |                                                                                   |                                                                                   | 14                                                                                |                                                                                   | 79                                                                                  | 91                                                                                  |                                                                                     |                                                                                     | 144                                                                                 | 94                                                                                  |
| Internal Link Dist (ft) |                                                                                   | 197                                                                               |                                                                                   |                                                                                   | 145                                                                               |                                                                                   |                                                                                     | 245                                                                                 |                                                                                     |                                                                                     | 14                                                                                  |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     | 334                                                                               | 585                                                                               |                                                                                   |                                                                                   | 162                                                                               |                                                                                   | 723                                                                                 | 2526                                                                                |                                                                                     |                                                                                     | 2146                                                                                | 1287                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.39                                                                              | 0.18                                                                              |                                                                                   |                                                                                   | 0.02                                                                              |                                                                                   | 0.23                                                                                | 0.15                                                                                |                                                                                     |                                                                                     | 0.23                                                                                | 0.28                                                                                |

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 81.6

Natural Cycle: 45

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.49

Intersection Signal Delay (s/veh): 8.8

Intersection LOS: A

Intersection Capacity Utilization 64.6%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                                                                                                   |                                                                                                   |                                                                                                     |  |                                                                                                      |  |
|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------|--|
| <br>Ø2<br>61 s |                                                                                                   | <br>Ø4<br>17 s |  | <br>Ø10<br>12 s |  |
| <br>Ø5<br>10 s | <br>Ø6<br>51 s |                                                                                                     |  |                                                                                                      |  |

## 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations     |  |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)    | 256                                                                               | 0                                                                                 | 221                                                                               | 1                                                                                 | 2                                                                                 | 2                                                                                 | 187                                                                                 | 545                                                                                 | 4                                                                                   | 5                                                                                   | 499                                                                                 | 263                                                                                 |
| Future Volume (vph)     | 256                                                                               | 0                                                                                 | 221                                                                               | 1                                                                                 | 2                                                                                 | 2                                                                                 | 187                                                                                 | 545                                                                                 | 4                                                                                   | 5                                                                                   | 499                                                                                 | 263                                                                                 |
| Ideal Flow (vphpl)      | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                |
| Lane Width (ft)         | 12                                                                                | 12                                                                                | 12                                                                                | 10                                                                                | 10                                                                                | 10                                                                                | 10                                                                                  | 10                                                                                  | 10                                                                                  | 13                                                                                  | 11                                                                                  | 12                                                                                  |
| Grade (%)               |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -2%                                                                               |                                                                                   |                                                                                     | -3%                                                                                 |                                                                                     |                                                                                     | 3%                                                                                  |                                                                                     |
| Storage Length (ft)     | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Lanes           | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)       | 25                                                                                |                                                                                   | 25                                                                                | 25                                                                                |                                                                                   | 25                                                                                | 75                                                                                  |                                                                                     | 25                                                                                  | 25                                                                                  |                                                                                     | 25                                                                                  |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                |
| Ped Bike Factor         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 1.00                                                                                |
| Frt                     |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.946                                                                             |                                                                                   |                                                                                     | 0.999                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected           | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.990                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)       | 1975                                                                              | 1767                                                                              | 0                                                                                 | 0                                                                                 | 1854                                                                              | 0                                                                                 | 1871                                                                                | 3739                                                                                | 0                                                                                   | 0                                                                                   | 3762                                                                                | 1758                                                                                |
| Flt Permitted           | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.990                                                                             |                                                                                   | 0.404                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (perm)       | 1975                                                                              | 1767                                                                              | 0                                                                                 | 0                                                                                 | 1854                                                                              | 0                                                                                 | 795                                                                                 | 3739                                                                                | 0                                                                                   | 0                                                                                   | 3574                                                                                | 1752                                                                                |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | No                                                                                |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | No                                                                                  |
| Satd. Flow (RTOR)       |                                                                                   | 688                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)        |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 35                                                                                  |                                                                                     |                                                                                     | 35                                                                                  |                                                                                     |
| Link Distance (ft)      |                                                                                   | 277                                                                               |                                                                                   |                                                                                   | 225                                                                               |                                                                                   |                                                                                     | 325                                                                                 |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Travel Time (s)         |                                                                                   | 7.6                                                                               |                                                                                   |                                                                                   | 6.1                                                                               |                                                                                   |                                                                                     | 6.3                                                                                 |                                                                                     |                                                                                     | 1.8                                                                                 |                                                                                     |
| Confl. Peds. (#/hr)     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 2                                                                                   |
| Peak Hour Factor        | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                |
| Heavy Vehicles (%)      | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 1%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 264                                                                               | 228                                                                               | 0                                                                                 | 0                                                                                 | 5                                                                                 | 0                                                                                 | 193                                                                                 | 566                                                                                 | 0                                                                                   | 0                                                                                   | 519                                                                                 | 271                                                                                 |
| Turn Type               | Prot                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  | pm+ov                                                                               |
| Protected Phases        | 4                                                                                 |                                                                                   |                                                                                   |                                                                                   | 10                                                                                |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 4                                                                                   |
| Permitted Phases        |                                                                                   |                                                                                   |                                                                                   | 10                                                                                |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase          | 4                                                                                 |                                                                                   |                                                                                   | 10                                                                                | 10                                                                                |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 9.0                                                                                 |                                                                                     | 9.0                                                                                 | 9.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)       | 10.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 8.0                                                                                 | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 10.0                                                                                |
| Total Split (s)         | 29.0                                                                              |                                                                                   |                                                                                   | 12.0                                                                              | 12.0                                                                              |                                                                                   | 13.0                                                                                | 49.0                                                                                |                                                                                     | 36.0                                                                                | 36.0                                                                                | 29.0                                                                                |
| Total Split (%)         | 32.2%                                                                             |                                                                                   |                                                                                   | 13.3%                                                                             | 13.3%                                                                             |                                                                                   | 14.4%                                                                               | 54.4%                                                                               |                                                                                     | 40.0%                                                                               | 40.0%                                                                               | 32.2%                                                                               |
| Maximum Green (s)       | 24.0                                                                              |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 10.0                                                                                | 43.0                                                                                |                                                                                     | 30.0                                                                                | 30.0                                                                                | 24.0                                                                                |
| Yellow Time (s)         | 3.0                                                                               |                                                                                   |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 | 3.0                                                                                 |
| All-Red Time (s)        | 2.0                                                                               |                                                                                   |                                                                                   | 2.0                                                                               | 2.0                                                                               |                                                                                   | 0.0                                                                                 | 2.0                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   | 3.0                                                                                 | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 | 5.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                                |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 2.0                                                                               |                                                                                   |                                                                                   | 2.0                                                                               | 2.0                                                                               |                                                                                   | 2.0                                                                                 | 2.0                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Recall Mode             | None                                                                              |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                                | Max                                                                                 |                                                                                     | Max                                                                                 | Max                                                                                 | None                                                                                |
| Walk Time (s)           | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 9.0                                                                                 |                                                                                     | 9.0                                                                                 | 9.0                                                                                 | 7.0                                                                                 |
| Flash Don't Walk (s)    | 17.0                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 17.0                                                                                |
| Pedestrian Calls (#/hr) | 4                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 4                                                                                   |
| Act Effct Green (s)     | 14.2                                                                              | 0.0                                                                               |                                                                                   |                                                                                   | 5.2                                                                               |                                                                                   | 46.7                                                                                | 43.7                                                                                |                                                                                     |                                                                                     | 33.2                                                                                | 48.4                                                                                |
| Actuated g/C Ratio      | 0.20                                                                              | 0.00                                                                              |                                                                                   |                                                                                   | 0.07                                                                              |                                                                                   | 0.66                                                                                | 0.62                                                                                |                                                                                     |                                                                                     | 0.47                                                                                | 0.68                                                                                |

## 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| v/c Ratio               | 0.66                                                                              | 0.33                                                                              |                                                                                   |                                                                                   | 0.04                                                                              |                                                                                   | 0.30                                                                               | 0.25                                                                                |                                                                                     |                                                                                     | 0.31                                                                                | 0.23                                                                                |
| Control Delay (s/veh)   | 34.9                                                                              | 1.3                                                                               |                                                                                   |                                                                                   | 35.6                                                                              |                                                                                   | 7.8                                                                                | 7.9                                                                                 |                                                                                     |                                                                                     | 14.5                                                                                | 3.9                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay (s/veh)     | 34.9                                                                              | 1.3                                                                               |                                                                                   |                                                                                   | 35.6                                                                              |                                                                                   | 7.8                                                                                | 7.9                                                                                 |                                                                                     |                                                                                     | 14.5                                                                                | 3.9                                                                                 |
| LOS                     | C                                                                                 | A                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   | A                                                                                   |
| Approach Delay (s/veh)  |                                                                                   | 19.3                                                                              |                                                                                   |                                                                                   | 35.6                                                                              |                                                                                   |                                                                                    | 7.9                                                                                 |                                                                                     |                                                                                     | 10.9                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Queue Length 50th (ft)  | 102                                                                               | 0                                                                                 |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   | 23                                                                                 | 45                                                                                  |                                                                                     |                                                                                     | 64                                                                                  | 21                                                                                  |
| Queue Length 95th (ft)  | 199                                                                               | 0                                                                                 |                                                                                   |                                                                                   | 14                                                                                |                                                                                   | 94                                                                                 | 133                                                                                 |                                                                                     |                                                                                     | 164                                                                                 | 82                                                                                  |
| Internal Link Dist (ft) |                                                                                   | 197                                                                               |                                                                                   |                                                                                   | 145                                                                               |                                                                                   |                                                                                    | 245                                                                                 |                                                                                     |                                                                                     | 14                                                                                  |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 100                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     | 679                                                                               | 688                                                                               |                                                                                   |                                                                                   | 186                                                                               |                                                                                   | 678                                                                                | 2306                                                                                |                                                                                     |                                                                                     | 1675                                                                                | 1199                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.39                                                                              | 0.33                                                                              |                                                                                   |                                                                                   | 0.03                                                                              |                                                                                   | 0.28                                                                               | 0.25                                                                                |                                                                                     |                                                                                     | 0.31                                                                                | 0.23                                                                                |

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 70.8

Natural Cycle: 50

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.66

Intersection Signal Delay (s/veh): 11.9

Intersection LOS: B

Intersection Capacity Utilization 66.6%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                                                                                                                                             |                                                                                                                                             |                                                                                                                                             |  |                                                                                                                                                |  |
|---------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <div>#10</div> <div></div> <div>Ø2</div> <div>49 s</div> |                                                                                                                                             | <div>#10</div> <div></div> <div>Ø4</div> <div>29 s</div> |  | <div>#10</div> <div></div> <div>Ø10</div> <div>12 s</div> |  |
| <div>#10</div> <div></div> <div>Ø5</div> <div>13 s</div> | <div>#10</div> <div></div> <div>Ø6</div> <div>36 s</div> |                                                                                                                                             |  |                                                                                                                                                |  |

## 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations     |  |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)    | 228                                                                               | 0                                                                                 | 232                                                                               | 1                                                                                 | 3                                                                                 | 4                                                                                 | 237                                                                                 | 370                                                                                 | 11                                                                                  | 3                                                                                   | 412                                                                                 | 246                                                                                 |
| Future Volume (vph)     | 228                                                                               | 0                                                                                 | 232                                                                               | 1                                                                                 | 3                                                                                 | 4                                                                                 | 237                                                                                 | 370                                                                                 | 11                                                                                  | 3                                                                                   | 412                                                                                 | 246                                                                                 |
| Ideal Flow (vphpl)      | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                |
| Lane Width (ft)         | 12                                                                                | 12                                                                                | 12                                                                                | 10                                                                                | 10                                                                                | 10                                                                                | 10                                                                                  | 10                                                                                  | 10                                                                                  | 13                                                                                  | 11                                                                                  | 12                                                                                  |
| Grade (%)               |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -2%                                                                               |                                                                                   |                                                                                     | -3%                                                                                 |                                                                                     |                                                                                     | 3%                                                                                  |                                                                                     |
| Storage Length (ft)     | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Lanes           | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)       | 25                                                                                |                                                                                   | 25                                                                                | 25                                                                                |                                                                                   | 25                                                                                | 75                                                                                  |                                                                                     | 25                                                                                  | 25                                                                                  |                                                                                     | 25                                                                                  |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                |
| Ped Bike Factor         |                                                                                   | 0.92                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   | 0.99                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 0.99                                                                                |
| Frt                     |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.932                                                                             |                                                                                   |                                                                                     | 0.996                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected           | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.994                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)       | 1955                                                                              | 1608                                                                              | 0                                                                                 | 0                                                                                 | 1834                                                                              | 0                                                                                 | 1890                                                                                | 3729                                                                                | 0                                                                                   | 0                                                                                   | 3762                                                                                | 1758                                                                                |
| Flt Permitted           | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.994                                                                             |                                                                                   | 0.449                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.953                                                                               |                                                                                     |
| Satd. Flow (perm)       | 1955                                                                              | 1608                                                                              | 0                                                                                 | 0                                                                                 | 1832                                                                              | 0                                                                                 | 889                                                                                 | 3729                                                                                | 0                                                                                   | 0                                                                                   | 3585                                                                                | 1738                                                                                |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | No                                                                                |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | No                                                                                  |
| Satd. Flow (RTOR)       |                                                                                   | 760                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)        |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 35                                                                                  |                                                                                     |                                                                                     | 35                                                                                  |                                                                                     |
| Link Distance (ft)      |                                                                                   | 277                                                                               |                                                                                   |                                                                                   | 225                                                                               |                                                                                   |                                                                                     | 325                                                                                 |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Travel Time (s)         |                                                                                   | 7.6                                                                               |                                                                                   |                                                                                   | 6.1                                                                               |                                                                                   |                                                                                     | 6.3                                                                                 |                                                                                     |                                                                                     | 1.8                                                                                 |                                                                                     |
| Confl. Peds. (#/hr)     |                                                                                   |                                                                                   | 3                                                                                 | 3                                                                                 |                                                                                   |                                                                                   | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Peak Hour Factor        | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                |
| Heavy Vehicles (%)      | 1%                                                                                | 0%                                                                                | 1%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 243                                                                               | 247                                                                               | 0                                                                                 | 0                                                                                 | 8                                                                                 | 0                                                                                 | 252                                                                                 | 406                                                                                 | 0                                                                                   | 0                                                                                   | 441                                                                                 | 262                                                                                 |
| Turn Type               | Prot                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  | pm+ov                                                                               |
| Protected Phases        | 4                                                                                 |                                                                                   |                                                                                   |                                                                                   | 10                                                                                |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 4                                                                                   |
| Permitted Phases        |                                                                                   |                                                                                   |                                                                                   | 10                                                                                |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase          | 4                                                                                 |                                                                                   |                                                                                   | 10                                                                                | 10                                                                                |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 9.0                                                                                 |                                                                                     | 9.0                                                                                 | 9.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)       | 10.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 8.0                                                                                 | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 10.0                                                                                |
| Total Split (s)         | 29.0                                                                              |                                                                                   |                                                                                   | 12.0                                                                              | 12.0                                                                              |                                                                                   | 19.0                                                                                | 49.0                                                                                |                                                                                     | 30.0                                                                                | 30.0                                                                                | 29.0                                                                                |
| Total Split (%)         | 32.2%                                                                             |                                                                                   |                                                                                   | 13.3%                                                                             | 13.3%                                                                             |                                                                                   | 21.1%                                                                               | 54.4%                                                                               |                                                                                     | 33.3%                                                                               | 33.3%                                                                               | 32.2%                                                                               |
| Maximum Green (s)       | 24.0                                                                              |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 16.0                                                                                | 43.0                                                                                |                                                                                     | 24.0                                                                                | 24.0                                                                                | 24.0                                                                                |
| Yellow Time (s)         | 3.0                                                                               |                                                                                   |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 | 3.0                                                                                 |
| All-Red Time (s)        | 2.0                                                                               |                                                                                   |                                                                                   | 2.0                                                                               | 2.0                                                                               |                                                                                   | 0.0                                                                                 | 2.0                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   | 3.0                                                                                 | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 | 5.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                                |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 2.0                                                                               |                                                                                   |                                                                                   | 2.0                                                                               | 2.0                                                                               |                                                                                   | 2.0                                                                                 | 2.0                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Recall Mode             | None                                                                              |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                                | Max                                                                                 |                                                                                     | Max                                                                                 | Max                                                                                 | None                                                                                |
| Walk Time (s)           | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 9.0                                                                                 |                                                                                     | 9.0                                                                                 | 9.0                                                                                 | 7.0                                                                                 |
| Flash Don't Walk (s)    | 17.0                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 17.0                                                                                |
| Pedestrian Calls (#/hr) | 4                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 4                                                                                   |
| Act Effct Green (s)     | 13.7                                                                              | 0.0                                                                               |                                                                                   |                                                                                   | 5.4                                                                               |                                                                                   | 46.7                                                                                | 43.7                                                                                |                                                                                     |                                                                                     | 31.7                                                                                | 46.4                                                                                |
| Actuated g/C Ratio      | 0.19                                                                              | 0.00                                                                              |                                                                                   |                                                                                   | 0.08                                                                              |                                                                                   | 0.66                                                                                | 0.62                                                                                |                                                                                     |                                                                                     | 0.45                                                                                | 0.66                                                                                |

## 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| v/c Ratio               | 0.64                                                                              | 0.33                                                                              |                                                                                   |                                                                                   | 0.06                                                                              |                                                                                   | 0.35                                                                               | 0.18                                                                                |                                                                                     |                                                                                     | 0.27                                                                                | 0.23                                                                                |
| Control Delay (s/veh)   | 34.3                                                                              | 1.1                                                                               |                                                                                   |                                                                                   | 35.4                                                                              |                                                                                   | 7.9                                                                                | 7.4                                                                                 |                                                                                     |                                                                                     | 15.7                                                                                | 4.9                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay (s/veh)     | 34.3                                                                              | 1.1                                                                               |                                                                                   |                                                                                   | 35.4                                                                              |                                                                                   | 7.9                                                                                | 7.4                                                                                 |                                                                                     |                                                                                     | 15.7                                                                                | 4.9                                                                                 |
| LOS                     | C                                                                                 | A                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   | A                                                                                   |
| Approach Delay (s/veh)  |                                                                                   | 17.6                                                                              |                                                                                   |                                                                                   | 35.4                                                                              |                                                                                   |                                                                                    | 7.6                                                                                 |                                                                                     |                                                                                     | 11.7                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Queue Length 50th (ft)  | 93                                                                                | 0                                                                                 |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   | 30                                                                                 | 29                                                                                  |                                                                                     |                                                                                     | 53                                                                                  | 22                                                                                  |
| Queue Length 95th (ft)  | 186                                                                               | 0                                                                                 |                                                                                   |                                                                                   | 19                                                                                |                                                                                   | 121                                                                                | 95                                                                                  |                                                                                     |                                                                                     | 154                                                                                 | 100                                                                                 |
| Internal Link Dist (ft) |                                                                                   | 197                                                                               |                                                                                   |                                                                                   | 145                                                                               |                                                                                   |                                                                                    | 245                                                                                 |                                                                                     |                                                                                     | 14                                                                                  |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 100                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     | 678                                                                               | 760                                                                               |                                                                                   |                                                                                   | 185                                                                               |                                                                                   | 822                                                                                | 2319                                                                                |                                                                                     |                                                                                     | 1617                                                                                | 1151                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.36                                                                              | 0.33                                                                              |                                                                                   |                                                                                   | 0.04                                                                              |                                                                                   | 0.31                                                                               | 0.18                                                                                |                                                                                     |                                                                                     | 0.27                                                                                | 0.23                                                                                |

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 70.3

Natural Cycle: 50

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.64

Intersection Signal Delay (s/veh): 11.9

Intersection LOS: B

Intersection Capacity Utilization 63.3%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                                                                                                          |                                                                                                          |                                                                                                             |
|----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| #10<br><br>Ø2<br>49 s | #10<br><br>Ø4<br>29 s | #10<br><br>Ø10<br>12 s |
| #10<br><br>Ø5<br>19 s | #10<br><br>Ø6<br>30 s |                                                                                                             |

## 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations     |  |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)    | 134                                                                               | 0                                                                                 | 100                                                                               | 2                                                                                 | 1                                                                                 | 1                                                                                 | 159                                                                                 | 373                                                                                 | 4                                                                                   | 2                                                                                   | 475                                                                                 | 348                                                                                 |
| Future Volume (vph)     | 134                                                                               | 0                                                                                 | 100                                                                               | 2                                                                                 | 1                                                                                 | 1                                                                                 | 159                                                                                 | 373                                                                                 | 4                                                                                   | 2                                                                                   | 475                                                                                 | 348                                                                                 |
| Ideal Flow (vphpl)      | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                |
| Lane Width (ft)         | 12                                                                                | 12                                                                                | 12                                                                                | 10                                                                                | 10                                                                                | 10                                                                                | 10                                                                                  | 10                                                                                  | 10                                                                                  | 13                                                                                  | 11                                                                                  | 12                                                                                  |
| Grade (%)               |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -2%                                                                               |                                                                                   |                                                                                     | -3%                                                                                 |                                                                                     |                                                                                     | 3%                                                                                  |                                                                                     |
| Storage Length (ft)     | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Lanes           | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)       | 25                                                                                |                                                                                   | 25                                                                                | 25                                                                                |                                                                                   | 25                                                                                | 75                                                                                  |                                                                                     | 25                                                                                  | 25                                                                                  |                                                                                     | 25                                                                                  |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                |
| Ped Bike Factor         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 0.99                                                                                | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                | 0.99                                                                                |
| Frt                     |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.966                                                                             |                                                                                   |                                                                                     | 0.998                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected           | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.976                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)       | 1936                                                                              | 1767                                                                              | 0                                                                                 | 0                                                                                 | 1866                                                                              | 0                                                                                 | 1853                                                                                | 3594                                                                                | 0                                                                                   | 0                                                                                   | 3654                                                                                | 1758                                                                                |
| Flt Permitted           | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.976                                                                             |                                                                                   | 0.441                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.954                                                                               |                                                                                     |
| Satd. Flow (perm)       | 1936                                                                              | 1767                                                                              | 0                                                                                 | 0                                                                                 | 1866                                                                              | 0                                                                                 | 856                                                                                 | 3594                                                                                | 0                                                                                   | 0                                                                                   | 3486                                                                                | 1738                                                                                |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | No                                                                                |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | No                                                                                  |
| Satd. Flow (RTOR)       |                                                                                   | 584                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)        |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 35                                                                                  |                                                                                     |                                                                                     | 35                                                                                  |                                                                                     |
| Link Distance (ft)      |                                                                                   | 277                                                                               |                                                                                   |                                                                                   | 225                                                                               |                                                                                   |                                                                                     | 325                                                                                 |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Travel Time (s)         |                                                                                   | 7.6                                                                               |                                                                                   |                                                                                   | 6.1                                                                               |                                                                                   |                                                                                     | 6.3                                                                                 |                                                                                     |                                                                                     | 1.8                                                                                 |                                                                                     |
| Confl. Peds. (#/hr)     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 6                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 6                                                                                   |
| Peak Hour Factor        | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                |
| Heavy Vehicles (%)      | 2%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 2%                                                                                  | 5%                                                                                  | 0%                                                                                  | 0%                                                                                  | 4%                                                                                  | 0%                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 138                                                                               | 103                                                                               | 0                                                                                 | 0                                                                                 | 4                                                                                 | 0                                                                                 | 164                                                                                 | 389                                                                                 | 0                                                                                   | 0                                                                                   | 492                                                                                 | 359                                                                                 |
| Turn Type               | Prot                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  | pm+ov                                                                               |
| Protected Phases        | 4                                                                                 |                                                                                   |                                                                                   |                                                                                   | 10                                                                                |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 4                                                                                   |
| Permitted Phases        |                                                                                   |                                                                                   |                                                                                   | 10                                                                                |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase          | 4                                                                                 |                                                                                   |                                                                                   | 10                                                                                | 10                                                                                |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 9.0                                                                                 |                                                                                     | 9.0                                                                                 | 9.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)       | 10.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 8.0                                                                                 | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 10.0                                                                                |
| Total Split (s)         | 17.0                                                                              |                                                                                   |                                                                                   | 12.0                                                                              | 12.0                                                                              |                                                                                   | 10.0                                                                                | 61.0                                                                                |                                                                                     | 51.0                                                                                | 51.0                                                                                | 17.0                                                                                |
| Total Split (%)         | 18.9%                                                                             |                                                                                   |                                                                                   | 13.3%                                                                             | 13.3%                                                                             |                                                                                   | 11.1%                                                                               | 67.8%                                                                               |                                                                                     | 56.7%                                                                               | 56.7%                                                                               | 18.9%                                                                               |
| Maximum Green (s)       | 12.0                                                                              |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                 | 55.0                                                                                |                                                                                     | 45.0                                                                                | 45.0                                                                                | 12.0                                                                                |
| Yellow Time (s)         | 3.0                                                                               |                                                                                   |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 | 3.0                                                                                 |
| All-Red Time (s)        | 2.0                                                                               |                                                                                   |                                                                                   | 2.0                                                                               | 2.0                                                                               |                                                                                   | 0.0                                                                                 | 2.0                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   | 3.0                                                                                 | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 | 5.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                                |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 2.0                                                                               |                                                                                   |                                                                                   | 2.0                                                                               | 2.0                                                                               |                                                                                   | 2.0                                                                                 | 2.0                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Recall Mode             | None                                                                              |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                                | Max                                                                                 |                                                                                     | Max                                                                                 | Max                                                                                 | None                                                                                |
| Walk Time (s)           | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 9.0                                                                                 |                                                                                     | 9.0                                                                                 | 9.0                                                                                 | 7.0                                                                                 |
| Flash Don't Walk (s)    | 17.0                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 17.0                                                                                |
| Pedestrian Calls (#/hr) | 4                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 4                                                                                   |
| Act Effct Green (s)     | 11.6                                                                              | 0.0                                                                               |                                                                                   |                                                                                   | 5.2                                                                               |                                                                                   | 60.1                                                                                | 57.1                                                                                |                                                                                     |                                                                                     | 47.6                                                                                | 60.2                                                                                |
| Actuated g/C Ratio      | 0.14                                                                              | 0.00                                                                              |                                                                                   |                                                                                   | 0.06                                                                              |                                                                                   | 0.74                                                                                | 0.70                                                                                |                                                                                     |                                                                                     | 0.58                                                                                | 0.74                                                                                |

## 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| v/c Ratio               | 0.50                                                                              | 0.18                                                                              |                                                                                   |                                                                                   | 0.03                                                                              |                                                                                   | 0.23                                                                               | 0.15                                                                                |                                                                                     |                                                                                     | 0.24                                                                                | 0.28                                                                                |
| Control Delay (s/veh)   | 38.3                                                                              | 0.7                                                                               |                                                                                   |                                                                                   | 40.8                                                                              |                                                                                   | 5.8                                                                                | 5.8                                                                                 |                                                                                     |                                                                                     | 10.4                                                                                | 3.3                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay (s/veh)     | 38.3                                                                              | 0.7                                                                               |                                                                                   |                                                                                   | 40.8                                                                              |                                                                                   | 5.8                                                                                | 5.8                                                                                 |                                                                                     |                                                                                     | 10.4                                                                                | 3.3                                                                                 |
| LOS                     | D                                                                                 | A                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   | A                                                                                   |
| Approach Delay (s/veh)  |                                                                                   | 22.2                                                                              |                                                                                   |                                                                                   | 40.8                                                                              |                                                                                   |                                                                                    | 5.8                                                                                 |                                                                                     |                                                                                     | 7.4                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Queue Length 50th (ft)  | 63                                                                                | 0                                                                                 |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   | 15                                                                                 | 24                                                                                  |                                                                                     |                                                                                     | 52                                                                                  | 27                                                                                  |
| Queue Length 95th (ft)  | 129                                                                               | 0                                                                                 |                                                                                   |                                                                                   | 14                                                                                |                                                                                   | 79                                                                                 | 92                                                                                  |                                                                                     |                                                                                     | 147                                                                                 | 94                                                                                  |
| Internal Link Dist (ft) |                                                                                   | 197                                                                               |                                                                                   |                                                                                   | 145                                                                               |                                                                                   |                                                                                    | 245                                                                                 |                                                                                     |                                                                                     | 14                                                                                  |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 100                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     | 334                                                                               | 584                                                                               |                                                                                   |                                                                                   | 162                                                                               |                                                                                   | 717                                                                                | 2516                                                                                |                                                                                     |                                                                                     | 2037                                                                                | 1286                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.41                                                                              | 0.18                                                                              |                                                                                   |                                                                                   | 0.02                                                                              |                                                                                   | 0.23                                                                               | 0.15                                                                                |                                                                                     |                                                                                     | 0.24                                                                                | 0.28                                                                                |

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 81.5

Natural Cycle: 45

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.50

Intersection Signal Delay (s/veh): 9.1

Intersection LOS: A

Intersection Capacity Utilization 65.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                                                                                                   |                                                                                                   |                                                                                                     |  |                                                                                                      |  |
|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------|--|
| <br>Ø2<br>61 s |                                                                                                   | <br>Ø4<br>17 s |  | <br>Ø10<br>12 s |  |
| <br>Ø5<br>10 s | <br>Ø6<br>51 s |                                                                                                     |  |                                                                                                      |  |

## 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations     |  |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)    | 260                                                                               | 0                                                                                 | 221                                                                               | 2                                                                                 | 2                                                                                 | 2                                                                                 | 187                                                                                 | 548                                                                                 | 4                                                                                   | 8                                                                                   | 502                                                                                 | 264                                                                                 |
| Future Volume (vph)     | 260                                                                               | 0                                                                                 | 221                                                                               | 2                                                                                 | 2                                                                                 | 2                                                                                 | 187                                                                                 | 548                                                                                 | 4                                                                                   | 8                                                                                   | 502                                                                                 | 264                                                                                 |
| Ideal Flow (vphpl)      | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                |
| Lane Width (ft)         | 12                                                                                | 12                                                                                | 12                                                                                | 10                                                                                | 10                                                                                | 10                                                                                | 10                                                                                  | 10                                                                                  | 10                                                                                  | 13                                                                                  | 11                                                                                  | 12                                                                                  |
| Grade (%)               |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -2%                                                                               |                                                                                   |                                                                                     | -3%                                                                                 |                                                                                     |                                                                                     | 3%                                                                                  |                                                                                     |
| Storage Length (ft)     | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Lanes           | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)       | 25                                                                                |                                                                                   | 25                                                                                | 25                                                                                |                                                                                   | 25                                                                                | 75                                                                                  |                                                                                     | 25                                                                                  | 25                                                                                  |                                                                                     | 25                                                                                  |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                |
| Ped Bike Factor         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 1.00                                                                                |
| Frt                     |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.955                                                                             |                                                                                   |                                                                                     | 0.999                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected           | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.984                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.999                                                                               |                                                                                     |
| Satd. Flow (prot)       | 1975                                                                              | 1767                                                                              | 0                                                                                 | 0                                                                                 | 1860                                                                              | 0                                                                                 | 1871                                                                                | 3739                                                                                | 0                                                                                   | 0                                                                                   | 3758                                                                                | 1758                                                                                |
| Flt Permitted           | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.984                                                                             |                                                                                   | 0.399                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.946                                                                               |                                                                                     |
| Satd. Flow (perm)       | 1975                                                                              | 1767                                                                              | 0                                                                                 | 0                                                                                 | 1860                                                                              | 0                                                                                 | 785                                                                                 | 3739                                                                                | 0                                                                                   | 0                                                                                   | 3559                                                                                | 1752                                                                                |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | No                                                                                |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | No                                                                                  |
| Satd. Flow (RTOR)       |                                                                                   | 685                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)        |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 35                                                                                  |                                                                                     |                                                                                     | 35                                                                                  |                                                                                     |
| Link Distance (ft)      |                                                                                   | 277                                                                               |                                                                                   |                                                                                   | 225                                                                               |                                                                                   |                                                                                     | 325                                                                                 |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Travel Time (s)         |                                                                                   | 7.6                                                                               |                                                                                   |                                                                                   | 6.1                                                                               |                                                                                   |                                                                                     | 6.3                                                                                 |                                                                                     |                                                                                     | 1.8                                                                                 |                                                                                     |
| Confl. Peds. (#/hr)     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 2                                                                                   |
| Peak Hour Factor        | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                |
| Heavy Vehicles (%)      | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 1%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 268                                                                               | 228                                                                               | 0                                                                                 | 0                                                                                 | 6                                                                                 | 0                                                                                 | 193                                                                                 | 569                                                                                 | 0                                                                                   | 0                                                                                   | 526                                                                                 | 272                                                                                 |
| Turn Type               | Prot                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  | pm+ov                                                                               |
| Protected Phases        | 4                                                                                 |                                                                                   |                                                                                   |                                                                                   | 10                                                                                |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 4                                                                                   |
| Permitted Phases        |                                                                                   |                                                                                   |                                                                                   | 10                                                                                |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase          | 4                                                                                 |                                                                                   |                                                                                   | 10                                                                                | 10                                                                                |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 9.0                                                                                 |                                                                                     | 9.0                                                                                 | 9.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)       | 10.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 8.0                                                                                 | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 10.0                                                                                |
| Total Split (s)         | 29.0                                                                              |                                                                                   |                                                                                   | 12.0                                                                              | 12.0                                                                              |                                                                                   | 13.0                                                                                | 49.0                                                                                |                                                                                     | 36.0                                                                                | 36.0                                                                                | 29.0                                                                                |
| Total Split (%)         | 32.2%                                                                             |                                                                                   |                                                                                   | 13.3%                                                                             | 13.3%                                                                             |                                                                                   | 14.4%                                                                               | 54.4%                                                                               |                                                                                     | 40.0%                                                                               | 40.0%                                                                               | 32.2%                                                                               |
| Maximum Green (s)       | 24.0                                                                              |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 10.0                                                                                | 43.0                                                                                |                                                                                     | 30.0                                                                                | 30.0                                                                                | 24.0                                                                                |
| Yellow Time (s)         | 3.0                                                                               |                                                                                   |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 | 3.0                                                                                 |
| All-Red Time (s)        | 2.0                                                                               |                                                                                   |                                                                                   | 2.0                                                                               | 2.0                                                                               |                                                                                   | 0.0                                                                                 | 2.0                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   | 3.0                                                                                 | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 | 5.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                                |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 2.0                                                                               |                                                                                   |                                                                                   | 2.0                                                                               | 2.0                                                                               |                                                                                   | 2.0                                                                                 | 2.0                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Recall Mode             | None                                                                              |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                                | Max                                                                                 |                                                                                     | Max                                                                                 | Max                                                                                 | None                                                                                |
| Walk Time (s)           | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 9.0                                                                                 |                                                                                     | 9.0                                                                                 | 9.0                                                                                 | 7.0                                                                                 |
| Flash Don't Walk (s)    | 17.0                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 17.0                                                                                |
| Pedestrian Calls (#/hr) | 4                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 4                                                                                   |
| Act Effct Green (s)     | 14.3                                                                              | 0.0                                                                               |                                                                                   |                                                                                   | 5.3                                                                               |                                                                                   | 46.7                                                                                | 43.7                                                                                |                                                                                     |                                                                                     | 33.1                                                                                | 48.5                                                                                |
| Actuated g/C Ratio      | 0.20                                                                              | 0.00                                                                              |                                                                                   |                                                                                   | 0.07                                                                              |                                                                                   | 0.66                                                                                | 0.62                                                                                |                                                                                     |                                                                                     | 0.47                                                                                | 0.68                                                                                |

## 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| v/c Ratio               | 0.67                                                                              | 0.33                                                                              |                                                                                   |                                                                                   | 0.04                                                                              |                                                                                   | 0.31                                                                               | 0.25                                                                                |                                                                                     |                                                                                     | 0.32                                                                                | 0.23                                                                                |
| Control Delay (s/veh)   | 35.2                                                                              | 1.3                                                                               |                                                                                   |                                                                                   | 35.5                                                                              |                                                                                   | 7.9                                                                                | 8.0                                                                                 |                                                                                     |                                                                                     | 14.6                                                                                | 3.9                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay (s/veh)     | 35.2                                                                              | 1.3                                                                               |                                                                                   |                                                                                   | 35.5                                                                              |                                                                                   | 7.9                                                                                | 8.0                                                                                 |                                                                                     |                                                                                     | 14.6                                                                                | 3.9                                                                                 |
| LOS                     | D                                                                                 | A                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   | A                                                                                   |
| Approach Delay (s/veh)  |                                                                                   | 19.6                                                                              |                                                                                   |                                                                                   | 35.5                                                                              |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     | 11.0                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Queue Length 50th (ft)  | 103                                                                               | 0                                                                                 |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   | 23                                                                                 | 45                                                                                  |                                                                                     |                                                                                     | 65                                                                                  | 21                                                                                  |
| Queue Length 95th (ft)  | 202                                                                               | 0                                                                                 |                                                                                   |                                                                                   | 16                                                                                |                                                                                   | 94                                                                                 | 135                                                                                 |                                                                                     |                                                                                     | 166                                                                                 | 83                                                                                  |
| Internal Link Dist (ft) |                                                                                   | 197                                                                               |                                                                                   |                                                                                   | 145                                                                               |                                                                                   |                                                                                    | 245                                                                                 |                                                                                     |                                                                                     | 14                                                                                  |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 100                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     | 678                                                                               | 685                                                                               |                                                                                   |                                                                                   | 186                                                                               |                                                                                   | 672                                                                                | 2302                                                                                |                                                                                     |                                                                                     | 1663                                                                                | 1199                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.40                                                                              | 0.33                                                                              |                                                                                   |                                                                                   | 0.03                                                                              |                                                                                   | 0.29                                                                               | 0.25                                                                                |                                                                                     |                                                                                     | 0.32                                                                                | 0.23                                                                                |

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 70.9

Natural Cycle: 50

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.67

Intersection Signal Delay (s/veh): 12.0

Intersection LOS: B

Intersection Capacity Utilization 66.9%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                                                                                                          |                                                                                                          |                                                                                                             |
|----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| #10<br><br>Ø2<br>49 s | #10<br><br>Ø4<br>29 s | #10<br><br>Ø10<br>12 s |
| #10<br><br>Ø5<br>13 s | #10<br><br>Ø6<br>36 s |                                                                                                             |

## 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                         |  |  |  |  |  |  |   |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations     |  |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)    | 237                                                                               | 0                                                                                 | 232                                                                               | 1                                                                                 | 3                                                                                 | 4                                                                                 | 237                                                                                 | 376                                                                                 | 11                                                                                  | 25                                                                                  | 418                                                                                 | 247                                                                                 |
| Future Volume (vph)     | 237                                                                               | 0                                                                                 | 232                                                                               | 1                                                                                 | 3                                                                                 | 4                                                                                 | 237                                                                                 | 376                                                                                 | 11                                                                                  | 25                                                                                  | 418                                                                                 | 247                                                                                 |
| Ideal Flow (vphpl)      | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                              | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                | 2100                                                                                |
| Lane Width (ft)         | 12                                                                                | 12                                                                                | 12                                                                                | 10                                                                                | 10                                                                                | 10                                                                                | 10                                                                                  | 10                                                                                  | 10                                                                                  | 13                                                                                  | 11                                                                                  | 12                                                                                  |
| Grade (%)               |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -2%                                                                               |                                                                                   |                                                                                     | -3%                                                                                 |                                                                                     |                                                                                     | 3%                                                                                  |                                                                                     |
| Storage Length (ft)     | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Lanes           | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)       | 25                                                                                |                                                                                   | 25                                                                                | 25                                                                                |                                                                                   | 25                                                                                | 75                                                                                  |                                                                                     | 25                                                                                  | 25                                                                                  |                                                                                     | 25                                                                                  |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                |
| Ped Bike Factor         |                                                                                   | 0.92                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Frt                     |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.932                                                                             |                                                                                   |                                                                                     | 0.996                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected           | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.994                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.997                                                                               |                                                                                     |
| Satd. Flow (prot)       | 1955                                                                              | 1608                                                                              | 0                                                                                 | 0                                                                                 | 1834                                                                              | 0                                                                                 | 1890                                                                                | 3729                                                                                | 0                                                                                   | 0                                                                                   | 3752                                                                                | 1758                                                                                |
| Flt Permitted           | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.994                                                                             |                                                                                   | 0.428                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.914                                                                               |                                                                                     |
| Satd. Flow (perm)       | 1955                                                                              | 1608                                                                              | 0                                                                                 | 0                                                                                 | 1832                                                                              | 0                                                                                 | 847                                                                                 | 3729                                                                                | 0                                                                                   | 0                                                                                   | 3439                                                                                | 1758                                                                                |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | No                                                                                |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | No                                                                                  |
| Satd. Flow (RTOR)       |                                                                                   | 761                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 4                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)        |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 35                                                                                  |                                                                                     |                                                                                     | 35                                                                                  |                                                                                     |
| Link Distance (ft)      |                                                                                   | 277                                                                               |                                                                                   |                                                                                   | 225                                                                               |                                                                                   |                                                                                     | 325                                                                                 |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Travel Time (s)         |                                                                                   | 7.6                                                                               |                                                                                   |                                                                                   | 6.1                                                                               |                                                                                   |                                                                                     | 6.3                                                                                 |                                                                                     |                                                                                     | 1.8                                                                                 |                                                                                     |
| Confl. Peds. (#/hr)     |                                                                                   |                                                                                   | 3                                                                                 | 3                                                                                 |                                                                                   |                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Peak Hour Factor        | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                              | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                |
| Heavy Vehicles (%)      | 1%                                                                                | 0%                                                                                | 1%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 252                                                                               | 247                                                                               | 0                                                                                 | 0                                                                                 | 8                                                                                 | 0                                                                                 | 252                                                                                 | 412                                                                                 | 0                                                                                   | 0                                                                                   | 472                                                                                 | 263                                                                                 |
| Turn Type               | Prot                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  | pm+ov                                                                               |
| Protected Phases        | 4                                                                                 |                                                                                   |                                                                                   |                                                                                   | 10                                                                                |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 4                                                                                   |
| Permitted Phases        |                                                                                   |                                                                                   |                                                                                   | 10                                                                                |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase          | 4                                                                                 |                                                                                   |                                                                                   | 10                                                                                | 10                                                                                |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 9.0                                                                                 |                                                                                     | 9.0                                                                                 | 9.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)       | 10.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 8.0                                                                                 | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 10.0                                                                                |
| Total Split (s)         | 29.0                                                                              |                                                                                   |                                                                                   | 12.0                                                                              | 12.0                                                                              |                                                                                   | 19.0                                                                                | 49.0                                                                                |                                                                                     | 30.0                                                                                | 30.0                                                                                | 29.0                                                                                |
| Total Split (%)         | 32.2%                                                                             |                                                                                   |                                                                                   | 13.3%                                                                             | 13.3%                                                                             |                                                                                   | 21.1%                                                                               | 54.4%                                                                               |                                                                                     | 33.3%                                                                               | 33.3%                                                                               | 32.2%                                                                               |
| Maximum Green (s)       | 24.0                                                                              |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 16.0                                                                                | 43.0                                                                                |                                                                                     | 24.0                                                                                | 24.0                                                                                | 24.0                                                                                |
| Yellow Time (s)         | 3.0                                                                               |                                                                                   |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 | 3.0                                                                                 |
| All-Red Time (s)        | 2.0                                                                               |                                                                                   |                                                                                   | 2.0                                                                               | 2.0                                                                               |                                                                                   | 0.0                                                                                 | 2.0                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   | 3.0                                                                                 | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 | 5.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                                |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 2.0                                                                               |                                                                                   |                                                                                   | 2.0                                                                               | 2.0                                                                               |                                                                                   | 2.0                                                                                 | 2.0                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Recall Mode             | None                                                                              |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                                | Max                                                                                 |                                                                                     | Max                                                                                 | Max                                                                                 | None                                                                                |
| Walk Time (s)           | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 9.0                                                                                 |                                                                                     | 9.0                                                                                 | 9.0                                                                                 | 7.0                                                                                 |
| Flash Don't Walk (s)    | 17.0                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 17.0                                                                                |
| Pedestrian Calls (#/hr) | 4                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 4                                                                                   |
| Act Effct Green (s)     | 13.9                                                                              | 0.0                                                                               |                                                                                   |                                                                                   | 5.4                                                                               |                                                                                   | 46.8                                                                                | 43.7                                                                                |                                                                                     |                                                                                     | 31.7                                                                                | 51.7                                                                                |
| Actuated g/C Ratio      | 0.20                                                                              | 0.00                                                                              |                                                                                   |                                                                                   | 0.08                                                                              |                                                                                   | 0.66                                                                                | 0.62                                                                                |                                                                                     |                                                                                     | 0.45                                                                                | 0.73                                                                                |

## 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| v/c Ratio               | 0.65                                                                              | 0.32                                                                              |                                                                                   |                                                                                   | 0.06                                                                              |                                                                                   | 0.36                                                                               | 0.18                                                                                |                                                                                     |                                                                                     | 0.31                                                                                | 0.20                                                                                |
| Control Delay (s/veh)   | 34.7                                                                              | 1.1                                                                               |                                                                                   |                                                                                   | 35.5                                                                              |                                                                                   | 8.1                                                                                | 7.5                                                                                 |                                                                                     |                                                                                     | 16.1                                                                                | 4.6                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay (s/veh)     | 34.7                                                                              | 1.1                                                                               |                                                                                   |                                                                                   | 35.5                                                                              |                                                                                   | 8.1                                                                                | 7.5                                                                                 |                                                                                     |                                                                                     | 16.1                                                                                | 4.6                                                                                 |
| LOS                     | C                                                                                 | A                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   | A                                                                                   |
| Approach Delay (s/veh)  |                                                                                   | 18.1                                                                              |                                                                                   |                                                                                   | 35.5                                                                              |                                                                                   |                                                                                    | 7.7                                                                                 |                                                                                     |                                                                                     | 12.0                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Queue Length 50th (ft)  | 97                                                                                | 0                                                                                 |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   | 30                                                                                 | 30                                                                                  |                                                                                     |                                                                                     | 58                                                                                  | 22                                                                                  |
| Queue Length 95th (ft)  | 193                                                                               | 0                                                                                 |                                                                                   |                                                                                   | 19                                                                                |                                                                                   | 121                                                                                | 97                                                                                  |                                                                                     |                                                                                     | 166                                                                                 | 100                                                                                 |
| Internal Link Dist (ft) |                                                                                   | 197                                                                               |                                                                                   |                                                                                   | 145                                                                               |                                                                                   |                                                                                    | 245                                                                                 |                                                                                     |                                                                                     | 14                                                                                  |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 100                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     | 675                                                                               | 761                                                                               |                                                                                   |                                                                                   | 184                                                                               |                                                                                   | 801                                                                                | 2310                                                                                |                                                                                     |                                                                                     | 1542                                                                                | 1287                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.37                                                                              | 0.32                                                                              |                                                                                   |                                                                                   | 0.04                                                                              |                                                                                   | 0.31                                                                               | 0.18                                                                                |                                                                                     |                                                                                     | 0.31                                                                                | 0.20                                                                                |

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 70.6

Natural Cycle: 55

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.65

Intersection Signal Delay (s/veh): 12.2

Intersection LOS: B

Intersection Capacity Utilization 54.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 10: Prospect Avenue (CR 577) &amp; Rooney Circle/Driveway

|                                                                                                  |                                                                                                  |                                                                                                     |
|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| #10<br><br>Ø2 | #10<br><br>Ø4 | #10<br><br>Ø10 |
| 49 s                                                                                             | 29 s                                                                                             | 12 s                                                                                                |
| #10<br><br>Ø5 | #10<br><br>Ø6 |                                                                                                     |
| 19 s                                                                                             | 30 s                                                                                             |                                                                                                     |

**Intersection**

Int Delay, s/veh 0

| Movement                 | WBL                                                                               | WBR  | NBT                                                                               | NBR  | SBL  | SBT                                                                               |
|--------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|
| Lane Configurations      |  |      |  |      |      |  |
| Traffic Vol, veh/h       | 0                                                                                 | 1    | 429                                                                               | 0    | 2    | 739                                                                               |
| Future Vol, veh/h        | 0                                                                                 | 1    | 429                                                                               | 0    | 2    | 739                                                                               |
| 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                                                                                 | -    | -                                                                                 | -    | -    | -                                                                                 |
| Veh in Median Storage, # | 0                                                                                 | -    | 0                                                                                 | -    | -    | 0                                                                                 |
| Grade, %                 | 2                                                                                 | -    | -3                                                                                | -    | -    | 3                                                                                 |
| Peak Hour Factor         | 99                                                                                | 99   | 99                                                                                | 99   | 99   | 99                                                                                |
| Heavy Vehicles, %        | 0                                                                                 | 0    | 5                                                                                 | 0    | 0    | 3                                                                                 |
| Mvmt Flow                | 0                                                                                 | 1    | 433                                                                               | 0    | 2    | 746                                                                               |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 736    | 217    | 0      |
| Stage 1              | 433    | -      | -      |
| Stage 2              | 303    | -      | -      |
| Critical Hdwy        | 6.65   | 7.1    | -      |
| Critical Hdwy Stg 1  | 6.2    | -      | -      |
| Critical Hdwy Stg 2  | 6.4    | -      | -      |
| Follow-up Hdwy       | 3.65   | 3.3    | -      |
| Pot Cap-1 Maneuver   | 359    | 785    | -      |
| Stage 1              | 578    | -      | -      |
| Stage 2              | 669    | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | 359    | 785    | -      |
| Mov Cap-2 Maneuver   | 359    | -      | -      |
| Stage 1              | 577    | -      | -      |
| Stage 2              | 669    | -      | -      |

| Approach          | WB   | NB | SB   |
|-------------------|------|----|------|
| HCM Ctrl Dly, s/v | 9.59 | 0  | 0.04 |
| HCM LOS           | A    |    |      |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 785   | 15    |
| HCM Lane V/C Ratio    | -   | -        | 0.001 | 0.002 |
| HCM Ctrl Dly (s/v)    | -   | -        | 9.6   | 8.2   |
| HCM Lane LOS          | -   | -        | A     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 0     | 0     |

## 20: Prospect Avenue (CR 577) &amp; Blueberry Bend Driveway

## Intersection

Int Delay, s/veh 0.1

| Movement                 | WBL                                                                               | WBR  | NBT                                                                               | NBR  | SBL  | SBT                                                                               |
|--------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|
| Lane Configurations      |  |      |  |      |      |  |
| Traffic Vol, veh/h       | 1                                                                                 | 8    | 705                                                                               | 4    | 3    | 671                                                                               |
| Future Vol, veh/h        | 1                                                                                 | 8    | 705                                                                               | 4    | 3    | 671                                                                               |
| Conflicting Peds, #/hr   | 0                                                                                 | 0    | 0                                                                                 | 4    | 4    | 0                                                                                 |
| Sign Control             | Stop                                                                              | Stop | Free                                                                              | Free | Free | Free                                                                              |
| RT Channelized           | -                                                                                 | None | -                                                                                 | None | -    | None                                                                              |
| Storage Length           | 0                                                                                 | -    | -                                                                                 | -    | -    | -                                                                                 |
| Veh in Median Storage, # | 0                                                                                 | -    | 0                                                                                 | -    | -    | 0                                                                                 |
| Grade, %                 | 2                                                                                 | -    | -3                                                                                | -    | -    | 3                                                                                 |
| Peak Hour Factor         | 96                                                                                | 96   | 96                                                                                | 96   | 96   | 96                                                                                |
| Heavy Vehicles, %        | 0                                                                                 | 13   | 1                                                                                 | 0    | 25   | 1                                                                                 |
| Mvmt Flow                | 1                                                                                 | 8    | 734                                                                               | 4    | 3    | 699                                                                               |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 1026   | 373    | 0      |
| Stage 1              | 740    | -      | -      |
| Stage 2              | 286    | -      | -      |
| Critical Hdwy        | 6.65   | 7.36   | -      |
| Critical Hdwy Stg 1  | 6.2    | -      | -      |
| Critical Hdwy Stg 2  | 6.4    | -      | -      |
| Follow-up Hdwy       | 3.65   | 3.43   | -      |
| Pot Cap-1 Maneuver   | 238    | 581    | -      |
| Stage 1              | 392    | -      | -      |
| Stage 2              | 683    | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | 236    | 580    | -      |
| Mov Cap-2 Maneuver   | 236    | -      | -      |
| Stage 1              | 389    | -      | -      |
| Stage 2              | 683    | -      | -      |

| Approach          | WB    | NB | SB   |
|-------------------|-------|----|------|
| HCM Ctrl Dly, s/v | 12.35 | 0  | 0.09 |
| HCM LOS           | B     |    |      |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 499   | 24    |
| HCM Lane V/C Ratio    | -   | -        | 0.019 | 0.004 |
| HCM Ctrl Dly (s/v)    | -   | -        | 12.4  | 10    |
| HCM Lane LOS          | -   | -        | B     | B     |
| HCM 95th %tile Q(veh) | -   | -        | 0.1   | 0     |

**Intersection**

Int Delay, s/veh 0.3

| Movement                 | WBL                                                                               | WBR  | NBT                                                                               | NBR  | SBL  | SBT                                                                               |
|--------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|
| Lane Configurations      |  |      |  |      |      |  |
| Traffic Vol, veh/h       | 0                                                                                 | 3    | 471                                                                               | 10   | 22   | 530                                                                               |
| Future Vol, veh/h        | 0                                                                                 | 3    | 471                                                                               | 10   | 22   | 530                                                                               |
| 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                                                                                 | -    | -                                                                                 | -    | -    | -                                                                                 |
| Veh in Median Storage, # | 0                                                                                 | -    | 0                                                                                 | -    | -    | 0                                                                                 |
| Grade, %                 | 2                                                                                 | -    | -3                                                                                | -    | -    | 3                                                                                 |
| Peak Hour Factor         | 95                                                                                | 95   | 95                                                                                | 95   | 95   | 95                                                                                |
| Heavy Vehicles, %        | 0                                                                                 | 0    | 1                                                                                 | 0    | 0    | 1                                                                                 |
| Mvmt Flow                | 0                                                                                 | 3    | 496                                                                               | 11   | 23   | 558                                                                               |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 771    | 253    | 0      |
| Stage 1              | 501    | -      | -      |
| Stage 2              | 269    | -      | -      |
| Critical Hdwy        | 6.65   | 7.1    | -      |
| Critical Hdwy Stg 1  | 6.2    | -      | -      |
| Critical Hdwy Stg 2  | 6.4    | -      | -      |
| Follow-up Hdwy       | 3.65   | 3.3    | -      |
| Pot Cap-1 Maneuver   | 342    | 742    | -      |
| Stage 1              | 531    | -      | -      |
| Stage 2              | 698    | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | 334    | 742    | -      |
| Mov Cap-2 Maneuver   | 334    | -      | -      |
| Stage 1              | 518    | -      | -      |
| Stage 2              | 698    | -      | -      |

| Approach          | WB   | NB | SB   |
|-------------------|------|----|------|
| HCM Ctrl Dly, s/v | 9.87 | 0  | 0.51 |
| HCM LOS           | A    |    |      |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 742   | 215   |
| HCM Lane V/C Ratio    | -   | -        | 0.004 | 0.022 |
| HCM Ctrl Dly (s/v)    | -   | -        | 9.9   | 8.4   |
| HCM Lane LOS          | -   | -        | A     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 0     | 0.1   |

**Intersection**

Int Delay, s/veh 0

| Movement                 | WBL                                                                               | WBR  | NBT                                                                               | NBR  | SBL  | SBT                                                                               |
|--------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|
| Lane Configurations      |  |      |  |      |      |  |
| Traffic Vol, veh/h       | 0                                                                                 | 1    | 497                                                                               | 0    | 2    | 821                                                                               |
| Future Vol, veh/h        | 0                                                                                 | 1    | 497                                                                               | 0    | 2    | 821                                                                               |
| 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                                                                                 | -    | -                                                                                 | -    | -    | -                                                                                 |
| Veh in Median Storage, # | 0                                                                                 | -    | 0                                                                                 | -    | -    | 0                                                                                 |
| Grade, %                 | 2                                                                                 | -    | -3                                                                                | -    | -    | 3                                                                                 |
| Peak Hour Factor         | 99                                                                                | 99   | 99                                                                                | 99   | 99   | 99                                                                                |
| Heavy Vehicles, %        | 0                                                                                 | 0    | 5                                                                                 | 0    | 0    | 3                                                                                 |
| Mvmt Flow                | 0                                                                                 | 1    | 502                                                                               | 0    | 2    | 829                                                                               |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 838    | 251    | 0      |
| Stage 1              | 502    | -      | -      |
| Stage 2              | 336    | -      | -      |
| Critical Hdwy        | 6.65   | 7.1    | -      |
| Critical Hdwy Stg 1  | 6.2    | -      | -      |
| Critical Hdwy Stg 2  | 6.4    | -      | -      |
| Follow-up Hdwy       | 3.65   | 3.3    | -      |
| Pot Cap-1 Maneuver   | 311    | 744    | -      |
| Stage 1              | 530    | -      | -      |
| Stage 2              | 641    | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | 311    | 744    | -      |
| Mov Cap-2 Maneuver   | 311    | -      | -      |
| Stage 1              | 529    | -      | -      |
| Stage 2              | 641    | -      | -      |

| Approach          | WB   | NB | SB   |
|-------------------|------|----|------|
| HCM Ctrl Dly, s/v | 9.84 | 0  | 0.04 |
| HCM LOS           | A    |    |      |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 744   | 13    |
| HCM Lane V/C Ratio    | -   | -        | 0.001 | 0.002 |
| HCM Ctrl Dly (s/v)    | -   | -        | 9.8   | 8.4   |
| HCM Lane LOS          | -   | -        | A     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 0     | 0     |

## 20: Prospect Avenue (CR 577) &amp; Blueberry Bend Driveway

## Intersection

Int Delay, s/veh 0.1

| Movement                 | WBL                                                                               | WBR  | NBT                                                                               | NBR  | SBL  | SBT                                                                               |
|--------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|
| Lane Configurations      |  |      |  |      |      |  |
| Traffic Vol, veh/h       | 1                                                                                 | 8    | 799                                                                               | 4    | 3    | 766                                                                               |
| Future Vol, veh/h        | 1                                                                                 | 8    | 799                                                                               | 4    | 3    | 766                                                                               |
| 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                                                                                 | -    | -                                                                                 | -    | -    | -                                                                                 |
| Veh in Median Storage, # | 0                                                                                 | -    | 0                                                                                 | -    | -    | 0                                                                                 |
| Grade, %                 | 2                                                                                 | -    | -3                                                                                | -    | -    | 3                                                                                 |
| Peak Hour Factor         | 96                                                                                | 96   | 96                                                                                | 96   | 96   | 96                                                                                |
| Heavy Vehicles, %        | 0                                                                                 | 13   | 1                                                                                 | 0    | 25   | 1                                                                                 |
| Mvmt Flow                | 1                                                                                 | 8    | 832                                                                               | 4    | 3    | 798                                                                               |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 1160   | 418    | 0      |
| Stage 1              | 834    | -      | -      |
| Stage 2              | 325    | -      | -      |
| Critical Hdwy        | 6.65   | 7.36   | -      |
| Critical Hdwy Stg 1  | 6.2    | -      | -      |
| Critical Hdwy Stg 2  | 6.4    | -      | -      |
| Follow-up Hdwy       | 3.65   | 3.43   | -      |
| Pot Cap-1 Maneuver   | 197    | 541    | -      |
| Stage 1              | 347    | -      | -      |
| Stage 2              | 649    | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | 196    | 541    | -      |
| Mov Cap-2 Maneuver   | 196    | -      | -      |
| Stage 1              | 345    | -      | -      |
| Stage 2              | 649    | -      | -      |

| Approach          | WB    | NB | SB  |
|-------------------|-------|----|-----|
| HCM Ctrl Dly, s/v | 13.12 | 0  | 0.1 |
| HCM LOS           | B     |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 452   | 21    |
| HCM Lane V/C Ratio    | -   | -        | 0.021 | 0.005 |
| HCM Ctrl Dly (s/v)    | -   | -        | 13.1  | 10.5  |
| HCM Lane LOS          | -   | -        | B     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 0.1   | 0     |

## 20: Prospect Avenue (CR 577) &amp; Blueberry Bend Driveway

| Intersection             |                                                                                   |          |                                                                                   |        |      |                                                                                   |
|--------------------------|-----------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------|--------|------|-----------------------------------------------------------------------------------|
| Int Delay, s/veh         | 0.3                                                                               |          |                                                                                   |        |      |                                                                                   |
| Movement                 | WBL                                                                               | WBR      | NBT                                                                               | NBR    | SBL  | SBT                                                                               |
| Lane Configurations      |  |          |  |        |      |  |
| Traffic Vol, veh/h       | 0                                                                                 | 3        | 592                                                                               | 10     | 22   | 661                                                                               |
| Future Vol, veh/h        | 0                                                                                 | 3        | 592                                                                               | 10     | 22   | 661                                                                               |
| 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                                                                                 | -        | -                                                                                 | -      | -    | -                                                                                 |
| Veh in Median Storage, # | 0                                                                                 | -        | 0                                                                                 | -      | -    | 0                                                                                 |
| Grade, %                 | 2                                                                                 | -        | -3                                                                                | -      | -    | 3                                                                                 |
| Peak Hour Factor         | 95                                                                                | 95       | 95                                                                                | 95     | 95   | 95                                                                                |
| Heavy Vehicles, %        | 0                                                                                 | 0        | 1                                                                                 | 0      | 0    | 1                                                                                 |
| Mvmt Flow                | 0                                                                                 | 3        | 623                                                                               | 11     | 23   | 696                                                                               |
| Major/Minor              | Minor1                                                                            | Major1   |                                                                                   | Major2 |      |                                                                                   |
| Conflicting Flow All     | 953                                                                               | 317      | 0                                                                                 | 0      | 634  | 0                                                                                 |
| Stage 1                  | 628                                                                               | -        | -                                                                                 | -      | -    | -                                                                                 |
| Stage 2                  | 325                                                                               | -        | -                                                                                 | -      | -    | -                                                                                 |
| Critical Hdwy            | 6.65                                                                              | 7.1      | -                                                                                 | -      | 4.1  | -                                                                                 |
| Critical Hdwy Stg 1      | 6.2                                                                               | -        | -                                                                                 | -      | -    | -                                                                                 |
| Critical Hdwy Stg 2      | 6.4                                                                               | -        | -                                                                                 | -      | -    | -                                                                                 |
| Follow-up Hdwy           | 3.65                                                                              | 3.3      | -                                                                                 | -      | 2.2  | -                                                                                 |
| Pot Cap-1 Maneuver       | 265                                                                               | 673      | -                                                                                 | -      | 959  | -                                                                                 |
| Stage 1                  | 452                                                                               | -        | -                                                                                 | -      | -    | -                                                                                 |
| Stage 2                  | 650                                                                               | -        | -                                                                                 | -      | -    | -                                                                                 |
| Platoon blocked, %       |                                                                                   |          | -                                                                                 | -      |      | -                                                                                 |
| Mov Cap-1 Maneuver       | 257                                                                               | 673      | -                                                                                 | -      | 959  | -                                                                                 |
| Mov Cap-2 Maneuver       | 257                                                                               | -        | -                                                                                 | -      | -    | -                                                                                 |
| Stage 1                  | 439                                                                               | -        | -                                                                                 | -      | -    | -                                                                                 |
| Stage 2                  | 650                                                                               | -        | -                                                                                 | -      | -    | -                                                                                 |
| Approach                 | WB                                                                                | NB       |                                                                                   | SB     |      |                                                                                   |
| HCM Ctrl Dly, s/v        | 10.38                                                                             | 0        |                                                                                   | 0.5    |      |                                                                                   |
| HCM LOS                  | B                                                                                 |          |                                                                                   |        |      |                                                                                   |
| Minor Lane/Major Mvmt    | NBT                                                                               | NBRWBLn1 |                                                                                   | SBL    | SBT  |                                                                                   |
| Capacity (veh/h)         | -                                                                                 | 673      |                                                                                   | 174    | -    |                                                                                   |
| HCM Lane V/C Ratio       | -                                                                                 | 0.005    |                                                                                   | 0.024  | -    |                                                                                   |
| HCM Ctrl Dly (s/v)       | -                                                                                 | 10.4     |                                                                                   | 8.8    | 0.2  |                                                                                   |
| HCM Lane LOS             | -                                                                                 | B        |                                                                                   | A      | A    |                                                                                   |
| HCM 95th %tile Q(veh)    | -                                                                                 | 0        |                                                                                   | 0.1    | -    |                                                                                   |

**Intersection**

Int Delay, s/veh 0

| Movement                 | WBL  | WBR                                                                               | NBT                                                                               | NBR  | SBL  | SBT                                                                               |
|--------------------------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|
| Lane Configurations      |      |  |  |      |      |  |
| Traffic Vol, veh/h       | 0    | 4                                                                                 | 503                                                                               | 5    | 0    | 825                                                                               |
| Future Vol, veh/h        | 0    | 4                                                                                 | 503                                                                               | 5    | 0    | 825                                                                               |
| 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                                                                                 | -                                                                                 | -    | -    | -                                                                                 |
| Veh in Median Storage, # | 0    | -                                                                                 | 0                                                                                 | -    | -    | 0                                                                                 |
| Grade, %                 | 2    | -                                                                                 | -3                                                                                | -    | -    | 3                                                                                 |
| Peak Hour Factor         | 99   | 99                                                                                | 99                                                                                | 99   | 99   | 99                                                                                |
| Heavy Vehicles, %        | 0    | 0                                                                                 | 5                                                                                 | 0    | 0    | 3                                                                                 |
| Mvmt Flow                | 0    | 4                                                                                 | 508                                                                               | 5    | 0    | 833                                                                               |

**Major/Minor**

|                      | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | -      | 257    | 0      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |
| Critical Hdwy        | -      | 7.1    | -      |
| Critical Hdwy Stg 1  | -      | -      | -      |
| Critical Hdwy Stg 2  | -      | -      | -      |
| Follow-up Hdwy       | -      | 3.3    | -      |
| Pot Cap-1 Maneuver   | 0      | 738    | -      |
| Stage 1              | 0      | -      | -      |
| Stage 2              | 0      | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | -      | 738    | -      |
| Mov Cap-2 Maneuver   | -      | -      | -      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |

**Approach**

|                   | WB  | NB | SB |
|-------------------|-----|----|----|
| HCM Ctrl Dly, s/v | 9.9 | 0  | 0  |
| HCM LOS           | A   |    |    |

**Minor Lane/Major Mvmt**

|                       | NBT | NBRWBLn1 | SBT |
|-----------------------|-----|----------|-----|
| Capacity (veh/h)      | -   | - 738    | -   |
| HCM Lane V/C Ratio    | -   | - 0.005  | -   |
| HCM Ctrl Dly (s/v)    | -   | - 9.9    | -   |
| HCM Lane LOS          | -   | - A      | -   |
| HCM 95th %tile Q(veh) | -   | - 0      | -   |

**Intersection**

Int Delay, s/veh 0.1

| Movement                 | WBL  | WBR                                                                               | NBT                                                                               | NBR  | SBL  | SBT                                                                               |
|--------------------------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|
| Lane Configurations      |      |  |  |      |      |  |
| Traffic Vol, veh/h       | 0    | 14                                                                                | 803                                                                               | 7    | 0    | 774                                                                               |
| Future Vol, veh/h        | 0    | 14                                                                                | 803                                                                               | 7    | 0    | 774                                                                               |
| 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                                                                                 | -                                                                                 | -    | -    | -                                                                                 |
| Veh in Median Storage, # | 0    | -                                                                                 | 0                                                                                 | -    | -    | 0                                                                                 |
| Grade, %                 | 2    | -                                                                                 | -3                                                                                | -    | -    | 3                                                                                 |
| Peak Hour Factor         | 96   | 96                                                                                | 96                                                                                | 96   | 96   | 96                                                                                |
| Heavy Vehicles, %        | 0    | 13                                                                                | 1                                                                                 | 0    | 25   | 1                                                                                 |
| Mvmt Flow                | 0    | 15                                                                                | 836                                                                               | 7    | 0    | 806                                                                               |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | -      | 422    | 0      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |
| Critical Hdwy        | -      | 7.36   | -      |
| Critical Hdwy Stg 1  | -      | -      | -      |
| Critical Hdwy Stg 2  | -      | -      | -      |
| Follow-up Hdwy       | -      | 3.43   | -      |
| Pot Cap-1 Maneuver   | 0      | 538    | -      |
| Stage 1              | 0      | -      | -      |
| Stage 2              | 0      | -      | -      |
| Platoon blocked, %   | -      | -      | -      |
| Mov Cap-1 Maneuver   | -      | 538    | -      |
| Mov Cap-2 Maneuver   | -      | -      | -      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |

| Approach          | WB    | NB | SB |
|-------------------|-------|----|----|
| HCM Ctrl Dly, s/v | 11.88 | 0  | 0  |
| HCM LOS           | B     |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT |
|-----------------------|-----|----------|-----|
| Capacity (veh/h)      | -   | - 538    | -   |
| HCM Lane V/C Ratio    | -   | - 0.027  | -   |
| HCM Ctrl Dly (s/v)    | -   | - 11.9   | -   |
| HCM Lane LOS          | -   | - B      | -   |
| HCM 95th %tile Q(veh) | -   | - 0.1    | -   |

**Intersection**

Int Delay, s/veh 0.1

| Movement                 | WBL  | WBR                                                                               | NBT                                                                               | NBR  | SBL  | SBT                                                                               |
|--------------------------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|
| Lane Configurations      |      |  |  |      |      |  |
| Traffic Vol, veh/h       | 0    | 11                                                                                | 600                                                                               | 17   | 0    | 690                                                                               |
| Future Vol, veh/h        | 0    | 11                                                                                | 600                                                                               | 17   | 0    | 690                                                                               |
| 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                                                                                 | -                                                                                 | -    | -    | -                                                                                 |
| Veh in Median Storage, # | 0    | -                                                                                 | 0                                                                                 | -    | -    | 0                                                                                 |
| Grade, %                 | 2    | -                                                                                 | -3                                                                                | -    | -    | 3                                                                                 |
| Peak Hour Factor         | 95   | 95                                                                                | 95                                                                                | 95   | 95   | 95                                                                                |
| Heavy Vehicles, %        | 0    | 0                                                                                 | 1                                                                                 | 0    | 0    | 1                                                                                 |
| Mvmt Flow                | 0    | 12                                                                                | 632                                                                               | 18   | 0    | 726                                                                               |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | -      | 325    | 0      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |
| Critical Hdwy        | -      | 7.1    | -      |
| Critical Hdwy Stg 1  | -      | -      | -      |
| Critical Hdwy Stg 2  | -      | -      | -      |
| Follow-up Hdwy       | -      | 3.3    | -      |
| Pot Cap-1 Maneuver   | 0      | 665    | -      |
| Stage 1              | 0      | -      | -      |
| Stage 2              | 0      | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | -      | 665    | -      |
| Mov Cap-2 Maneuver   | -      | -      | -      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |

| Approach          | WB    | NB | SB |
|-------------------|-------|----|----|
| HCM Ctrl Dly, s/v | 10.51 | 0  | 0  |
| HCM LOS           | B     |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT |
|-----------------------|-----|----------|-----|
| Capacity (veh/h)      | -   | - 665    | -   |
| HCM Lane V/C Ratio    | -   | - 0.017  | -   |
| HCM Ctrl Dly (s/v)    | -   | - 10.5   | -   |
| HCM Lane LOS          | -   | - B      | -   |
| HCM 95th %tile Q(veh) | -   | - 0.1    | -   |

**Intersection**

Int Delay, s/veh 0

| Movement                 | WBL  | WBR                                                                               | NBT                                                                               | NBR  | SBL  | SBT                                                                               |
|--------------------------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|
| Lane Configurations      |      |  |  |      |      |  |
| Traffic Vol, veh/h       | 0    | 1                                                                                 | 429                                                                               | 1    | 0    | 741                                                                               |
| Future Vol, veh/h        | 0    | 1                                                                                 | 429                                                                               | 1    | 0    | 741                                                                               |
| 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                                                                                 | -                                                                                 | -    | -    | -                                                                                 |
| Veh in Median Storage, # | 0    | -                                                                                 | 0                                                                                 | -    | -    | 0                                                                                 |
| Grade, %                 | 3    | -                                                                                 | -3                                                                                | -    | -    | 3                                                                                 |
| Peak Hour Factor         | 99   | 99                                                                                | 99                                                                                | 99   | 99   | 99                                                                                |
| Heavy Vehicles, %        | 0    | 2                                                                                 | 5                                                                                 | 0    | 0    | 3                                                                                 |
| Mvmt Flow                | 0    | 1                                                                                 | 433                                                                               | 1    | 0    | 748                                                                               |

**Major/Minor**

|                      | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | -      | 217    | 0      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |
| Critical Hdwy        | -      | 7.24   | -      |
| Critical Hdwy Stg 1  | -      | -      | -      |
| Critical Hdwy Stg 2  | -      | -      | -      |
| Follow-up Hdwy       | -      | 3.32   | -      |
| Pot Cap-1 Maneuver   | 0      | 773    | -      |
| Stage 1              | 0      | -      | -      |
| Stage 2              | 0      | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | -      | 773    | -      |
| Mov Cap-2 Maneuver   | -      | -      | -      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |

**Approach**

|                   | WB   | NB | SB |
|-------------------|------|----|----|
| HCM Ctrl Dly, s/v | 9.66 | 0  | 0  |
| HCM LOS           | A    |    |    |

**Minor Lane/Major Mvmt**

|                       | NBT | NBRWBLn1 | SBT   |
|-----------------------|-----|----------|-------|
| Capacity (veh/h)      | -   | -        | 773   |
| HCM Lane V/C Ratio    | -   | -        | 0.001 |
| HCM Ctrl Dly (s/v)    | -   | -        | 9.7   |
| HCM Lane LOS          | -   | -        | A     |
| HCM 95th %tile Q(veh) | -   | -        | 0     |

**Intersection**

Int Delay, s/veh 0

| Movement                 | WBL  | WBR                                                                               | NBT                                                                               | NBR  | SBL  | SBT                                                                               |
|--------------------------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|
| Lane Configurations      |      |  |  |      |      |  |
| Traffic Vol, veh/h       | 0    | 2                                                                                 | 713                                                                               | 0    | 0    | 674                                                                               |
| Future Vol, veh/h        | 0    | 2                                                                                 | 713                                                                               | 0    | 0    | 674                                                                               |
| Conflicting Peds, #/hr   | 0    | 0                                                                                 | 0                                                                                 | 1    | 1    | 0                                                                                 |
| Sign Control             | Stop | Stop                                                                              | Free                                                                              | Free | Free | Free                                                                              |
| RT Channelized           | -    | None                                                                              | -                                                                                 | None | -    | None                                                                              |
| Storage Length           | -    | 0                                                                                 | -                                                                                 | -    | -    | -                                                                                 |
| Veh in Median Storage, # | 0    | -                                                                                 | 0                                                                                 | -    | -    | 0                                                                                 |
| Grade, %                 | 3    | -                                                                                 | -3                                                                                | -    | -    | 3                                                                                 |
| Peak Hour Factor         | 96   | 96                                                                                | 96                                                                                | 96   | 96   | 96                                                                                |
| Heavy Vehicles, %        | 0    | 2                                                                                 | 1                                                                                 | 0    | 0    | 1                                                                                 |
| Mvmt Flow                | 0    | 2                                                                                 | 743                                                                               | 0    | 0    | 702                                                                               |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | -      | 372    | 0      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |
| Critical Hdwy        | -      | 7.24   | -      |
| Critical Hdwy Stg 1  | -      | -      | -      |
| Critical Hdwy Stg 2  | -      | -      | -      |
| Follow-up Hdwy       | -      | 3.32   | -      |
| Pot Cap-1 Maneuver   | 0      | 606    | -      |
| Stage 1              | 0      | -      | -      |
| Stage 2              | 0      | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | -      | 605    | -      |
| Mov Cap-2 Maneuver   | -      | -      | -      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |

| Approach          | WB    | NB | SB |
|-------------------|-------|----|----|
| HCM Ctrl Dly, s/v | 10.97 | 0  | 0  |
| HCM LOS           | B     |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT   |
|-----------------------|-----|----------|-------|
| Capacity (veh/h)      | -   | -        | 605   |
| HCM Lane V/C Ratio    | -   | -        | 0.003 |
| HCM Ctrl Dly (s/v)    | -   | -        | 11    |
| HCM Lane LOS          | -   | -        | B     |
| HCM 95th %tile Q(veh) | -   | -        | 0     |

**Intersection**

Int Delay, s/veh 0

| Movement                 | WBL  | WBR                                                                               | NBT                                                                               | NBR  | SBL  | SBT                                                                               |
|--------------------------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|
| Lane Configurations      |      |  |  |      |      |  |
| Traffic Vol, veh/h       | 0    | 1                                                                                 | 474                                                                               | 0    | 0    | 552                                                                               |
| Future Vol, veh/h        | 0    | 1                                                                                 | 474                                                                               | 0    | 0    | 552                                                                               |
| 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                                                                                 | -                                                                                 | -    | -    | -                                                                                 |
| Veh in Median Storage, # | 0    | -                                                                                 | 0                                                                                 | -    | -    | 0                                                                                 |
| Grade, %                 | 3    | -                                                                                 | -3                                                                                | -    | -    | 3                                                                                 |
| Peak Hour Factor         | 95   | 95                                                                                | 95                                                                                | 95   | 95   | 95                                                                                |
| Heavy Vehicles, %        | 0    | 2                                                                                 | 1                                                                                 | 0    | 0    | 1                                                                                 |
| Mvmt Flow                | 0    | 1                                                                                 | 499                                                                               | 0    | 0    | 581                                                                               |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | -      | 249    | 0      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |
| Critical Hdwy        | -      | 7.24   | -      |
| Critical Hdwy Stg 1  | -      | -      | -      |
| Critical Hdwy Stg 2  | -      | -      | -      |
| Follow-up Hdwy       | -      | 3.32   | -      |
| Pot Cap-1 Maneuver   | 0      | 735    | -      |
| Stage 1              | 0      | -      | -      |
| Stage 2              | 0      | -      | -      |
| Platoon blocked, %   | -      | -      | -      |
| Mov Cap-1 Maneuver   | -      | 735    | -      |
| Mov Cap-2 Maneuver   | -      | -      | -      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |

| Approach          | WB   | NB | SB |
|-------------------|------|----|----|
| HCM Ctrl Dly, s/v | 9.91 | 0  | 0  |
| HCM LOS           | A    |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT   |
|-----------------------|-----|----------|-------|
| Capacity (veh/h)      | -   | -        | 735   |
| HCM Lane V/C Ratio    | -   | -        | 0.001 |
| HCM Ctrl Dly (s/v)    | -   | -        | 9.9   |
| HCM Lane LOS          | -   | -        | A     |
| HCM 95th %tile Q(veh) | -   | -        | 0     |

**Intersection**

Int Delay, s/veh 0

| Movement                 | WBL  | WBR                                                                               | NBT                                                                               | NBR  | SBL  | SBT                                                                               |
|--------------------------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|
| Lane Configurations      |      |  |  |      |      |  |
| Traffic Vol, veh/h       | 0    | 1                                                                                 | 497                                                                               | 1    | 0    | 823                                                                               |
| Future Vol, veh/h        | 0    | 1                                                                                 | 497                                                                               | 1    | 0    | 823                                                                               |
| 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                                                                                 | -                                                                                 | -    | -    | -                                                                                 |
| Veh in Median Storage, # | 0    | -                                                                                 | 0                                                                                 | -    | -    | 0                                                                                 |
| Grade, %                 | 3    | -                                                                                 | -3                                                                                | -    | -    | 3                                                                                 |
| Peak Hour Factor         | 99   | 99                                                                                | 99                                                                                | 99   | 99   | 99                                                                                |
| Heavy Vehicles, %        | 0    | 2                                                                                 | 5                                                                                 | 0    | 0    | 3                                                                                 |
| Mvmt Flow                | 0    | 1                                                                                 | 502                                                                               | 1    | 0    | 831                                                                               |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | -      | 252    | 0      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |
| Critical Hdwy        | -      | 7.24   | -      |
| Critical Hdwy Stg 1  | -      | -      | -      |
| Critical Hdwy Stg 2  | -      | -      | -      |
| Follow-up Hdwy       | -      | 3.32   | -      |
| Pot Cap-1 Maneuver   | 0      | 733    | -      |
| Stage 1              | 0      | -      | -      |
| Stage 2              | 0      | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | -      | 733    | -      |
| Mov Cap-2 Maneuver   | -      | -      | -      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |

| Approach          | WB   | NB | SB |
|-------------------|------|----|----|
| HCM Ctrl Dly, s/v | 9.92 | 0  | 0  |
| HCM LOS           | A    |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT |
|-----------------------|-----|----------|-----|
| Capacity (veh/h)      | -   | - 733    | -   |
| HCM Lane V/C Ratio    | -   | - 0.001  | -   |
| HCM Ctrl Dly (s/v)    | -   | - 9.9    | -   |
| HCM Lane LOS          | -   | - A      | -   |
| HCM 95th %tile Q(veh) | -   | - 0      | -   |

**Intersection**

Int Delay, s/veh 0

| Movement                 | WBL  | WBR                                                                               | NBT                                                                               | NBR  | SBL  | SBT                                                                               |
|--------------------------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|
| Lane Configurations      |      |  |  |      |      |  |
| Traffic Vol, veh/h       | 0    | 2                                                                                 | 807                                                                               | 0    | 0    | 769                                                                               |
| Future Vol, veh/h        | 0    | 2                                                                                 | 807                                                                               | 0    | 0    | 769                                                                               |
| 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                                                                                 | -                                                                                 | -    | -    | -                                                                                 |
| Veh in Median Storage, # | 0    | -                                                                                 | 0                                                                                 | -    | -    | 0                                                                                 |
| Grade, %                 | 3    | -                                                                                 | -3                                                                                | -    | -    | 3                                                                                 |
| Peak Hour Factor         | 96   | 96                                                                                | 96                                                                                | 96   | 96   | 96                                                                                |
| Heavy Vehicles, %        | 0    | 2                                                                                 | 1                                                                                 | 0    | 0    | 1                                                                                 |
| Mvmt Flow                | 0    | 2                                                                                 | 841                                                                               | 0    | 0    | 801                                                                               |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | -      | 420    | 0      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |
| Critical Hdwy        | -      | 7.24   | -      |
| Critical Hdwy Stg 1  | -      | -      | -      |
| Critical Hdwy Stg 2  | -      | -      | -      |
| Follow-up Hdwy       | -      | 3.32   | -      |
| Pot Cap-1 Maneuver   | 0      | 562    | -      |
| Stage 1              | 0      | -      | -      |
| Stage 2              | 0      | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | -      | 562    | -      |
| Mov Cap-2 Maneuver   | -      | -      | -      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |

| Approach          | WB    | NB | SB |
|-------------------|-------|----|----|
| HCM Ctrl Dly, s/v | 11.43 | 0  | 0  |
| HCM LOS           | B     |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT |
|-----------------------|-----|----------|-----|
| Capacity (veh/h)      | -   | - 562    | -   |
| HCM Lane V/C Ratio    | -   | - 0.004  | -   |
| HCM Ctrl Dly (s/v)    | -   | - 11.4   | -   |
| HCM Lane LOS          | -   | - B      | -   |
| HCM 95th %tile Q(veh) | -   | - 0      | -   |

**Intersection**

Int Delay, s/veh 0

| Movement                 | WBL  | WBR                                                                               | NBT                                                                               | NBR  | SBL  | SBT                                                                               |
|--------------------------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|
| Lane Configurations      |      |  |  |      |      |  |
| Traffic Vol, veh/h       | 0    | 1                                                                                 | 595                                                                               | 0    | 0    | 683                                                                               |
| Future Vol, veh/h        | 0    | 1                                                                                 | 595                                                                               | 0    | 0    | 683                                                                               |
| 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                                                                                 | -                                                                                 | -    | -    | -                                                                                 |
| Veh in Median Storage, # | 0    | -                                                                                 | 0                                                                                 | -    | -    | 0                                                                                 |
| Grade, %                 | 3    | -                                                                                 | -3                                                                                | -    | -    | 3                                                                                 |
| Peak Hour Factor         | 95   | 95                                                                                | 95                                                                                | 95   | 95   | 95                                                                                |
| Heavy Vehicles, %        | 0    | 2                                                                                 | 1                                                                                 | 0    | 0    | 1                                                                                 |
| Mvmt Flow                | 0    | 1                                                                                 | 626                                                                               | 0    | 0    | 719                                                                               |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | -      | 313    | 0      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |
| Critical Hdwy        | -      | 7.24   | -      |
| Critical Hdwy Stg 1  | -      | -      | -      |
| Critical Hdwy Stg 2  | -      | -      | -      |
| Follow-up Hdwy       | -      | 3.32   | -      |
| Pot Cap-1 Maneuver   | 0      | 665    | -      |
| Stage 1              | 0      | -      | -      |
| Stage 2              | 0      | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | -      | 665    | -      |
| Mov Cap-2 Maneuver   | -      | -      | -      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |

| Approach          | WB    | NB | SB |
|-------------------|-------|----|----|
| HCM Ctrl Dly, s/v | 10.42 | 0  | 0  |
| HCM LOS           | B     |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT   |
|-----------------------|-----|----------|-------|
| Capacity (veh/h)      | -   | -        | 665   |
| HCM Lane V/C Ratio    | -   | -        | 0.002 |
| HCM Ctrl Dly (s/v)    | -   | -        | 10.4  |
| HCM Lane LOS          | -   | -        | B     |
| HCM 95th %tile Q(veh) | -   | -        | 0     |

**Intersection**

Int Delay, s/veh 0

| Movement                 | WBL  | WBR                                                                               | NBT                                                                               | NBR  | SBL  | SBT                                                                               |
|--------------------------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|
| Lane Configurations      |      |  |  |      |      |  |
| Traffic Vol, veh/h       | 0    | 3                                                                                 | 500                                                                               | 7    | 0    | 825                                                                               |
| Future Vol, veh/h        | 0    | 3                                                                                 | 500                                                                               | 7    | 0    | 825                                                                               |
| 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                                                                                 | -                                                                                 | -    | -    | -                                                                                 |
| Veh in Median Storage, # | 0    | -                                                                                 | 0                                                                                 | -    | -    | 0                                                                                 |
| Grade, %                 | 3    | -                                                                                 | -3                                                                                | -    | -    | 3                                                                                 |
| Peak Hour Factor         | 99   | 99                                                                                | 99                                                                                | 99   | 99   | 99                                                                                |
| Heavy Vehicles, %        | 0    | 2                                                                                 | 5                                                                                 | 0    | 0    | 3                                                                                 |
| Mvmt Flow                | 0    | 3                                                                                 | 505                                                                               | 7    | 0    | 833                                                                               |

**Major/Minor**

|                      | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | -      | 256    | 0      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |
| Critical Hdwy        | -      | 7.24   | -      |
| Critical Hdwy Stg 1  | -      | -      | -      |
| Critical Hdwy Stg 2  | -      | -      | -      |
| Follow-up Hdwy       | -      | 3.32   | -      |
| Pot Cap-1 Maneuver   | 0      | 727    | -      |
| Stage 1              | 0      | -      | -      |
| Stage 2              | 0      | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | -      | 727    | -      |
| Mov Cap-2 Maneuver   | -      | -      | -      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |

**Approach**

|                   | WB   | NB | SB |
|-------------------|------|----|----|
| HCM Ctrl Dly, s/v | 9.97 | 0  | 0  |
| HCM LOS           | A    |    |    |

**Minor Lane/Major Mvmt**

|                       | NBT | NBRWBLn1 | SBT |
|-----------------------|-----|----------|-----|
| Capacity (veh/h)      | -   | - 727    | -   |
| HCM Lane V/C Ratio    | -   | - 0.004  | -   |
| HCM Ctrl Dly (s/v)    | -   | - 10     | -   |
| HCM Lane LOS          | -   | - A      | -   |
| HCM 95th %tile Q(veh) | -   | - 0      | -   |

**Intersection**

Int Delay, s/veh 0.1

| Movement                 | WBL  | WBR                                                                               | NBT                                                                               | NBR  | SBL  | SBT                                                                               |
|--------------------------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|
| Lane Configurations      |      |  |  |      |      |  |
| Traffic Vol, veh/h       | 0    | 10                                                                                | 810                                                                               | 7    | 0    | 774                                                                               |
| Future Vol, veh/h        | 0    | 10                                                                                | 810                                                                               | 7    | 0    | 774                                                                               |
| 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                                                                                 | -                                                                                 | -    | -    | -                                                                                 |
| Veh in Median Storage, # | 0    | -                                                                                 | 0                                                                                 | -    | -    | 0                                                                                 |
| Grade, %                 | 3    | -                                                                                 | -3                                                                                | -    | -    | 3                                                                                 |
| Peak Hour Factor         | 96   | 96                                                                                | 96                                                                                | 96   | 96   | 96                                                                                |
| Heavy Vehicles, %        | 0    | 2                                                                                 | 1                                                                                 | 0    | 0    | 1                                                                                 |
| Mvmt Flow                | 0    | 10                                                                                | 844                                                                               | 7    | 0    | 806                                                                               |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | -      | 426    | 0      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |
| Critical Hdwy        | -      | 7.24   | -      |
| Critical Hdwy Stg 1  | -      | -      | -      |
| Critical Hdwy Stg 2  | -      | -      | -      |
| Follow-up Hdwy       | -      | 3.32   | -      |
| Pot Cap-1 Maneuver   | 0      | 557    | -      |
| Stage 1              | 0      | -      | -      |
| Stage 2              | 0      | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | -      | 557    | -      |
| Mov Cap-2 Maneuver   | -      | -      | -      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |

| Approach          | WB    | NB | SB |
|-------------------|-------|----|----|
| HCM Ctrl Dly, s/v | 11.59 | 0  | 0  |
| HCM LOS           | B     |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT   |
|-----------------------|-----|----------|-------|
| Capacity (veh/h)      | -   | -        | 557   |
| HCM Lane V/C Ratio    | -   | -        | 0.019 |
| HCM Ctrl Dly (s/v)    | -   | -        | 11.6  |
| HCM Lane LOS          | -   | -        | B     |
| HCM 95th %tile Q(veh) | -   | -        | 0.1   |

**Intersection**

Int Delay, s/veh 0.1

| Movement                 | WBL  | WBR                                                                               | NBT                                                                               | NBR  | SBL  | SBT                                                                               |
|--------------------------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|
| Lane Configurations      |      |  |  |      |      |  |
| Traffic Vol, veh/h       | 0    | 9                                                                                 | 603                                                                               | 8    | 0    | 690                                                                               |
| Future Vol, veh/h        | 0    | 9                                                                                 | 603                                                                               | 8    | 0    | 690                                                                               |
| 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                                                                                 | -                                                                                 | -    | -    | -                                                                                 |
| Veh in Median Storage, # | 0    | -                                                                                 | 0                                                                                 | -    | -    | 0                                                                                 |
| Grade, %                 | 3    | -                                                                                 | -3                                                                                | -    | -    | 3                                                                                 |
| Peak Hour Factor         | 95   | 95                                                                                | 95                                                                                | 95   | 95   | 95                                                                                |
| Heavy Vehicles, %        | 0    | 2                                                                                 | 1                                                                                 | 0    | 0    | 1                                                                                 |
| Mvmt Flow                | 0    | 9                                                                                 | 635                                                                               | 8    | 0    | 726                                                                               |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | -      | 322    | 0      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |
| Critical Hdwy        | -      | 7.24   | -      |
| Critical Hdwy Stg 1  | -      | -      | -      |
| Critical Hdwy Stg 2  | -      | -      | -      |
| Follow-up Hdwy       | -      | 3.32   | -      |
| Pot Cap-1 Maneuver   | 0      | 656    | -      |
| Stage 1              | 0      | -      | -      |
| Stage 2              | 0      | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | -      | 656    | -      |
| Mov Cap-2 Maneuver   | -      | -      | -      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |

| Approach          | WB    | NB | SB |
|-------------------|-------|----|----|
| HCM Ctrl Dly, s/v | 10.57 | 0  | 0  |
| HCM LOS           | B     |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT   |
|-----------------------|-----|----------|-------|
| Capacity (veh/h)      | -   | -        | 656   |
| HCM Lane V/C Ratio    | -   | -        | 0.014 |
| HCM Ctrl Dly (s/v)    | -   | -        | 10.6  |
| HCM Lane LOS          | -   | -        | B     |
| HCM 95th %tile Q(veh) | -   | -        | 0     |