Planning Commission
Agenda - Final-Amended

Chair Dan Ahrens
Vice Chair Chris Cote
Carlos Salinas
Jeff Samuelson
Kevin McHugh
Todd Warnke
Tom Martinez

Thursday, October 26, 2023 **6:00 PM**

Hybrid Commission Meeting
Town Hall Council Chambers
100 N. Wilcox Street
Castle Rock, CO 80104
Online: https://crgov.webex.com/crgov
Phone-in: 720-650-7664
Meeting Number: 2485 779 3197
Meeting Password: PCMeeting2023

This hybrid meeting is open to the public and will be held in a virtual format in accordance with the Board and Commission Electronic Participation, Connected and Hybrid Meeting Policy. Public may choose to attend in person at Town Hall or electronically or by phone if preferred. This meeting will be hosted online and can be accessed using link and meeting information above.

To access full meeting details, please visit: www.crgov.com/Town Government/Boards and Commissions/Planning Commission and click on the "View current agenda packet" link.

Remote participants please sign up to speak by sending an email to the Development Services Planning Manager, Kevin Wrede (kwrede@crgov.com) no later than 1 pm on the day of the hearing, to be added to the list of speakers. Public comments may also be given in person or submitted in writing via email, to be included in the public record.

**** ALL TIMES ARE APPROXIMATE ****

5:30 pm DINNER FOR BOARD MEMBERS

6:00 pm CALL TO ORDER / ROLL CALL

6:02 pm CERTIFICATION OF MEETING

6:05 pm APPROVAL OF MINUTES

PC 2023-021 **July 27, 2023 Planning Commission Meeting Minutes**

Attachments: July 27, 2023 Planning Commission Minutes

6:07 pm PUBLIC HEARING ITEMS

PC 2023-022 **Alexander Way Annexation, Planned Development Plan and Zoning Regulations** [East of the Silver Heights subdivision in unincorporated Douglas County, north of Alexander Place, and west of Diamond Ridge Estates]

Attachments:
- Staff Report
- Attachment A: Vicinity Map
- Attachment B: Alexander Way Annexation Petition
- Attachment C: Alexander Way Annexation Plat
- Attachment D: Planned Development Plan and Zoning Regulations
- Attachment E: Traffic Impact Analysis
- Attachment F: Fiscal Impact Analysis
- Attachment G: Public Comment

PC 2023-023 **Use by Special Review - Site Development Plan, Lot 3 Castle Park West, 1st Amendment** [1.49 Acres Multi-Family Located South of Wolfensberger Road and East of Park Street]

Attachments:
- Staff Report
- Attachment B: Site Development Plan

PC 2023-024 **Crowfoot Valley Road Annexation and Public Land District - 1** [5.31 acres, located within the Crowfoot Valley Road Right-of-Way between Tower Road and Macanta Boulevard]

Attachments:
- Staff Report
- Attachment A: Vicinity Map
- Attachment B: Annexation Petition
- Attachment C: Annexation Map
- Attachment D: Municipal Code Section 17.30.020: Public Land-1

6:40 pm TOWN COUNCIL LIAISON UPDATE

6:45 pm DESIGN REVIEW BOARD UPDATE

6:48 pm COMMISSION ITEMS

Check for quorum for upcoming meetings
November 9, 2023
December 14, 2023

6:52 pm STAFF UPDATE/PLANNING COMMISSION DISCUSSION ITEMS

6:55 pm ADJOURN

Town of Castle Rock

Agenda Memorandum

Agenda Date: 10/26/2023

Item #: **File #:** PC 2023-021

To: Members of the Planning Commission

From: Planning Commission Administrator

July 27, 2023 Planning Commission Meeting Minutes

Executive Summary

Attached are the meeting minutes from the July 27, 2023 Planning Commission meeting for your review and approval.

Planning Commission
Meeting Minutes - Draft

Chair Dan Ahrens
Vice Chair Chris Cote
Carlos Salinas
Jeff Samuelson
Kevin McHugh
Todd Warnke
Tom Martinez

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** ALL TIMES ARE APPROXIMATE **

DINNER FOR BOARD MEMBERS

CALL TO ORDER / ROLL CALL

Present 6 - Jeff Samuelson, Carlos Salinas, Chair Dan Ahrens, Tom Martinez, Todd Warnke, and Kevin McHugh

Not Present 1 - Vice Chair Chris Cote

CERTIFICATION OF MEETING

Ms. Vossler certified that the meeting and agenda had been noticed in accordance with the requirements of the Open Meetings Law.

APPROVAL OF MINUTES

PC 2023-019 **June 22, 2023 Planning Commission Meeting Minutes**

Moved by Commissioner Martinez, seconded by Commissioner McHugh, to approve

Planning Commission Topic PC 2023-019 as presented. The motion passed by a vote of: 6 to 0

Yes: 6 - Samuelson, Salinas, Chair Ahrens, Martinez, Warnke, and McHugh

Not Present: 1 - Vice Chair Cote

PUBLIC HEARING ITEMS

PC 2023-020 **Site Development Plan, The Meadows Filing No. 17, Area No. 3** [17.36 Acres Senior Multifamily Located South of the Intersection of Regent Street and Meadows Parkway]

Ms. Simon presented on PC 2023-020 Site Development Plan, The Meadows Filing No. 17, Area No. 3 [17.36 Acres Senior Multifamily Located South of the Intersection of Regent Street and Meadows Parkway]. Staff recommends that the Planning Commission recommend approval to Town Council.

Commissioner Samuelson asked staff about the parking requirements of the site. Ms. Simon shared that the applicant is providing 262 spaces which is above the required 179 spaces, which is above the current requirements and also the new requirements passed recently by town council. Commissioner Martinez asked staff about the storm water runoff requirements of the site. Ms. Simon and Ms. Vossler responded by providing further detail on the Town's storm water requirements and the detention pond on the site. Commissioner Martinez asked for sale signs on or near the property. Ms. Simon clarified that the lots for sale are not this specific project but other lots in the development. Commissioner Martinez asked for further details about the traffic impacts of this development. Mr. Kucewsky responded that the town has performed traffic studies on the area, and that Castle Rock Development Company is making improvements to Meadows Parkway at both Regent St. and Lombard St. The team has analyzed the timing of this construction to make sure that traffic will not be backing up on to Limelight Ave or on to US 85. Commissioner Warnke asked about the remaining acreage in the overall development. Ms. Simon clarified that there are two commercial lots, trail head parking, and open space tracts in the overall development. Commissioner Salinas proposed a question about the existing trail head in the area, wondering what changes are being made. Ms. Simon provided detail that the trail head is being relocated, and 2 additional parking spaces are being added to the trail head parking. Commissioner Martinez asked if the town has considered adding further improvements to the trail head such. Ms. Simon responded that the trail head will be improved, however it is not a part of this application for the Senior Multifamily Housing. Commissioner Martinez asked about the traffic entering into this property. Ms. Simon responded that there will be a separate entrance to the property with traffic signals at Regent St and at Lombard St near the trail head parking. Commissioner Salinas asked about the existing trees on the site, and if any trees would be removed. Ms. Simon directed the commissioners to the applicable section in the staff report, and Ms. Vossler directed that the applicant may be able to answer this question with more detail. Commissioner Martinez posed further questions about the traffic nearby during construction of the site. Ms. Vossler directed that the applicant may be able to answer this question with more detail.

Applicants: RC Hanich, Castle Rock Development Company and Keith James, Inland Group
Public Comments: None

RC Hanich, Castle Rock Development Company, responded in regard to the traffic signals that are being added near the site, that the developer has had the plan approved with an updated traffic study, and has been working with staff to address traffic concerns around this project.

Mr. Keith James, Inland Group, presented on the Affinity at Castle Rock proposed development. Commissioner Martinez questioned what competition exists for similar housing in the area. Mr. James provided detail that there is very little competition in this area, and strong market demand for active adult living space. The population of eligible residents is growing due to aging, and relocation to the area. Commissioner Samuelson asked about the reason people are moving to similar developments. Mr. James responded that the residents are usually leaving homes and moving to the area to be closer to family. Commissioner Salinas asked if the applicant is pursuing any green building initiatives. Mr. James responded the project will be following to the National Green Building Standards. Commissioner Salinas asked about the traffic control on the feeder road, specifically construction traffic. Mr. James responded that the traffic will likely come from one of two existing streets, Regent and Lombard, and will use the signal to enter and a right turn only exit. Chair Ahrens questioned how many trees are being and removed from the area. Mr. James responded that they will be removing some trees, but they will be planting 174 additional trees to the site.

Moved by Commissioner Warnke, seconded by Commissioner Samuelson, to approve Planning Commission Topic PC 2023-020 as presented. The motion passed by a vote of: 6 to 0

Yes: 6 - Samuelson, Salinas, Chair Ahrens, Martinez, Warnke, and McHugh

Not Present: 1 - Vice Chair Cote

TOWN COUNCIL LIAISON UPDATE

None.

DESIGN REVIEW BOARD UPDATE

None.

COMMISSION ITEMS

Check for quorum for upcoming meetings
August 10, 2023
August 24, 2023

STAFF UPDATE/PLANNING COMMISSION DISCUSSION ITEMS

Ms. Vossler updated the commission that staff is seeing applications for future projects in Dawson Trails.

ADJOURN

Moved by Chair Ahrens, seconded by Commissioner Samuelson, to adjourn. The motion passed by a vote of: 6 to 0

Yes: 6 - Samuelson, Salinas, Chair Ahrens, Martinez, Warnke, and McHugh

Not Present: 1 - Vice Chair Cote

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Minutes approved by the Planning Commission on _____ by a vote of _____ in favor, _____ opposed, with _____ abstention(s).

_____

Planning Commission

Town of Castle Rock

Agenda Memorandum

Agenda Date: 10/26/2023

Item #: **File #:** PC 2023-022

To: Members of the Planning Commission

From: Brad Boland, AICP, Long Range Project Manager, Development Services Department

Alexander Way Annexation, Planned Development Plan and Zoning Regulations
[East of the Silver Heights subdivision in unincorporated Douglas County, north of Alexander Place, and west of Diamond Ridge Estates]

Executive Summary

455 Alexander, LLC, and Tierra Investors, LLC (applicants) have submitted a Petition for Annexation and accompanying plat map (Attachment B and C) and are requesting approval of the Alexander Way Annexation. The annexation consists of two parcels totaling 73.76-acres which are locate east of the Silver Heights subdivision in unincorporated Douglas County, north of Alexander Place, and west of the Diamond Ridge Estates neighborhood (Attachment A). The application for zoning also includes a 4.2-acre parcel that is already annexed into the Town. The applicants propose to zone the entire 77.96-acres (the property) as a planned development (PD), and is seeking approval of the Alexander Way Planned Development Plan and Zoning Regulations (Attachment D).

Key Benefits of Proposed Annexation and Zoning

- Provides 40% Open Space and a 1.5-acre Pocket Park
- Provides a unique housing type with the 22 units of live work
- Provides groundwater rights in excess of the water demand of the development
- Low density adjacent to County development provides an appropriate transition
- Provides opportunities for additional trail connections
- Is a logical infill property
- Eliminates permitted uses on the 4.2-acre parcel that would not be compatible with the surrounding Diamond Ridge Estates PD.
- Allows Town determination of growth patterns and development standards

Summary of Proposal

The parcels to be annexed total 73.76 acres and are currently zoned A-1 Agricultural One. Town Council held a public hearing on October 19, 2021, and found the annexation petition to be in substantial compliance with the provisions of Article II, Section 30(1)(B) of the Colorado Constitution and Section 31-12-107(1), C.R.S. Further, Town Council held a public hearing on December 7, 2021

and found the parcels proposed for annexation were eligible to be annexed in accordance with the Colorado Revised Statues. The Town will now consider whether the property should be annexed to the Town, and whether the proposed Planned Development zoning is appropriate and should be approved.

The Alexander Way PD proposes to allow 77 single-family dwelling units for a gross density of .987 dwelling units per acre (du/ac) and approximately 31.25 acres, 40% of the site, of open space and an additional 1.5-acre pocket park. The residential use is split in to two distinct use areas. The first use area allows for 55 single-family dwelling units on minimum lots of a half-acre. The second residential use area allows for 22 live work units. The live works units are a mixture of single family detached and attached dwelling units. The live work units allow for expanded home businesses beyond the Town's home occupation regulations.

The purpose of this staff report is to provide an analysis of the proposed annexation and zoning, to summarize the obligations formalized in the Development Agreement (DA) and to make a recommendation to Planning Commission. Staff has thoroughly reviewed the proposals, and the applicant has made all staff requested changes.

Based on the staff analysis detailed in this report, staff recommends that Planning Commission recommend approval to Town Council of the Alexander Way Annexation, PD Plan and PD Zoning Regulations.

Town Council will hold a public hearing on Tuesday, Nov 7, 2023 to consider and act on the 1st reading of the proposed annexation and PD Zoning. Town Council's 2nd reading and final action on the annexation and PD Zoning is anticipated to be held on Tuesday, November 21, 2023. Town Council will take action on the Development Agreement at the November 21, 2023 public hearing.

Attachments

Attachment A: Vicinity Map
Attachment B: Alexander Way Annexation Petition
Attachment C: Alexander Way Annexation Plat
Attachment D: Planned Development Plan and Zoning Regulations
Attachment E: Traffic Impact Analysis
Attachment F: Fiscal Impact Analysis

Meeting Date: October 26, 2023

AGENDA MEMORANDUM

To: Planning Commission

From: Brad Boland, AICP, Long Range Project Manager, Development Services Department

Title: **Alexander Way Annexation, Planned Development Plan and Zoning Regulations** [East of the Silver Heights subdivision in unincorporated Douglas County, north of Alexander Place, and west of Diamond Ridge Estates]

Executive Summary

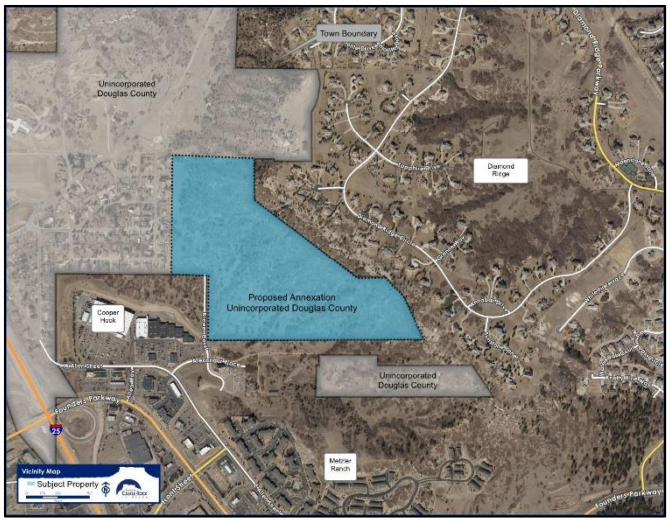

Figure 1: Alexander Way Vicinity Map

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Background

Existing Zoning

The two parcels located in unincorporated Douglas County are both zoned A1 – Agricultural One. The A-1 permitted uses include agricultural related uses, community uses, and a residence and caretaker dwelling.

The 4.2 acre parcel that is already within the Town is part of the Maher Ranch PD and is identified as a Dedicated Community Open Space use area. Uses allowed include open space, parks, public or private membership clubs and health clubs including incidental shops, personal service establishments, restaurants and lounges, and community centers.

Surrounding Zoning and Uses

The property is bordered by the Town on the south and east and bordered by unincorporated Douglas County to the north and bordered by both the Town and unincorporated Douglas County to the west. To the north, the property is bordered by two properties in unincorporated Douglas County, one of which is zoned A1 – Agricultural One and the other Rural Residential. On the west, the property is bordered by the Silver Heights single family residential subdivision in unincorporated Douglas County at the northern section of the property and a property within the Town on the southern portion of the property, known as the Cooper Hook PD. The Cooper Hook PD, a Planned Development allows a variety of commercial uses and open space. To the south, the property is bordered by Town property and the Cooper Hook PD once again. To the east, the property is bordered by Town property known as Diamond Ridge Estates PD. The Diamond Ridge Estates PD is Planned Development that allows for single family residential.

Existing Conditions

A Land Suitability Analysis (LSAR) and Geologic Hazards Assessment were provided as part of the application submission which assessed the site's existing topography, vegetation, geology, wildlife habitat, soils, and wildfire mitigation and rock outcroppings. The LSAR and Geologic Hazards Assessment concluded that the site is suitable for development as proposed.

The site generally slopes west-northwest with a steep incline leading up to a ridge that runs along the site's eastern boundery. There are several gully features that run perpendiculatar to the eastern ridge in the center of the site.

Vegetation on the property includes stands of native Gambel Oak along the eastern portion of the property. There are scattered evergreen trees located among the Gamble Oak. The western portion of the property is covered with grass and trees.

A variety of wildlife can be found on the property, most notably small to mid-sized mammals, song birds, and raptors. Big game species such as elk, deer, bear, and mountain lion have also been present on the property.

Discussion of Proposal

Alexander Way Annexation

The Alexander Way annexation petition and plat map were accepted and filed with the Town Clerk on September 16, 2021. As required by the Colorado Revised Statutes (C.R.S.), the petition was reviewed by Town Council in two separate hearings. The Substantial Compliance hearing was held on October 19, 2021 and the Council found that the petition substantially complied with the requirements of the Colorado Constitution and the C.R.S for annexation. The Eligibility hearing was held on December 7, 2021 and Town Council found the property to be eligible to be considered for annexation into the Town.

The area proposed for annexation is approximately 73.76 and is currently zoned A1-Agricutural One.

Alexander Way Planned Development Zoning

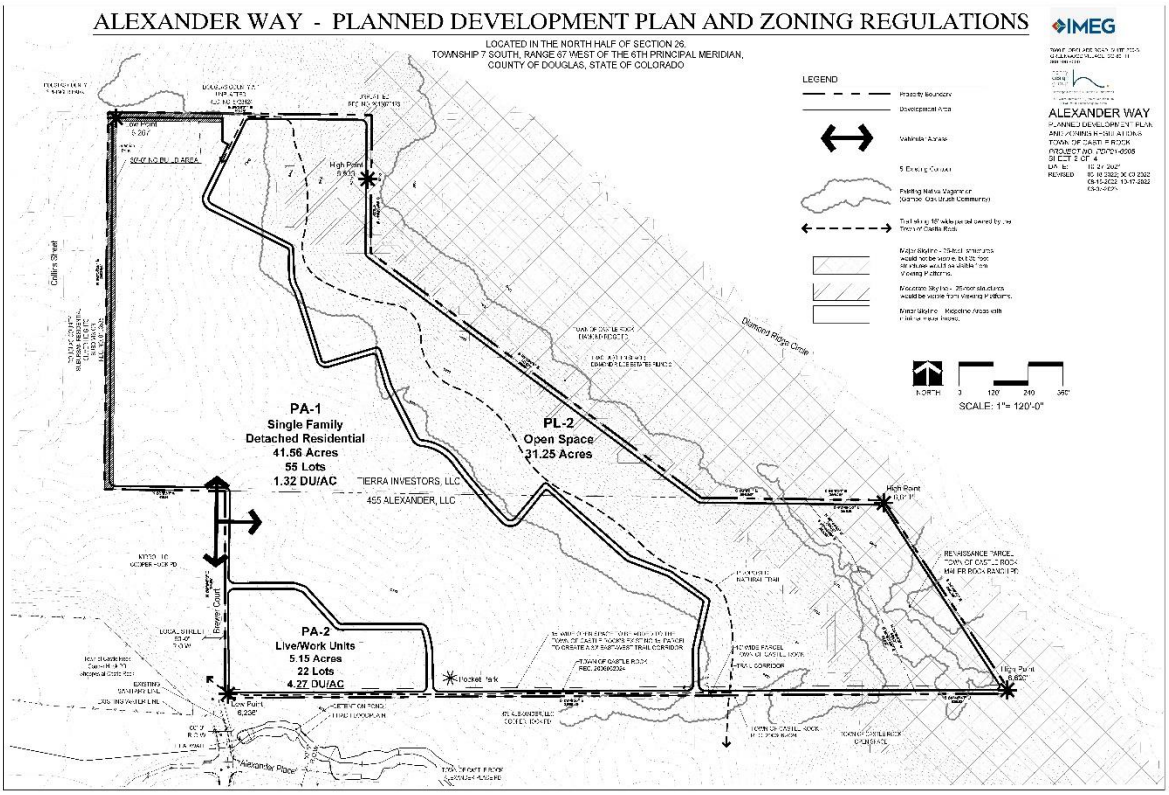


Figure 2: Alexander Way Planned Development Plan

The applicant is requesting that the property be zoned Planned Development (PD) (Attachment D). In addition to the 73.76-acres proposed to be annexed, the zoning includes a 4.2 acre parcel already within the Town that will be incorporated into the Planned Development. The Planned Development consits of three use areas; single family detached residential, live work, and dedicated open space. The proposed zoning would allow a total of 77 single-family detached and attached dwelling units, at a gross density of 0.987 du/ac.

The single family detached residential use area (PA-1) is 41.56 acres in size and allows for 55 detached single family homes for a net density of 1.32 units/acre. A minimum lot size of 21,780 square feet (half an acre) is required. The maximum height allowed is 35 feet. Initial plans called for an open space tract that included a trail along the western boundary adjacent to the Silver Heights subdivision. During the public outreach process, concerns regarding a trail behind the Silver Heights subidivision were brought forth by neighbors. Concerns were also raised regarding having an open space tract without a formal trail due to maintenance of the area and the use of the tract as a informal trail corridor. In response the applicant changed the plans so that the single family detached lots would back up to the Silver Heights subdivision. A larger rear setback of 50 feet was proposed to create a buffer between the two residential developments.

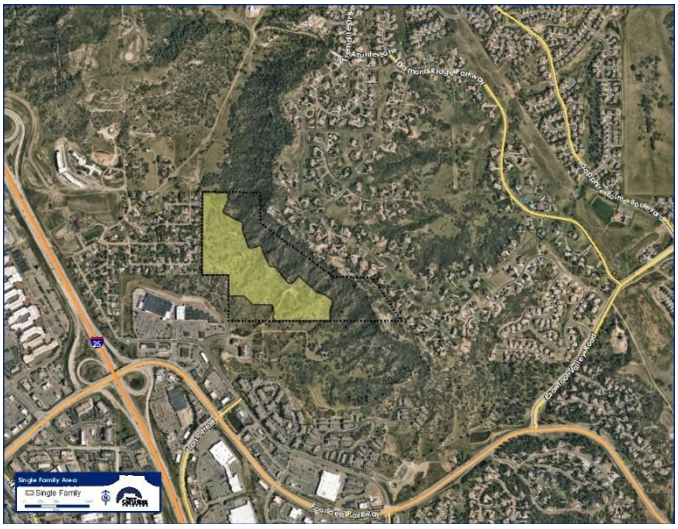


Figure 3: Single Family Detached Use Area

The live work use Area (PA-2) is 5.5 acres in size and is located in the southwest corner of the development. The use area allows for 22 live work units for a net density in this area of 4.27 units/acre. The live work use area allows a mixture of attached single family dwelling units and detached dwelling units. The intent of the live work use area is to allow complementary work uses that are conducted entirely within the dwelling units. The uses can only be conducted by the residents of the dwelling units and there can be no more than five non-resident employees. The allowed

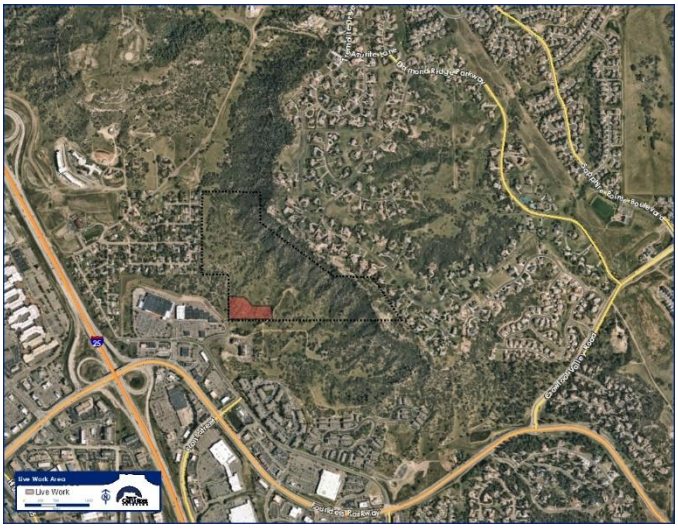


Figure 4: Live Work Use Area

uses are an expansion of the Town's home occupation uses. Additional uses include beauty/nail salon and barbershops with a two-chair maximum and group classes with a maximum of five participants at any one time. No outdoor storage of materials or equipment used in connection with the business is allowed. A minimum lot size of 1,800 square feet for attached dwelling units and 5,000 square feet for detached dwelling units is proposed.

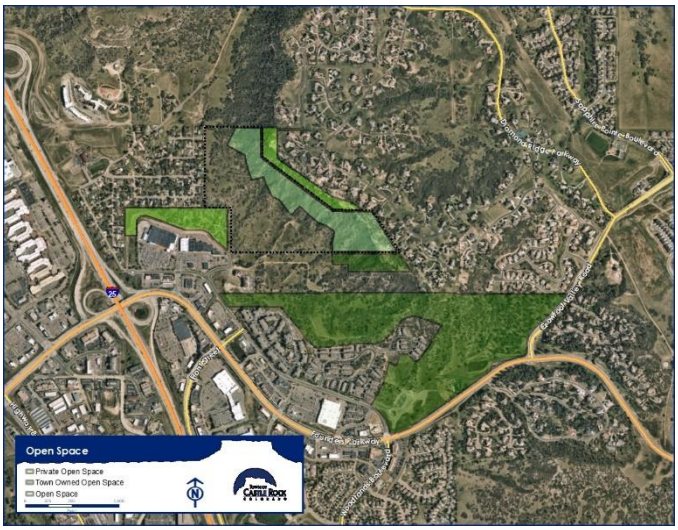


Figure 5: Open Space Areas; Light Green - Existing Private Open Space, Medium Green - Proposed Alexander Way Public Open Space, Dark Green - Existing Town owned Open Space

The development plan proposes to set aside 31.25 acres or 40% of the property as dedicated open space (PL-2) which will be dedicated to the Town. The dedicated open space is located on the east side of the property and spans from the north boundary all the way to the south boundary. At the south boundary the dedicated open space is immediately adjacent to a 7 acre Town owned open space tract within the Cooper Hook PD. The dedicated open space use area will comply with the PL-2 zoning district that permits passive uses and development standards as established in the Town's Municipal Code Section 17.30.030. A natural trail system will go through the dedicated open space and will be built by the developer. Per feedback received at the neighborhood meetings, no trail connection will be made to Diamond Ridge Estates to the east. All skyline/ridgeline areas on the propery are within the proposed open space.

In addition to the open space being dedicated to the Town, 1.5 acres will be set aside for a neighborhood pocket park. The 1.5 acres will be located in either PA-1 or PA-2 or both. In addition, a 15 foot tract along the entirety of the south property boundary will be created and dedicated to the Town. This 15 foot tract will mirror a similar 15 foot tract that spans the north boundary of the Cooper Hook PD. The two tracts combined will create a 30 foot corridor that could potentially be used for a future trail connection to Town owned open space.

Technical Reports and Analyses

Water

The proposed water system will be extended from an existing 8-inch main located at the end of existing Brewer Court within dedicated rights of way creating two loops serving the development. The site configuration at the north end of the extended Brewer Court is designed to allow for a future water extension that may serve as a future connection

to the Silver Heights subdivision if it is ever needed. The proposed development area is entirely within the Metzler North Blue zone hydraulic elevation range.

Sanitary Sewer

Existing sanitary sewer is provided in an 8” sewer main at the end of the Brewer Court, which will be extended to serve the development. This system drains south and west through the Cooper Hook development to the Town’s larger wastewater collection and conveyance system.

The proposed sanitary sewer extension will include a single point of connection at Brewer Court and extend within proposed rights of way for the single family residential area and the live work area in the southwest corner of the project. Development of the water and sewer infrastructure necessary to serve the project will be the responsibility of the developer/owner. The flow created by the proposed development is a sufficiently small flow that will not adversely affect the downstream capacity of the existing sewer system.

Drainage/Floodplain

There are no major drainage ways within the Alexander Way development. The site is located in FEMA Zone X as noted on FIRM Panel 08035C0186G Revised March 16, 2016. There are no irrigation ditches or canals adjacent to or impacted by this project. There is designated FEMA floodplain that begins approximately 2500 feet west of the project boundary. The FHAD for Tributary C identifies flood limits along the southern boundary of the Cooper Hook property.

This property is located within the East Plum Creek watershed basin, and will be required to provide water quality and full spectrum detention for the 100-percent of the site. The developer will be required to provide storm sewers, inlets, and extended detention basins for water quality and storage, in accordance with Town regulations.

Groundwater Rights and Dedication

All Denver Basin groundwater rights underlying the Alexander Way PD property will be conveyed to the Town upon annexation. The Alexander Way PD property consists of three parcels: North, South, Already Annexed – 4.2 acres.

However, the groundwater rights underlying the northern parcel are currently owned by the Silver Heights Water District. If the annexation is approved, the applicant will be required to disconnect the property from the Silver Heights Water District and convey the water rights to the Town. Once the northern parcel nontributary groundwater rights have been conveyed to the Town, the Alexander Way Water Bank will be credited for them.

Additionally, under all three parcels the groundwater rights include not-nontributary (NNT) groundwater that requires adjudicated augmentation plans and conveyance of the plans to the Town. To ensure that this is completed in a timely manner, the owner will be subject to a 50% building permit cap until the augmentation plans are adjudicated and conveyed to the Town.

In addition to the groundwater rights associated with the Alexander Way PD, the owners hold additional groundwater rights and an adjudicated augmentation plan that they propose to convey to the Town as part of the annexation approval. These water rights are located under the Diamond Ridge Estates development and were not dedicated to the Town at the time the development was approved. However, from the Diamond Ridge Estates remaining groundwater rights, a portion will be conveyed, 256.9 AF, and of that amount, 238.1 AF (216.4 SFE[1]) can be credited to the water bank. The other portion of the remaining groundwater rights are from the Diamond Ridge adjudicated augmentation plan which will also be conveyed to the Town (216.6 AF).

	Conveyed (AF/YR)	Allowed for Water Bank (AF/YR)	Credit for Water Bank (SFE)
Diamond Ridge Estates	256.9 + 216.6 = **473.5**	238.1	216.4
AW – North[2]	0	0	0
AW – South	54.3	21.1	19.2
AW - Already Annexed (4.2 acres)	7.11	4.4	4.0
Total	534.91	263.6	**239.6**

[1] Single Family Equivalent (SFE)
[2]Groundwater rights underlying Silver Heights will be given credit for the NT groundwater once it is conveyed to the Town.

A review of the Groundwater Rights Title Opinion was completed by Town's outside water attorney and accepted by staff.

The property is identified as an infill parcel as depicted in the Castle Rock Water Inclusion and Exclusion map and therefore exempt from providing renewable water per section 4.04.045B of the Castle Rock Municipal Code

Alexander Way Water Bank

The Alexander Way Development Agreement contains details on the Alexander Way Water Bank including how debits and credits are made. The Alexander Way Water Bank will be initially credited with **239.6 SFE** [216.4 SFE (Diamond Ridge Estates) + 19.2 SFE (south parcel) + 4.0 SFE (already annexed 4.2 acres) = 239.6 SFE].

Future credit for the Alexander Way water bank will come from the nontributary (NT) groundwater rights currently owned by Silver Heights.

To determine if the NNT groundwater rights underlying all 3 parcels and included in the Diamond Ridge augmentation plan will be credited to the water bank, the Town's water attorney is currently reviewing them due to the complexities of conveying NNT groundwater that was partially dedicated previously. However, there will be enough credit in the water bank for the planned development from the above-mentioned SFE credits.

Transportation and Traffic Impacts

The Transportation Impact Analysis (Attachment E) addresses the capacity, geometric, and control requirements associated with the development entitled Alexander Way Residential.

The Transportation Impact Analysis has been revised to address Town comments made through the review process, regarding annual growth rates, mitigation for poor intersection level of service and vehicle queuing results, and updates to applicable study figures and tables throughout.

Founders Parkway at Allen Way: The Transportation Impact Analysis has determined that a portion of the traffic generated by the development will utilize this signalized intersection. A pro-rata share of improvement costs for intersection control equal to 1% or $57,621.65 will be a condition of the Development Agreement (DA).

Founders Parkway at Front St: The Transportation Impact Analysis has determined that a portion of the traffic generated by the development will utilize this signalized intersection. A cash-in-lieu payment equal to 1% or $40,876.90 will be a condition of the DA for construction of additional turn lanes.

Allen Street and Alexander Place: This intersection shall be converted to an "All Way" Stop upon issuance of the first building permit.

Staff is of the opinion that the proposed site-generated traffic resulting from Alexander Way Residential is expected to create no negative impact to traffic operations for the surrounding roadway network. Analysis of site-generated traffic concludes that proposed development traffic volume is considered minor.

Parks and Recreation

The development plan proposes to set aside 31.25 acres as public open space (OSD). The area of OSD runs along the eastern boundary of the property, providing a buffer between the adjacent development and serving to protect slopes, mature vegetative stands, and wildlife habitat and movement corridors. All OSD acreage will be dedicated to, and owned by, the Town, and will be zoned as Public Land-2 (PL-2). The PL-2

district permits passive uses and development standards as established in the Town's Municipal Code Section 17.30.030. The developer also plans to incorporate approximately 1.5 acres of private open space (OSP) into the residential planning areas. The permitted uses allowed in OSP are listed in the Alexander Way PDP Zoning Regulations and include picnic areas, seating nodes and lookouts, grading and drainage improvements, public utilities and associated structures, neighborhood parks and playgrounds as well as irrigation, water storage, distribution and well facilities.

Alexander Way proposes a natural surface trail through the dedicated open space which will tie into the Town's trail network. The developer also is providing a 15' wide corridor along the southern boundary which, when connected with the Town's 15' parcel, creates a 30' wide east/west trail corridor.

Public Land Dedication

It was determined that the development does not contain a suitable site for land dedication. As such the applicant will pay cash-in-lieu of land dedication. The required payment will be based on the valuation schedule maintained administratively by the Town and will reflect the cost the Town may incur in acquiring on the open market property of equivalent acreage suitable for development for the public purposes as identified in Chapter 16.08 of the Municipal Code. The cash-in-lieu fee shall be calculated and paid at time of plat.

Police and Fire Service

Upon annexation, the property will be served by Castle Rock Police, rather than the Douglas County Sheriff. The property will also be disconnected from the Castle Rock Fire Protection District, and will be served by the Castle Rock Fire Department. Prior to the issuance of the first building permit for the proposed development, the owner will be required to prepare and submit to Castle Rock Fire Department a fire protection plan for the development. The fire protection plan shall be prepared in accordance with the Town's Community Wildfire Protection Plan, Town Regulations, and all applicable State laws and regulations by a registered design professional, qualified landscape architect, or qualified fire safety specialist acceptable to the Town. The fire protection plan shall analyze the wildfire risk of the development and recommend fire protection and life safety measures for the purpose of mitigating wildfire hazards within the development. The owner shall be responsible for implementation of fire protection and life safety measures as may be recommended by the fire protection plan and approved by the Town.

The dedicated open space and any other parcels that may be conveyed to the Town shall be assessed, at no cost to the Town, by a professional that is familiar with Wildland Urban Interface (WUI) mitigation. This assessment shall be provided to the Life Safety Division of the Fire Department for review and determination if any treatments are necessary to meet the current Community Wildfire Protection Plan that has been approved by the State of Colorado and Town of Castle Rock. Any identified

mitigation will be required to be performed by the owner prior to the conveyance of the property.

Fiscal Impact Analysis

The Castle Rock Municipal Code, Section 17.32.100, provides that the Town may require an evaluation of the fiscal impacts of any new Planned Development that involves significant changes to uses and densities. The analysis shall generally consist of a comparison of the project's projected direct revenues (property, sales and use tax generation) to projected costs of providing urban services to the development. The analysis shall examine the revenue/cost comparison not only at full build-out, but at appropriate phases of development as the project builds out over time. The conclusions of the Fiscal Impact Analysis of the Alexander Way proposed annexation and zoning are summarized as follows (Attachment F).

The proposed Alexander Way development, which is anticipated to deliver a majority of single family detached housing and portion of live work units, will result in a very modest positive fiscal balance for the Town. The ongoing annual net fiscal impact of the Alexander Way development on the Town's General Fund, Transportation Fund, and Community Center Fund is estimated at a positive $89,645, $23,426, and $742 per year at full stabilization, respectively.

The total annual net fiscal impact at full stabilization is estimated at $113,813 which is slightly above a neutral balance of estimated revenues versus Town expenses. Thus, the project can be characterized as covering the estimated costs of providing Town services, but should not be characterized as creating significant positive revenues. The positive fiscal impact of the development is contingent upon the relatively high average household incomes required to afford the higher value large lot single family product types, and that support the capture of higher levels of retail sales generating local sales tax revenue.

It should be noted that a fiscal impact analysis only provides an order of magnitude estimate of project revenues and expenses based on the current Town budget. As with any fiscal projection, there should be an assumed margin of error associated with the estimates. Results are best interpreted as an estimate of fiscal impacts based on the Town's current budget. To the extent that the Town is providing services at a level below desired levels based on budget constraints, the analysis may underrepresent the future costs of providing services to the project.

Given that all fiscal models rely on prospective assumptions and there are margins of error in these assumptions, in this case the fiscal model's very slight positive fiscal balance in favor of the Town, it is reasonable to conclude that as a generalized statement the fiscal benefits and costs for the Town from the proposed development are roughly equal.

Development Agreement Summary

A development agreement is a contract between the Town of Castle Rock and the property owner (Owner) that addresses required infrastructure improvements, development phasing, open space conveyances, water rights conveyances, Town service obligations, developer obligations and other relevant items. The development agreement is considered and acted upon by Town Council. The following is a brief summary of the key elements of the Alexander Way DA.

The major provisions of the Alexander Way Development Agreement (DA) are listed below.

- Owner shall convey all groundwater rights to the Town upon annexation.
- Owner shall convey additional ground water rights to the Town
- A $57,621.65 pro rata share contribution to the Founders Parkway and Allen Way intersection
- A $40,876.90 pro rata share contribution to the Founders Parkway and Front Street intersection
- Conversion to an all way stop at the intersection of Alexander Place and Allen Street
- Conveyance of 31.25-acres of open space to the Town
- Construction and maintenance of a natural surface trail system in the open space
- PLD contributions to be determined at the time of plat

Public Notification and Outreach

Public Hearing Notice

Public hearing notice signs were posted on the property and written notice letters were sent to property owners within 500 feet of the property, at least 15 days prior to the public hearing. In addition, a public notice of the Annexation and Zoning hearing was published in the Douglas County News-Press in accordance with Section 20.02.020 of the Municipal Code.

Town staff published notice of the Planning Commission and Town Council public hearings on the Town's website and provided information about the proposal on the Town's *Development Activity* interactive map.

External Referrals
External referrals were sent to various utility providers, public service providers and jurisdictional partners.

Comments from Colorado Parks and Wildlife urged that fragmentation and loss of habitat be kept to a minimum through clustering of development and provision of open space. Trails were encouraged to be placed near the edges of open space and not wider than 8 feet. Education of future residents in living with wildlife was suggested.

Colorado Geological Survey (CGS) stated initial concerns regarding rock fall and landslide susceptibility and requested that a geotechnical study be submitted at time of the Site Development Plan/Plan. The applicant chose to prepare the geologic/geotechnical report in response to these comments for this application. After CGS reviewed the geologic/geotechnical study they stated that their concerns had been addressed provided that the recommendations in the report be followed. CGS will be a referral agency during the Site Development Plan review.

The remainder of the agencies contacted for external comments either did not respond, responded indicating “No Comment”, or had comments of a technical nature.

Neighborhood Meetings and Public Outreach

The applicant has conducted four neighborhood meetings.

The first meeting was held on July 13, 2021 in a hybrid format with the in-person portion being held at Town Hall. Approximately 45 people attended in person and online combined. Concerns raised was the ownership of open space, would development be proposed within the skyline/ridgeline areas, and concern about the impact of wildlife. Residents expressed concerns about a proposed trail connection from the development into the Diamond Ridge Estates PD. Residents of the Silver Heights expressed concerns regarding the location of the detention pond and safety. General concerns about development and water were raised.

The second neighborhood meeting was held on February 2, 2022. The meeting was originally scheduled to be a hybrid meeting but due to weather was held virtually. Approximately 15 people attended the meeting. Concerns and questions that were raised by attendees included the elevation difference between Diamond Ridge Estates and the proposed homes (estimated to be 200 to 250 feet depending on location). Residents of Silver Heights raised concerns about the trail corridor proposed adjacent to their neighborhood.

A third neighborhood meeting was held on April 12, 2023 in a hybrid format with the in-person portion held at the Castle Rock library. Approximately 5 people attended the meeting. Questions regarding potential landscaping along the eastern boundary of the property were asked and discussed. General concerns on overall growth in the Town were raised.

A fourth neighborhood meeting was held on October 16, 2023 in a virtual format and no members of the public were in attendance.

Analysis

Staff has completed a full analysis of the proposed annexation and proposed Planned Development zoning, taking into account the representations made in the application for annexation and zoning, and the goals and principles of the Town’s 2030 Vision and

Comprehensive Master Plan, the criterion of the Town's Municipal Code and the requirements of the Town's technical criteria. The remainder of this report focuses on how the annexation and zoning proposals are consistent with the Town's guiding documents and meet the Town criterion for approval, beginning with the request for annexation.

Annexation Analysis

The Town has complied with the process prescribed by the Municipal Annexation Act of 1965 (the Act). On October 19, 2021, Town Council found the Alexander Way Annexation Petition to be in substantial compliance with the prescribed form and content required by the Colorado Revised Statutes and set the date of the Eligibility Hearing for December 7, 2021. After proper public noticing, Town Council held the Eligibility Hearing as scheduled, reviewed the statutory allegations made in the Annexation Petition (Attachment B) and found that the property is eligible to be considered for annexation into the Town of Castle Rock.

The third phase of the process is the Annexation Hearing, the purpose of which is to determine whether the property should be annexed to the Town. Section 20.02.040 of the Municipal Code states that Town Council shall consider the policies, guidelines and criteria in the Town [Comprehensive] Master Plan, as amended, along with any other relevant information in determining whether it is in the best interests of the Town to grant or deny the petition for annexation. The following section identifies the applicable principles of the Comprehensive Master Plan and summarizes how the proposed Alexander Way annexation achieves those principles.

2030 Vision and Comprehensive Master Plan

The principles set forth in the Town's Comprehensive Master Plan are based on four cornerstones identified through a Town-wide visioning effort as the characteristics most important to the community. The four cornerstones are Distinct Town Identity, Responsible Growth, Community Services and Thriving Economy. The following is an analysis of the specific principles applicable to this proposed annexation.

Distinct Town Identity

- *ID-2.1 Master Planned Developments*

  Master Planned communities that offer diverse housing options, mixed use development, transition zones, trail connections, open space buffers and community services and amenities are encourage. Regional and local transportation networks serve to ensure safe and reliable commuter routes.

  Analysis: Alexander Way is a master planned development and will offer a variety of housing types, a transition from urban to county development, trail and road

extensions and connections and a well-defined open space buffer to the existing Town neighborhood to the east of the property.

- ID-6.1 Natural Environment Protection

  Identify and preserve important properties that offer unique natural and scenic vistas or other characteristics that distinguish Castle rock from other communities.

  Analysis: Annexation to the Town will give the Town the ability to determine zoning and to preserve the unique natural features of this property. Specifically, approximately 40% of the property will be set aside as open space.

- ID-7.1 Parks and Recreation Facilities

  Provide a variety of indoor and outdoor spaces, well distributed throughout the Town, that encourage active community recreation.

  Analysis: Trails are proposed within the open space of the development with potential future connections to other Town open space and trails. A 1.5-acre pocket park is additionally proposed in the residential use areas.

- ID-7.2 Open Space

  Establish permanent open space and natural buffers to preserve fragile ecosystems, habitats and corridors. Provide opportunities for passive recreation.

  Analysis: As described above, the Alexander Way PD preserves 40% of the site as dedicated open space that will include passive uses. The dedicated open space consists of one contiguous creating an uninterrupted corridor.

- ID-7.3 Trails

  Continue to build a connected municipal trails system that meets the needs of a wide diversity of users, connects Castle Rock's neighborhoods and activity centers, and provides linkages to the regional trails system.

  Analysis: The Alexander Way PD will enhance the Town's extensive trail system with potential links to the Town's overall trail system.

Responsible Growth

The Comprehensive Master Plan specifically states that annexation requests must take into consideration the following items.

- *RG 2.1 - Castle Rock Annexation Areas*

A. Is a logical extension or infill of the Town boundaries.

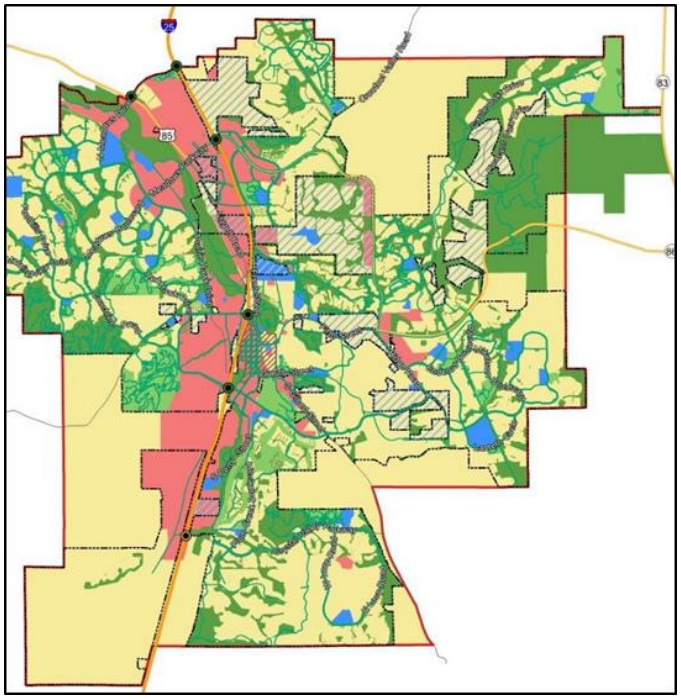
Analysis: The Comprehensive Plan, Future Land Use Plan represents future Town buildout boundaries and anticipated land uses. The Alexander Way property is within an unincorporated enclave and is a logical infill annexation (see Figure 9). The property is anticipated to be an area of residential development per the Future Land Use Map in the Comprehensive Plan.

B. Has demonstrated a significant benefit to the Town.

Analysis: Annexation and zoning of the Alexander Way property is a logical infill and provides for continuity of Fire and Police services. Approximately 40% of the property will be dedicated as public open space owned by the Town. The development will provide additional ground water rights beyond what is required to serve the development. The proposed live work units provide a unique housing type not found elsewhere in the Town.

C. Will be provided with adequate urban services.

Analysis: The property is able to be served with appropriate and adequate municipal services.



D. Is fiscally responsible.

Analysis: The owner will be required to pay for all infrastructure improvements necessary for development of the property such as water, wastewater, storm water and/or drainage, and transportation improvements. Additionally, the owner will convey all groundwater rights to the Town associated with the property and will convey additional groundwater rights to the Town.

The conclusions of the Fiscal Impact Analysis are summarized earlier in this report.
E. Conveys to the Town all water rights appurtenant to the ground at time of annexation.

Analysis: The owner will dedicate all appurtenant ground water rights. The applicants are conveying additional ground water rights to the Town that exceed the projected water demand of the development.

F. Secures renewable water to 100 percent of the expected development on the annexed area.

The property is identified as an infill parcel as depicted in the Castle Rock Water Inclusion and Exclusion map and therefore exempt from providing renewable water per section 4.04.045B of the Castle Rock Municipal Code. The applicant is proposing to convey additional ground water rights beyond what is required to serve the development.

- *RG2.2 - Annexation of Infill Areas*

  Consider the annexation and development of areas surrounded, or partially surrounded, by the Town boundary that can demonstrate a benefit to the Town, connect to Town water and sewer and create a contiguous municipal boundary.

  Analysis: The property is within an unincorporated Enclave that is surrounded by the Town. The proposed annexation has demonstrated a benefit to the Town and can be connected to Town water and sewer. The annexation would contribute to filling in the Town's boundary.

- *RG3.3 – Mix of Housing Options*

  Encourage a variety of housing options to provide a balanced mix of single family detached, single family attached and multifamily units with an increase in density within the Downtown Overlay District or in the Interchange Overlay Districts.

  Analysis: The proposed live work units provide a unique housing type that is not found elsewhere in the Town.

Community Services

- *EC1.2 – Parks and Recreation Facilities*

  Provide convenient access to recreation resources and open space throughout Town by locating neighborhood parks within walking distance of residents and convenient access to trails. Create sufficient passive open

space corridors that are contiguous and integrated into Town and County local and regional trail systems that encourage an active and healthy lifestyle. Provide recreational facilities and programs for Town residents that meet a variety of athletic interests

Analysis: The proposed open space and trails will be easily accessible to the proposed residences. The proposed open space creates an open space corridor that is contiguous and is adjacent to existing Town open space.

Thriving Economy

- *EC1.2 – Jobs Housing Balance*

Promote a balance of jobs to housing to provide residents the opportunity to live close to where they work. Accommodate a mix of land uses that will allow a full spectrum of service and primary employment opportunities for its residents.

Analysis: The proposed live work units will allow residents to work where they live and allow for opportunities for small business creation.

Planned Development Plan Approval Criteria and Analysis, CRMC 17.34.030:

Staff analysis of the proposed Alexander Way Planned Development Plan and Zoning regulations has taken into account the representations made in the land use application and supporting reports and analyses. Per Section 17.34.030 PD Plan Approval Criteria, the proposed PD zoning shall be evaluated under the following criteria.

A. Community Vision/Land Use Entitlements
The proposed Alexander Way PD meets this criterion. The development proposal conforms to the Town of Castle Rock Vision and Comprehensive Master plan by

- *Planning for and accommodating the needs of existing and future residents;*
- *Offering cohesive neighborhoods, with a mix of land uses that support a variety of lifestyle options for Castle Rock residents;*
- *Including buffers and transitions that recognize, and are sensitive to, the scale and character of the surrounding neighborhoods;*
- *Protecting and preserving wildlife habitat corridors;*
- *Providing large areas of open space, trail systems, and passive park space;*
- *Providing all groundwater rights associated with the property to the Town and provides additional ground water; and*

B. Relationship to surrounding area.

The proposed open space creates a buffer to the Diamond Ridge Estates PD to the east. Large rear setbacks have been set for the large lots adjacent to the Silver

Heights subdivision to the west in accordance with feedback received during the neighborhood meetings. The live work units are located adjacent to existing commercial uses. The 4.2-acre parcel has permitted uses that would not be compatible with the surrounding Diamond Ridge Estates PD. The 4.2-acre parcel falls within the dedicated open space use area and eliminates those potential permitted uses.

C. Circulation and connectivity.

The proposed PD plan complies with this criterion by providing appropriate internal pedestrian and vehicle circulation, capacity and connectivity, and the DA obligates the developer to required offsite improvements. The road improvements will be phased to correspond to development within the PD.

D. Service, phasing and off-site impacts.

The proposed PD amendment complies with this criterion. The PD plan, phasing plan and DA establish the necessary onsite and offsite improvements to serve the Alexander Way development with adequate municipal water, wastewater and sewer services. The applicants are responsible for the cost and construction of the infrastructure improvements to serve the property.

E. Open space, public lands and recreation amenities.

Planned Developments are required to dedicate a minimum of 20% of the property as open space. The Alexander Way PD includes 31.25 acres of public open space that equals 40% of the overall project. The public open space will be dedicated to the Town. A natural surface trail system as per the Town's Soft Surface Sustainable Trail Development Guide, located generally as shown on the PDP is required to be installed by the applicants.

A 1.5-acre pocket park will be created in one or spanning both the residential planning areas. The 1.5-acre pocket park will be owned and maintained by the HOA or Metropolitan District.

F. Preservation of natural features.

The PD plan complies with this criterion. The open space area will preserve the incline leading up to the ridge to the east. The open space is one large contiguous area and is adjacent to an existing open space property owned by the Town.

Development on the site will comply with state and federal regulations such as the Migratory Bird Act.

Budget Impact

The proposed annexation and zoning will generate review fees. In addition, there are DA obligations and impact fees required at the time of annexation and with future site plans, plats and subdivision improvement obligations that will offset Town costs.

Findings and Recommendation

Annexation

Town staff finds that the proposed annexation was reviewed and processed as prescribed in Title 20 of the Municipal Code, meets the goals and principles of the Town's 2030 Vision and Comprehensive Master Plan.

Staff recommends that Planning Commission recommend to Town Council approval of the Alexander Way Annexation.

Planned Development Plan and Zoning Regulations

Town staff finds that proposed Planned Development Plan and Zoning Regulations were processed and reviewed as prescribed in Chapter 17.34 of the Municipal Code.

Staff recommends that the Planning Commission recommend to Town Council approval of the Alexander Way Planned Development Plan and Zoning Regulations.

Proposed Motions

The annexation and zoning of the Alexander Way property are two distinct land use applications which requires two distinct motions.

"I move to recommend approval of the Alexander Way Annexation to Town Council."

"I move to recommend approval of the Alexander Way Planned Development Plan and Zoning Regulations to Town Council."

Alternative Motions

Option 1

"I move to recommend approval of the Alexander Way Annexation to Town Council with the following conditions; (list conditions)"

"I move to recommend approval of the Alexander Way Planned Development Plan and Zoning Regulations to Town Council with the following conditions; (list conditions)"

Option 2

"I move to continue this item to the Planning Commission meeting on [date], at [time].

Attachments

Attachment A: Vicinity Map
Attachment B: Alexander Way Annexation Petition
Attachment C: Alexander Way Annexation Plat
Attachment D: Planned Development Plan and Zoning Regulations
Attachment E: Traffic Impact Analysis
Attachment F: Fiscal Impact Analysis
Attachment G: Public Comment


Sapphire Pointe Boulevard
Tremolite Drive
Azurite Lane
Diamond Ridge Parkway
Unincorporated
Douglas County
Subject Property
Alexander Way
Proposed Annexation
Unincorporated
Douglas County
4.2 Acre Parcel
Within
Town of
Castle Rock
Town Boundary
Unincorporated
Douglas County
25
85
Front Street
Crowfoot Valley Road
Founders Parkway
Alexander Way Vicinity Map
Subject Property
0 270 540 1,080
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Town of Castle Rock
Colorado
31

PETITION FOR ANNEXATION

ALEXANDER WAY

TO THE TOWN COUNCIL OF THE TOWN OF CASTLE ROCK, COLORADO

The undersigned (collectively, "**Petitioner**"), in accordance with Section 30(1)(b) of Article II of the Constitution of the State of Colorado (the "**State Constitution**") and the Municipal Annexation Act of 1965 as set forth in Article 12, Title 31, Colorado Revised Statutes, as amended and as in effect on the submission date set forth below (the "**Annexation Act**"), hereby petitions the Town Council (the "**Council**") of the Town of Castle Rock, Colorado (the "**Town**") to annex to the Town the unincorporated territory located in the County of Douglas, State of Colorado, which property is more particularly described in Exhibit A attached hereto and incorporated herein by reference (the "**Annexation Property**"). In support of this petition ("**Petition**"), Petitioner alleges that:

1. It is desirable and necessary that the Annexation Property be annexed to the Town.

2. The requirements of Section 30(1)(b) of Article II of the State Constitution and Sections 31-12-104 and 31-12-105 of the Annexation Act exist or have been met.

3. The Petitioner comprises more than fifty percent (50%) of the landowners in the area of the Annexation Property and owns more than fifty percent (50%) of the Annexation Property, excluding public streets and alleys and any land owned by the Town.

4. The signer of this Petition is the owner of one hundred percent (l 00%) of the area of the Annexation Property exclusive of public streets and alleys and any land owned by the Town.

5. Not less than one-sixth (1/6) of the perimeter of the Annexation Property is contiguous with the Town's current municipal boundaries.

6. A community of interest exists between the Annexation Property and the Town.

7. The Annexation Property is urban or will be urbanized in the near future.

8. The Annexation Property is integrated with or is capable of being integrated with the Town.

9. The Annexation Property is not presently a part of any incorporated city, city and county, or town; nor have any proceedings been commenced for annexation of part or all of the Annexation Property to any other municipality; nor has any election for annexation of the Annexation Property or substantially the same territory to the Town been held within the twelve (12) months immediately preceding the filing of this Petition.

10. The proposed annexation will not result in the detachment of area from any school district and attachment of the same to another school district.

11. Except to the extent necessary to avoid dividing parcels within the Annexation Property held in identical ownership, at least fifty percent (50%) of which are within the three (3) mile limit, the proposed annexation will not extend the municipal boundary of the Town more than three (3) miles in any direction from any point of the current municipal boundary in one (1) year.

12. In establishing the boundaries of the Annexation Property, if a portion of a platted street or alley is annexed, the entire width of said street or alley shall be included within the area annexed; and, reasonable access shall not be denied to landowners, owners of easements, or the owners of franchises, adjoining any platted street or alley to be annexed that will not be bounded on both sides by the Town.

13. In establishing the boundaries of the Annexation Property, no land which is held in identical ownership, whether consisting of a single tract or parcel of real estate or two or more contiguous tracts or parcels of real estate:

    (a) is being divided into separate parts or parcels without the written consent of the landowner thereof unless such tracts or parcels are separated by a dedicated street, road or other public way; or

    (b) comprising twenty (20) acres or more (which, together with buildings and improvements situate thereon having a valuation for assessment in excess of two hundred thousand dollars ($200,000) for ad valorem tax purposes for the year next preceding the proposed annexation) is included in the Annexation Property without the written consent of the landowner.

14. The legal description of the lands owned by the signer of this Petition is set forth underneath the name of such Petitioner on Exhibit B, attached hereto and incorporated herein by this reference.

15. The Petitioner signed this Petition no more than one hundred eighty (180) days prior to the date of filing.

16. Attached to this Petition as Exhibit C is the Affidavit of Circulator of this Petition that the signature hereon is the signature of the person whose name it purports to be.

17. This Petition is accompanied by four (4) prints of an annexation map containing, among other things, the following information:

    (a) a written legal description of the boundaries of the Annexation Property;

    (b) a map showing the boundaries of the Annexation Property

(c) within the annexation map, a showing of the location of each ownership tract in unplatted land and, if part or all of the area is platted, the boundaries and the plat numbers of the plots or of lots and blocks; and

(d) next to the boundary of the Annexation Property, a drawing of the contiguous boundary of the Town and the contiguous boundary of any other municipality abutting the Annexation Property, if any.

18. In connection with the processing of this Petition, the Petitioner requests that the Town:

(a) institute the process to establish planned development ("**PD**") zoning for the Annexation Property in accordance with applicable provisions of the Town's Municipal Code (the "**Code**") and in accordance with any applicable provisions of Section 31-12-115 of the Annexation Act; and

(b) approve and execute a development agreement acceptable to Petitioner and the Town (the "**Development Agreement**") which establishes vested property rights for the Annexation Property for an agreed upon term, pursuant to Chapter 17.08 of the Code and Article 68, Title 24, Colorado Revised Statutes, and which, in conjunction with the PD zoning, will establish the development plan for the Annexation Property.

19. Petitioner has filed this Petition subject to the following conditions:

(a) Unless otherwise agreed in writing by Petitioner, the annexation of the Annexation Property into the Town shall not be effective unless concurrently with the Council's final approval of an ordinance annexing the Annexation Property into the Town, the Council gives its final approval to (A) zoning regulations for the Annexation Property in form and substance satisfactory to the Petitioner, and (B) the Development Agreement in form and substance satisfactory to Petitioner which among other things creates vested rights for the Annexation Property pursuant to existing Town ordinances or resolution and Section 24-68-101, C.R.S., et seq.; and

(b) Petitioner hereby reserves the right to withdraw this Petition, and thereby prevent the Annexation Property from being annexed into the Town, by so notifying the Town Clerk in writing prior to the later to occur of:

(i) the occurrence of the conditions to effectiveness of the annexation as set forth in Section 31-12-113(2)(b) of the Annexation Act;

(ii) a later date, if any, set forth in the Development Agreement.

20. Upon the annexation of the Annexation Property becoming effective, and subject to the conditions set forth in this Petition, and to be set forth in the Development Agreement and the documents constituting the terms of the PD zoning for the Annexation Property (the "**PD Documents**"), the Annexation Property shall be

subject to the regulations of the Town, except as otherwise set forth in the Development Agreement and the PD Documents, and except for general taxation purposes in which case the annexation shall be deemed effective on January 1 of the next succeeding year following adoption of the annexation ordinance.

21. This Petition is filed on the condition that the zoning requested by Petitioner under paragraph 18 (a), above, is granted by the Town as provided in the Development Agreement, and the Town agrees that no filing of the annexation ordinance and annexation maps as provided under Section 31-12-113, subsection (2)(a)(II)(A) of the Annexation Act shall be made until, and unless the requested zoning is granted and no longer subject to appeal.

22. Except for the terms and conditions of this Petition, the Development Agreement and the PD Documents, which terms and conditions Petitioner has approved or shall expressly approve, and therefore do not constitute an imposition of additional terms and conditions within the meaning of Section 31-12-112(1) of the Annexation Act, Petitioner requests that no additional terms and conditions be imposed upon annexation of the Annexation Property to the Town.

THEREFORE, Petitioner requests that the Town Council of the Town of Castle Rock, Colorado, complete and approve the annexation of the Annexation Property pursuant and subject to the provisions of the Municipal Annexation Act of 1965, as amended, and the terms and conditions of this Petition.

Respectfully submitted this 13th day of August, 2021

Signature of Landowner/Petitioner

455 ALEXANDER LLC

By: _____
Name: Jacques Machoc
Its: Co-Manager
Date of Signature: August 13, 2021

Mailing Address: 700 17th Street, Ste 200
Denver, CO 80202

Signature of Landowner/Petitioner

TIERRA INVESTORS, LLC

By: _____
Name: LENN HALLEMAN
Its: MEMBER
Date of Signature: August 13, 2021

Mailing Address: 851 S. High St.,
Denver, CO 80209

EXHIBIT A
TO PETITION FOR ANNEXATION

Legal Description of Annexation Property

A TRACT OF LAND LOCATED IN THE NORTH HALF OF SECTION 26, TOWNSHIP 7 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN, DOUGLAS COUNTY, COLORADO, BEING DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 26, AS MONUMENTED BY A 3 INCH DIAMETER ALUMINUM CAP, MARKED: "1993 LS 13485", AND CONSIDERING THE NORTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 26 TO BEAR SOUTH 89°23'27"EAST TO THE NORTH QUARTER CORNER OF SAID SECTION 26, AS REFERENCED BY A WITNESS CORNER, LOCATED 25.0 FEET SOUTH OF SAID NORTH QUARTER CORNER, AND MONUMENTED BY A 2.5 INCH DIAMETER ALUMINUM CAP, MARKED: "25' WC LS 13155"; THENCE ALONG SAID NORTH LINE, SOUTH 89°23'27"EAST, 1292.65 FEET TO THE INTERSECTION WITH THE EAST LINE OF BLOCK 5 OF THE AMENDED MAP OF SILVER HEIGHTS SUBDIVISION, ACCORDING TO THE PLAT RECORDED AT RECEPTION NO. 103535 AND THE **POINT OF BEGINNING** OF THIS DESCRIPTION; THENCE CONTINUING ALONG SAID NORTH LINE, SOUTH 89°23'27"EAST, 913.25 FEET TO THE NORTHWEST CORNER OF TRACT A OF DIAMOND RIDGE ESTATES FILING TWO, ACCORDING TO THE RECORDED PLAT THEREOF; THENCE ALONG THE WESTERLY LIMITS OF SAID TRACT A THE FOLLOWING TWO COURSES; 1) SOUTH 00°31'06"WEST, 475.23 FEET; 2) SOUTH 53°29'05"EAST, 1424.51 FEET TO THE SOUTHWESTERLY CORNER OF SAID TRACT A, AND THE INTERSECTION WITH A LINE THAT RUNS BETWEEN THE NORTHEAST CORNER OF THE SOUTHWEST QUARTER, OF THE NORTHEAST QUARTER OF SAID SECTION 26, AS MONUMENTED BY A 2.5 INCH DIAMETER ALUMINUM CAP, MARKED: "1993 LS 6935" AND THE SOUTHEAST CORNER OF SAID BLOCK 5 OF THE AMENDED MAP OF SILVER HEIGHTS SUBDIVISION, AS MONUMENTED BY A 2 INCH DIAMETER ALUMINUM CAP MARKED: "LS 27011"; THENCE ALONG SAID INTERSECTED LINE, SOUTH 89°11'37"EAST, 359.30 FEET TO THE NORTHEAST CORNER OF THAT PARCEL DESCRIBED IN THE DEED RECORDED AT RECEPTION NO. 2020114077; THENCE ALONG THE EASTERLY LIMITS OF SAID PARCEL THE FOLLOWING TWO COURSES; 1) SOUTH 39°44'05"EAST, 253.32 FEET; 2) SOUTH 25°03'40"EAST, 528.12 FEET TO THE SOUTHEAST CORNER OF SAID PARCEL; THENCE ALONG THE SOUTH LINE OF SAID PARCEL, SOUTH 89°41'25"WEST, 2392.48 FEET TO THE SOUTHWEST CORNER OF SAID PARCEL; THENCE ALONG THE WEST LINE OF SAID PARCEL, NORTH 00°04'19"EAST, 714.39 FEET TO THE NORTHWEST CORNER OF SAID PARCEL AND THE INTERSECTION OF SAID LINE THAT RUNS BETWEEN SAID NORTHEAST CORNER OF THE SOUTHWEST QUARTER, OF THE NORTHEAST QUARTER OF SAID SECTION 26, AND SAID SOUTHEAST CORNER OF SAID BLOCK 5 OF THE AMENDED MAP OF SILVER HEIGHTS SUBDIVISION; THENCE ALONG SAID INTERSECTED LINE, NORTH 89°11'37"WEST, 418.14 FEET TO SAID SOUTHEAST CORNER OF BLOCK 5; THENCE ALONG THE WEST LINE OF SAID BLOCK 5, NORTH 00°31'36"EAST, 1303.54 FEET TO THE **POINT OF BEGINNING** OF THIS DESCRIPTION, CONTAINING 73.76 ACRES, MORE OR LESS.

THIS LEGAL DESCRIPTION WAS PREPARED BY, OR UNDER THE DIRECT SUPERVISION OF, MICHAEL C. CREGGER, PROFESSIONAL LAND SURVEYOR, COLORADO REGISTRATION NO. 22564 FOR AND ON BEHALF OF IMEG CORP ON JULY 12, 2021.

EXHIBIT B
TO PETITION FOR ANNEXATION

LEGAL DESCRIPTION OF LAND OWNED BY 455 ALEXANDER LLC

Name of Owner: 455 Alexander LLC

Address of Owner: 700 17th Street, Ste 200
Denver, CO 80202

Legal description and address of land owned by 455 Alexander LLC in area proposed for annexation:

A TRACT OF LAND LOCATED IN THE NORTH HALF OF SECTION 26, TOWNSHIP 7 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF DOUGLAS, STATE OF COLORADO, BEING DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 26, AS MONUMENTED BY A 3 INCH DIAMETER ALUMINUM CAP, MARKED "1993 LS 13485", AND CONSIDERING THE NORTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 26 TO BEAR SOUTH 89°23'27" EAST TO THE NORTH QUARTER CORNER OF SAID SECTION 26, AS REFERENCED BY A WITNESS CORNER, LOCATED 25.0 FEET SOUTH OF SAID NORTH QUARTER CORNER, AND MONUMENTED BY A 2.5 INCH DIAMETER ALUMINUM CAP, MARKED: "25' WC LS 13155"; THENCE ALONG SAID NORTH LINE, SOUTH 89°23'27" EAST, 1292.65 FEET TO THE INTERSECTION WITH THE EAST LINE OF BLOCK 5 OF THE AMENDED MAP OF SILVER HEIGHTS SUBDIVISION, ACCORDING TO THE PLAT RECORDED AT RECEPTION NO. 103535 AND THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE CONTINUING ALONG SAID NORTH LINE, SOUTH 89°23'27" EAST, 913.25 FEET TO THE NORTHWEST CORNER OF TRACT A OF DIAMOND RIDGE ESTATES FILING TWO, ACCORDING TO THE RECORDED PLAT THEREOF; THENCE ALONG THE WESTERLY LIMITS OF SAID TRACT A THE FOLLOWING TWO COURSES; 1) SOUTH 00°31'06" WEST, 475.23 FEET; 2) SOUTH 53°29'05" EAST, 1424.51 FEET TO THE SOUTHWESTERLY CORNER OF SAID TRACT A, AND THE INTERSECTION WITH A LINE THAT RUNS BETWEEN THE NORTHEAST CORNER OF THE SOUTHWEST QUARTER, OF THE NORTHEAST QUARTER OF SAID SECTION 26, AS MONUMENTED BY A 2.5 INCH DIAMETER ALUMINUM CAP, MARKED: "1993 LS 6935" AND THE SOUTHEAST CORNER OF SAID BLOCK 5 OF THE AMENDED MAP OF SILVER HEIGHTS SUBDIVISION, AS MONUMENTED BY A 2 INCH DIAMETER ALUMINUM CAP MARKED: "LS 27011"; THENCE ALONG SAID INTERSECTED LINE, SOUTH 89°11'37" EAST, 359.30 FEET TO THE NORTHEAST CORNER OF THAT PARCEL DESCRIBED IN THE DEED RECORDED AT RECEPTION NO. 2020114077; THENCE ALONG THE EASTERLY LIMITS OF SAID PARCEL THE FOLLOWING TWO COURSES; 1) SOUTH 39°44'05" EAST, 253.32 FEET; 2) SOUTH

25°03'40" EAST, 528.12 FEET TO THE SOUTHEAST CORNER OF SAID PARCEL; THENCE ALONG THE SOUTH LINE OF SAID PARCEL, SOUTH 89°41'25" WEST, 2392.48 FEET TO THE SOUTHWEST CORNER OF SAID PARCEL; THENCE ALONG THE WEST LINE OF SAID PARCEL, NORTH 00°04'19" EAST, 714.39 FEET TO THE NORTHWEST CORNER OF SAID PARCEL AND THE INTERSECTION OF SAID LINE THAT RUNS BETWEEN SAID NORTHEAST CORNER OF THE SOUTHWEST QUARTER, OF THE NORTHEAST QUARTER OF SAID SECTION 26, AND SAID SOUTHEAST CORNER OF SAID BLOCK 5 OF THE AMENDED MAP OF SILVER HEIGHTS SUBDIVISION; THENCE ALONG SAID INTERSECTED LINE, NORTH 89°11'37" WEST, 418.14 FEET TO SAID SOUTHEAST CORNER OF BLOCK 5; THENCE ALONG THE WEST LINE OF SAID BLOCK 5, NORTH 00°31'36" EAST, 1303.54 FEET TO THE POINT OF BEGINNING.

Percentage owned by 455 Alexander LLC: 48%

EXHIBIT B
TO PETITION FOR ANNEXATION

LEGAL DESCRIPTION OF LAND OWNED BY TIERRA INVESTORS, LLC

Name of Owner: Tierra Investors, LLC

Address of Owner: 851 S. High St.,
Denver, CO 80209

Legal description and address of land owned by Tierra Investors, LLC in area proposed for annexation:

A TRACT OF LAND LOCATED IN THE NORTH HALF OF THE NORTH HALF OF SECTION 26, TOWNSHIP 7 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN, DOUGLAS COUNTY, COLORADO, BEING DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 26, AS MONUMENTED BY A 3 INCH DIAMETER ALUMINUM CAP, MARKED: "1993 LS 13485", AND CONSIDERING THE NORTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 26 TO BEAR SOUTH 89°23'27"EAST TO THE NORTH QUARTER CORNER OF SAID SECTION 26, AS REFERENCED BY A WITNESS CORNER, LOCATED 25.0 FEET SOUTH OF SAID NORTH QUARTER CORNER, AND MONUMENTED BY A 2.5 INCH DIAMETER ALUMINUM CAP, MARKED: "25' WC LS 13155"; THENCE ALONG SAID NORTH LINE, SOUTH 89°23'27"EAST, 1292.65 FEET TO THE INTERSECTION WITH THE EAST LINE OF BLOCK 5 OF THE AMENDED MAP OF SILVER HEIGHTS SUBDIVISION, ACCORDING TO THE PLAT RECORDED AT RECEPTION NO. 103535 AND THE **POINT OF BEGINNING** OF THIS DESCRIPTION; THENCE CONTINUING ALONG SAID NORTH LINE, SOUTH 89°23'27"EAST, 913.25 FEET TO THE NORTHWEST CORNER OF TRACT A OF DIAMOND RIDGE ESTATES FILING TWO, ACCORDING TO THE RECORDED PLAT THEREOF; THENCE ALONG THE WESTERLY LIMITS OF SAID TRACT A THE FOLLOWING TWO COURSES; 1) SOUTH 00°31'06"WEST, 475.23 FEET; 2) SOUTH 53°29'05"EAST, 1424.51 FEET TO THE SOUTHWESTERLY CORNER OF SAID TRACT A, AND THE INTERSECTION WITH A LINE THAT RUNS BETWEEN THE NORTHEAST 1/16TH CORNER OF SAID SECTION 26, AS MONUMENTED BY A 2.5 INCH DIAMETER ALUMINUM CAP, MARKED: "1993 LS 6935" AND THE SOUTHEAST CORNER OF SAID BLOCK 5 OF THE AMENDED MAP OF SILVER HEIGHTS SUBDIVISION, AS MONUMENTED BY A 2 INCH DIAMETER ALUMINUM CAP MARKED: "LS 27011"; THENCE ALONG SAID INTERSECTED LINE, NORTH 89°11'37"WEST, 2065.95 FEET TO SAID SOUTHEAST CORNER OF BLOCK 5; THENCE ALONG THE WEST LINE OF SAID BLOCK 5, NORTH 00°31'06"EAST, 1303.54 FEET TO THE **POINT OF BEGINNING** OF THIS DESCRIPTION, CONTAINING 38.364 ACRES, MORE OR LESS.

THIS LEGAL DESCRIPTION WAS PREPARED BY, OR UNDER THE DIRECT SUPERVISION OF, MICHAEL C. CREGGER, PROFESSIONAL LAND SURVEYOR, COLORADO REGISTRATION NO. 22564 FOR AND ON BEHALF OF IMEG CORP ON SEPTEMBER 1, 2020.

Percentage owned by Tierra Investors, LLC: 52%

EXHIBIT C
TO PETITION FOR ANNEXATION

AFFIDAVIT OF CIRCULATOR

STATE OF COLORADO)
) SS.
COUNTY OF Denver)

The undersigned, Lenn Haffeman, being duly sworn upon his oath, deposes and states:

1. That the affiant circulated the Petition for Annexation of lands known as Alexander Way to the Town of Castel Rock, Colorado, for the purpose of obtaining the signature of the petitioners.

2. That the signatures thereon are the signatures of the persons or parties whose names they purport to be.

Lenn Haffeman

Date: August 30, 2021

Subscribed and sworn to before me this 30th day of August, 2021.

My commission expires Sept. 20, 2021

Karen Z. Henry

Notary Public

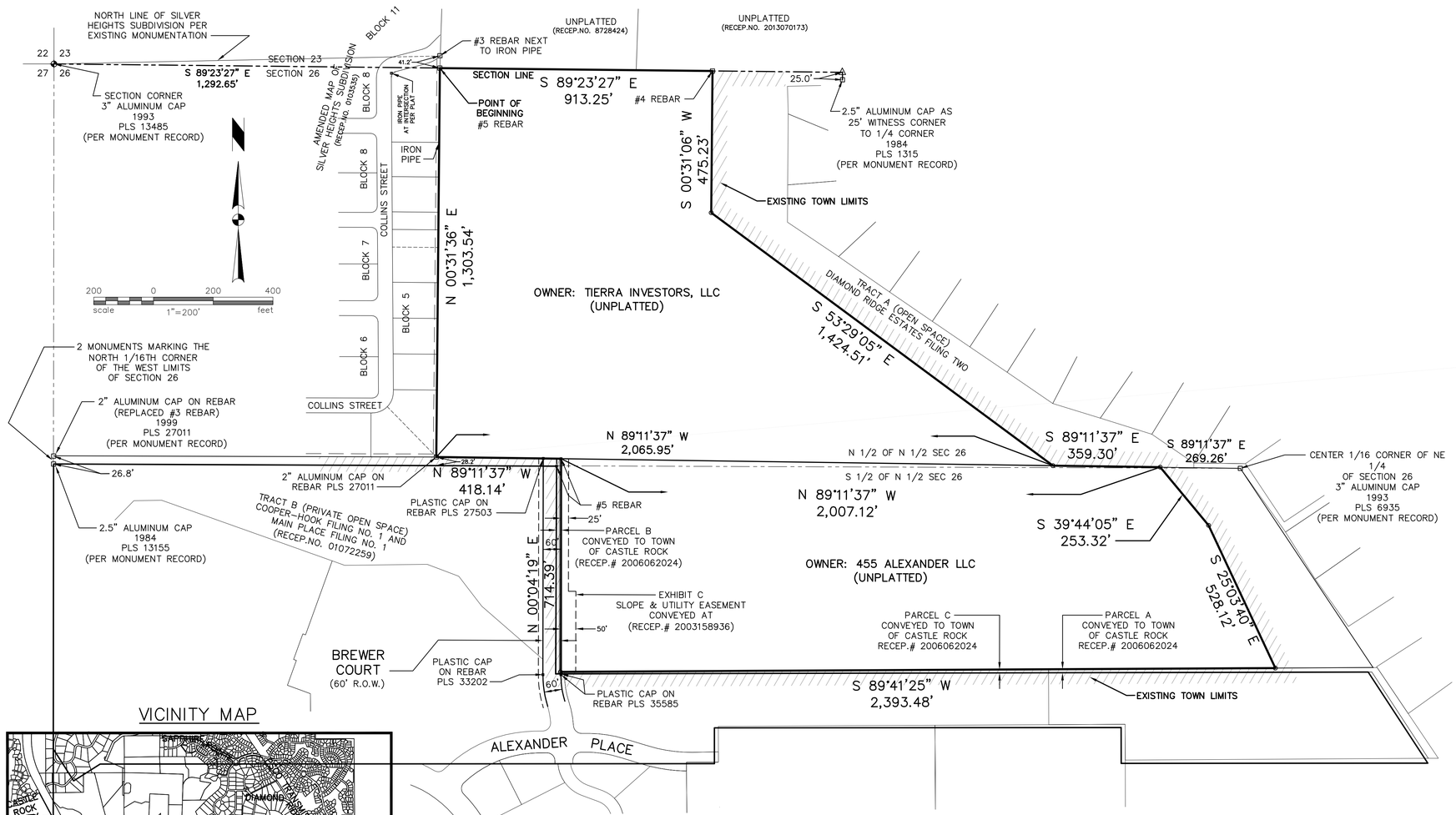
WITNESS my hand and official seal.

KAREN Z. HENRY
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 19974016463
MY COMMISSION EXPIRES SEPTEMBER 20, 2021

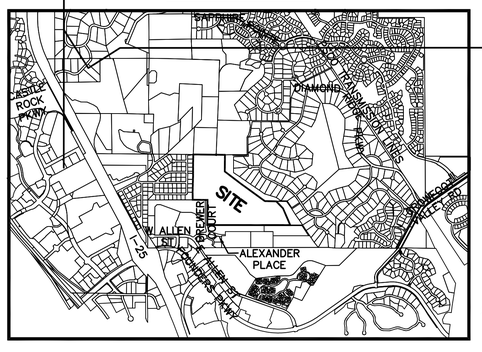
ALEXANDER WAY

ANNEXATION MAP

LOCATED IN THE N 1/2 OF SECTION 26, T. 7 S., R. 67 W. OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO



VICINITY MAP



2000 0 2000
scale 1"=2000' feet

ANNEXATION SUMMARY TABLE

TOTAL ANNEXATION ACREAGE = 73.76 ACRES
ANNEXATION BOUNDARY = 8,783.27 FEET
1/6 OF ANNEXATION BOUNDARY = 1,463.88 FEET
CONTIGUOUS WITH TOWN LIMITS = 6,566.49 FEET

LAND SURVEYOR

IMEG CORPORATION
MICHAEL CREGGER, P.L.S.
7600 E. ORCHARD RD, #250-S
GREENWOOD VILLAGE, CO 80111

IMEG CORPORATION

LEGAL DESCRIPTION

A TRACT OF LAND LOCATED IN THE NORTH HALF OF SECTION 26, TOWNSHIP 7 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN, DOUGLAS COUNTY, COLORADO, BEING DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 26, AS MONUMENTED BY A 3 INCH DIAMETER ALUMINUM CAP, MARKED: "1993 LS 13485", AND CONSIDERING THE NORTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 26 TO BEAR SOUTH 89°23'27"EAST TO THE NORTH QUARTER CORNER OF SAID SECTION 26, AS REFERENCED BY A WITNESS CORNER, LOCATED 25.0 FEET SOUTH OF SAID NORTH QUARTER CORNER, AND MONUMENTED BY A 2.5 INCH DIAMETER ALUMINUM CAP, MARKED: "25' WC LS 13155"; THENCE ALONG SAID NORTH LINE, SOUTH 89°23'27"EAST, 1292.65 FEET TO THE INTERSECTION WITH THE EAST LINE OF BLOCK 5 OF THE AMENDED MAP OF SILVER HEIGHTS SUBDIVISION, ACCORDING TO THE PLAT RECORDED AT RECEPTION NO. 103535 AND THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE CONTINUING ALONG SAID NORTH LINE, SOUTH 89°23'27"EAST, 913.25 FEET TO THE NORTHWEST CORNER OF TRACT A OF DIAMOND RIDGE ESTATES FILING TWO, ACCORDING TO THE RECORDED PLAT THEREOF; THENCE ALONG THE WESTERLY LIMITS OF SAID TRACT A THE FOLLOWING TWO COURSES; 1) SOUTH 00°31'06"WEST, 475.23 FEET; 2) SOUTH 53°29'05"EAST, 1424.51 FEET TO THE SOUTHWESTERLY CORNER OF SAID TRACT A, AND THE INTERSECTION WITH A LINE THAT RUNS BETWEEN THE NORTHEAST CORNER OF THE SOUTHWEST QUARTER, OF THE NORTHEAST QUARTER OF SAID SECTION 26, AS MONUMENTED BY A 2.5 INCH DIAMETER ALUMINUM CAP, MARKED: "1993 LS 6935" AND THE SOUTHEAST CORNER OF SAID BLOCK 5 OF THE AMENDED MAP OF SILVER HEIGHTS SUBDIVISION, AS MONUMENTED BY A 2 INCH DIAMETER ALUMINUM CAP MARKED: "LS 27011"; THENCE ALONG SAID INTERSECTED LINE, SOUTH 89°11'37"EAST, 359.30 FEET TO THE NORTHEAST CORNER OF THAT PARCEL DESCRIBED IN THE DEED RECORDED AT RECEPTION NO. 2020114077; THENCE ALONG THE EASTERLY LIMITS OF SAID PARCEL THE FOLLOWING TWO COURSES; 1) SOUTH 39°44'05"EAST, 253.32 FEET; 2) SOUTH 25°03'40"EAST, 528.12 FEET TO THE SOUTHEAST CORNER OF SAID PARCEL; THENCE ALONG THE SOUTH LINE OF SAID PARCEL, SOUTH 89°41'25"WEST, 2392.48 FEET TO THE SOUTHWEST CORNER OF SAID PARCEL; THENCE ALONG THE WEST LINE OF SAID PARCEL, NORTH 00°04'19"EAST, 714.39 FEET TO THE NORTHWEST CORNER OF SAID PARCEL AND THE INTERSECTION OF SAID LINE THAT RUNS BETWEEN SAID NORTHEAST CORNER OF THE SOUTHWEST QUARTER, OF THE NORTHEAST QUARTER OF SAID SECTION 26, AND SAID SOUTHEAST CORNER OF SAID BLOCK 5 OF THE AMENDED MAP OF SILVER HEIGHTS SUBDIVISION; THENCE ALONG SAID INTERSECTED LINE, NORTH 89°11'37"WEST, 418.14 FEET TO SAID SOUTHEAST CORNER OF BLOCK 5; THENCE ALONG THE WEST LINE OF SAID BLOCK 5, NORTH 00°31'36"EAST, 1303.54 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION, CONTAINING 73.76 ACRES, MORE OR LESS.

THIS LEGAL DESCRIPTION WAS PREPARED BY, OR UNDER THE DIRECT SUPERVISION OF, MICHAEL C. CREGGER, PROFESSIONAL LAND SURVEYOR, COLORADO REGISTRATION NO. 22564 FOR AND ON BEHALF OF IMEG CORP ON JULY 12, 2021.

TOWN CERTIFICATION

THIS ANNEXATION MAP WAS APPROVED BY THE TOWN COUNCIL OF THE TOWN OF CASTLE ROCK, COLORADO ON THE _____ DAY OF _____, 20___.

_____ DATE: _____
MAYOR

ATTEST: _____ DATE: _____
TOWN CLERK

DOUGLAS COUNTY CLERK AND RECORDER'S CERTIFICATE

THIS MAP WAS FILED FOR RECORD IN THE OFFICE OF THE COUNTY CLERK AND RECORDER OF DOUGLAS COUNTY AT _____ ____.M. ON THE _____ DAY OF _____, 20_____ AT RECEPTION NO. _____.

DOUGLAS COUNTY CLERK AND RECORDER

BY: _____
DEPUTY

SURVEYOR'S CERTIFICATE

I, MICHAEL C. CREGGER, A LICENSED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT MORE THAN ONE-SIXTH (1/6) OF THE EXTERNAL BOUNDARY OF THE PROPOSED LANDS TO BE ANNEXED, AS SHOWN HEREON, IS CONTIGUOUS WITH THE LIMITS OF THE TOWN OF CASTLE ROCK, COLORADO.

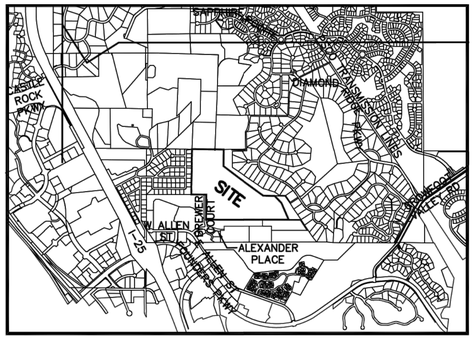
_____ _____
MICHAEL C. CREGGER DATE
COLORADO PROFESSIONAL LAND SURVEYOR
COLORADO REGISTRATION NO. 22564
FOR AND ON BEHALF OF IMEG CORP

NOTICE: ACCORDING TO COLORADO LAW, YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT, MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.

ALEXANDER WAY
ANNEXATION MAP
SHEET 1 OF 1

ALEXANDER WAY - PLANNED DEVELOPMENT PLAN AND ZONING REGULATIONS

LOCATED IN THE NORTH HALF OF SECTION 26,
TOWNSHIP 7 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN,
COUNTY OF DOUGLAS, STATE OF COLORADO



VICINITY MAP
SCALE: 1" = 2,000'

NORTH

SITE SUMMARY

LAND USE SUMMARY

PARCEL	USE	ACRES	DWELLING UNITS	DENSITY	MINIMUM LOT SIZE	% OF ACREAGE
PA-1	Single Family Detached Residential	41.56	55	1.32	21,780 Square Feet	53.3%
PA-2	Live / Work Attached	5.15	22	4.27	1800 Square Feet	6.6%
	Live /Work SFD				5,000 Square feet	
PL-2	Dedicated Open Space	31.25	N/A			40.1%
	TOTAL	77.96	77	.987		100%

NOTES

1. THE MINERAL RIGHTS ASSOCIATED WITH THIS DEVELOPMENT HAVE NOT BEEN SEVERED.
2. THIS DEVELOPMENT PLAN IS IMPACTED BY THE TOWN OF CASTLE ROCK SKYLINE/RIDGELINE PROTECTION REGULATIONS. SKYLINE/RIDGELINE AREAS MUST ADHERE TO CHAPTER 17.48 OF THE TOWN OF CASTLE ROCK MUNICIPAL CODE REGARDING MITIGATION PROCEDURES.
3. THIS DEVELOPMENT PLAN IS IMPACTED BY THE TOWN OF CASTLE ROCK RESIDENTIAL/NON-RESIDENTIAL INTERFACE REGULATIONS. INTERFACE AREAS MUST ADHERE TO CHAPTER 17.50 OF THE TOWN OF CASTLE ROCK MUNICIPAL CODE REGARDING MITIGATION PROCEDURES.
4. THIS DEVELOPMENT PLAN IS NOT IMPACTED BY SPECIES PROTECTED BY THE U.S. FISH & WILDLIFE SERVICE.
5. THIS SITE IS WITHIN THE TOWN OF CASTLE ROCK BLUE WATER PRESSURE ZONE.
6. ALL-WEATHER (CONCRETE OR ASPHALT) SURFACED ACCESS ROADS CAPABLE OF WITHSTANDING THE IMPOSED LOADS OF FIRE APPARATUS (75,000 LBS.) AND ALL REQUIRED FIRE HYDRANTS SHALL BE INSTALLED AND MADE SERVICEABLE PRIOR TO AND DURING ALL CONSTRUCTION.
7. RIGHT-OF-WAY FOR INGRESS AND EGRESS FOR EMERGENCY VEHICLES IS GRANTED OVER, ACROSS, ON AND THROUGH ANY AND ALL PRIVATE ROADS AND DRIVES.
8. URBAN/WILDLAND INTERFACE AREA MANAGEMENT PLAN TO BE EVALUATED BY THE TOWN OF CASTLE ROCK FIRE DEPARTMENT AS APPROPRIATE TO EACH PLANNED DEVELOPMENT (PD).

LEGAL DESCRIPTION

A TRACT OF LAND LOCATED IN THE NORTH HALF OF SECTION 26, TOWNSHIP 7 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN, DOUGLAS COUNTY, COLORADO, BEING DESCRIBED AS FOLLOWS:

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SOUTHEAST RENAISSANCE PARCEL:

A TRACT OF LAND SITUATED IN THE SOUTH 1/2 OF THE NORTHEAST 1/4 OF SECTION 26, TOWNSHIP 7 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN, DOUGLAS COUNTY, COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 26 AND CONSIDERING THE NORTH LINE OF SAID SOUTHWEST 1/4 OF THE NORTHEAST 1/4 TO BEAR SOUTH 89 DEGREES 46 MINUTES 33 SECONDS WEST WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO; THENCE SOUTH 34 DEGREES 40 MINUTES 42 SECONDS EAST, A DISTANCE OF 802.20 FEET ALONG A LINE CONNECTING THE NORTHEAST CORNER OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 TO A POINT ON THE SOUTH LINE OF THE NORTH 1/2, A DISTANCE OF 478.38 FEET WESTERLY FROM THE EAST 1/4 CORNER OF SAID SECTION 26; THENCE SOUTH 88 DEGREES 40 MINUTES 47 SECONDS WEST, A DISTANCE OF 328.33 FEET; THENCE NORTH 26 DEGREES 04 MINUTES 18 SECONDS WEST, A DISTANCE OF 528.12 FEET; THENCE NORTH 40 DEGREES 44 MINUTES 43 SECONDS WEST, A DISTANCE OF 253.20 FEET TO THE NORTH LINE OF SAID SOUTHWEST 1/4 OF THE NORTHEAST 1/4; THENCE NORTH 89 DEGREES 46 MINUTES 33 SECONDS EAST, A DISTANCE OF 269.19 FEET TO THE POINT OF BEGINNING, COUNTY OF DOUGLAS, STATE OF COLORADO.

TITLE CERTIFICATE

I, _____AN AUTHORIZED REPRESENTATIVE OF _____ A TITLE INSURANCE COMPANY LICENSED TO DO BUSINESS IN THE STATE OF COLORADO, HAVE MADE AN EXAMINATION OF THE PUBLIC RECORDS AND STATE THAT ALL OWNERS, MORTGAGEES AND LIENHOLDERS OF THE PROPERTY ARE LISTED IN THE CERTIFICATE OF OWNERSHIP AND LIENHOLDER SUBORDINATION CERTIFICATE.

_____
AUTHORIZED REPRESENTATIVE

_____
TITLE COMPANY

SIGNED THIS _____ DAY OF _____20____.

NOTARY BLOCK

SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ DAY OF _____
_____.

BY: _____ AS AUTHORIZED REPRESENTATIVE OF

_____.

WITNESS MY HAND AND OFFICIAL SEAL.

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES: _____.

PLANNING COMMISSION RECOMMENDATION

THIS PLANNED DEVELOPMENT WAS RECOMMENDED FOR APPROVAL BY THE PLANNING COMMISSION OF THE TOWN OF CASTLE ROCK, COLORADO ON THE
_____DAY OF _____, 20_____.

_____ _____ _____
CHAIR DATE

ATTEST:

_____ _____
DIRECTOR OF DEVELOPMENT SERVICES DATE

TOWN COUNCIL APPROVAL

THIS PLANNED DEVELOPMENT PLAN WAS APPROVED BY THE TOWN COUNCIL OF THE TOWN OF CASTLE ROCK, COLORADO ON ____ DAY OF _____, 20___.

_____ _____ _____
MAYOR DATE

ATTEST:

_____ _____
TOWN CLERK DATE

SURVEYORS CERTIFICATE

I, _____ A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THE SURVEY AND LEGAL DESCRIPTION REPRESENTED BY THIS PLANNED DEVELOPMENT PLAN WAS MADE UNDER MY SUPERVSION AND THE MONUMENTS SHOWN THEREON ACTUALLY EXIST AND THIS PLANNED DEVELOPMENT PLAN ACCURATELY REPRESENTS THAT SURVEY.

_____ _____
REGISTERED LAND SURVEYOR DATE

OWNERSHIP CERTIFICATE

THE UNDERSIGNED ARE ALL THE OWNERS OF CERTAIN LANDS IN THE TOWN OF CASTLE ROCK, DOUGLAS COUNTY AND STATE OF COLORADO DESCRIBED HEREIN.

_____ _____
TIERRA INVESTMENTS, LLC. A COLORADO LIMITED LIABILITY COMPANY
455 ALEXANDER, LLC. A COLORADO LIMITED LIABILITY COMPANY

NOTARY BLOCK

SUBSCRIBED AND SWORN BEFORE ME THIS

____DAY OF _____, 20____ BY _____ AS
_____ OF _____.

WITNESS MY HAND AND OFFICIAL SEAL

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES: _____.

NOTARY BLOCK

SUBSCRIBED AND SWORN BEFORE ME THIS

____ DAY OF _____, 20____ BY _____. AS _____ OF
_____.

WITNESS MY HAND AND OFFICIAL SEAL

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES: _____.

DOUGLAS COUNTY CLERK AND RECORDER'S CERTIFICATE

THIS PLANNED DEVELOPMENT PLAN WAS FILED FOR RECORD IN THE OFFICE OF THE COUNTY CLERK AND RECORDER OF DOUGLAS COUNTY AT

_____ ON THE _____ DAY OF _____, 20____ AT

RECEPTION NO._____.

DOUGLAS COUNTY CLERK AND RECORDER

BY: _____
DEPUTY

PROJECT TEAM

APPLICANT / OWNER
Tierra Investors, LLC & 455 Alexander, LLC
851 South High Street
Denver, CO 80209
303.814.2460

CIVIL ENGINEER
IMEG
7600 E. Orchard Rd., Suite 250-S
Greenwood Village, CO 80111
303.796.6000

LAND PLANNER
The Henry Design Group Inc.
1501 Wazee St. Suite 1-C
Denver, CO 80202
303-446-2368

SHEET INDEX

ALEXANDER WAY
PLANNED DEVELOPMENT PLAN
AND ZONING REGULATIONS
TOWN OF CASTLE ROCK
PROJECT NO. PDP21-0005
SHEET 1 OF 4
DATE: 10-27-2021
REVISED: 03-18-2022; 06-03-2022
08-15-2022; 10-17-2022
06-07-2023;

ALEXANDER WAY - PLANNED DEVELOPMENT PLAN AND ZONING REGULATIONS

LOCATED IN THE NORTH HALF OF SECTION 26,
TOWNSHIP 7 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN,
COUNTY OF DOUGLAS, STATE OF COLORADO

IMEG
7600 E. ORCHARD ROAD, SUITE 250-S
GREENWOOD VILLAGE, CO 80111
303.796.6000

henry design group
Landscape Architecture • Planning • Entitlements
1501 Wazee Street Suite 1-C, Denver, Colorado 80202
303.446.2368 • henrydesigngroup.com

ALEXANDER WAY

PLANNED DEVELOPMENT PLAN
AND ZONING REGULATIONS
TOWN OF CASTLE ROCK
PROJECT NO. PDP21-0005
SHEET 2 OF 4
DATE: 10-27-2021
REVISED: 03-18-2022; 06-03-2022
08-15-2022; 10-17-2022
06-07-2023;

LEGEND

- Property Boundary
- Development Area
- Vehicular Access
- 5' Existing Contour
- Existing Native Vegetation (Gambel Oak Brush Community)
- Trail along 15' wide parcel owned by the Town of Castle Rock
- Major Skyline - 25-foot structures would not be visible, but 35-foot structures would be visible from Viewing Platforms.
- Moderate Skyline - 25-foot structures would be visible from Viewing Platforms.
- Minor Skyline - Ridgeline Areas with minimal visual impact.

NORTH 0 120' 240' 360'
SCALE: 1"= 120'-0"

DOUGLAS COUNTY
SPRINGER PARK

DOUGLAS COUNTY A-1
UNPLATTED
REC. NO. 8728424

UNPLATTED
REC. NO. 2013070173

Low Point
6,267'

Detention Pond

30'-0" NO BUILD AREA

High Point
6,533'

Collins Street

DOUGLAS COUNTY
SUBURBAN RESIDENTIAL
SILVER HEIGHTS
SUBDIVISION
REC. NO. 0103535

TOWN OF CASTLE ROCK
DIAMOND RIDGE PD

Diamond Ridge Circle

TRACT A (OPEN SPACE)
DIAMOND RIDGE ESTATES FILING 2

PA-1
Single Family
Detached Residential
41.56 Acres
55 Lots
1.32 DU/AC

PL-2
Open Space
31.25 Acres

TIERRA INVESTORS, LLC
455 ALEXANDER, LLC

High Point
6,611'

RENAISSANCE PARCEL
TOWN OF CASTLE ROCK
MAHER ROCK RANCH PD

MIRRO, LLC
COOPER HOOK PD

Brewer Court

PROPOSED
NATURAL TRAIL

LOCAL STREET
60'-0"
R.O.W.

PA-2
Live/Work Units
5.15 Acres
22 Lots
4.27 DU/AC

15' WIDE OPEN SPACE TO BE ADDED TO THE TOWN OF CASTLE ROCK'S EXISTING 15' PARCEL TO CREATE A 30' EAST-WEST TRAIL CORRIDOR.

15' WIDE PARCEL
TOWN OF CASTLE ROCK
TRAIL CORRIDOR

TOWN OF CASTLE ROCK
REC. 2006062024

Town of Castle Rock
Cooper Hook PD
Shoppes at Castle Rock

Pocket Park

EXISTING
SANITARY LINE

EXISTING WATER LINE

Low Point
6,236'

DETENTION POND
FHAD FLOODPLAIN

379 ALEXANDER, LLC
COOPER HOOK PD

60'-0"
R.O.W.

HEADWALL

Alexander Place

60'-0"
R.O.W.

TOWN OF CASTLE ROCK
ALEXANDER PLACE PD

TOWN OF CASTLE ROCK
REC. 2006062024

TOWN OF CASTLE ROCK
OPEN SPACE

High Point
6,620'

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ALEXANDER WAY - PLANNED DEVELOPMENT PLAN AND ZONING REGULATIONS

LOCATED IN THE NORTH HALF OF SECTION 26,
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ALEXANDER WAY
PLANNED DEVELOPMENT PLAN
AND ZONING REGULATIONS
TOWN OF CASTLE ROCK
PROJECT NO. PDP21-0005
SHEET 3 OF 4
DATE: 10-27-2021
REVISED: 03-18-2022; 06-03-2022
08-15-2022; 10-17-2022
06-07-2023;

SECTION 1
GENERAL PROVISIONS

1.1 PURPOSE

A. Statement of Purpose

The purpose of this Planned Development Plan (PD Plan) and Planned Development Zoning Regulations (PD Zoning Regulations) is to establish standards for the development and improvement of the property. The standards contained in these Zoning Regulations are intended to carry out the goals of this planned community.

B. Application

These standards shall apply to all property contained within the Alexander Way PD as shown on the PD Plan and these PD Zoning Regulations. These PD Zoning Regulations run with the land and bind owners of record and successors in interest to the property.

1.2 AUTHORITY

A. Authority

The authority of these PD Zoning Regulations is Chapter 17.32 (PD-Planned Development District) of the Castle Rock Municipal Code, as amended.

B. Adoption

The Town Council has adopted the Alexander Way PD Plan and PD Zoning Regulations pursuant to Section 17.34 of Title 17 (Zoning) of the Castle Rock Municipal Code after appropriate public notice and hearing.

C. Relationship of Town of Castle Rock Regulations

All Town ordinances and regulations, as the same are amended from time to time, shall apply to and be enforceable in a Planned Development. Accordingly, such Town ordinances and regulations shall govern and control over any conflicting provisions in the PD Zoning Regulations unless such conflicting provision is vested as an express development right under the applicable development agreement.

D. Maximum Level of Development

The total number of dwelling units approved for development within the established Planning Area is the maximum allowed for platting and development. The actual number of dwellings approved will be determined at the Site Development Plan/Plat stage of review based upon environmental constraints, utility and street capacity, compatibility with surrounding land uses and other relevant factors. The developer has the right to build less units than the permitted maximum in each Planning Area. Dwelling units may not be transferred between Planning Areas unless otherwise permitted within these PD Zoning Regulations.

1.3. CONTROL PROVISIONS

A. Incorporation of the Planned Development Plan

The PD Plan for Alexander Way includes the type, location and boundaries of land use area as shown on the Alexander Way Planned Development Plan (PD Plan), which is attached as Exhibit A and is hereby incorporated by reference into these PD Zoning Regulations.

B. Planning Area Boundaries

The boundaries and acreage of all Planning Areas within Alexander Way are shown on the Alexander Way PD Plan. Where a Planning area abuts an internal local street or drive, the boundary shall be the centerline of the street. Where a Planning Area abuts a collector street the boundary shall be the right-of-way of that street as indicated on the PD Development Plan. Where a Planning Area abuts another Planning Area, the boundary shall be the centerline of the abutting boundaries as shown on the PD Plan. Modifications in Planning Area boundaries and streets may be accomplished by the Developer by final road alignments or engineering refinements shown on a Site Development Plan or Plat, without any amendment to the Alexander Way Planned Development Plan provided the Planning Area does not increase or decrease by more than twenty percent (20%) in size.

C. Administrative Amendments to the PD Plan and PD Zoning Regulations

Amendments to the PD Plan and PD Zoning Regulations shall comply with Chapter 17.36 of the Town of Castle Rock Municipal Code, as amended.

D. Road Alignments

The Planned Development Plan is intended to depict general locations of the primary roadways. Recognizing that the final road alignments are subject to engineering studies, minor road alignments of streets are expected, and can be accomplished by the developer through the platting process without any amendment to these regulations or to the PD Plan itself.

1.4 GENERAL PROVISIONS

A. Purpose

The purpose of this section is to establish general provisions and clarify standards and requirements for development which may occur in the Alexander Way Planned Development.

B. **Phasing**

The phasing order will be indicated on the Alexander Way Site Development Plan and will be subject to the criteria in the Annexation and Development Agreement.

C. **Severability of Provisions**

In the event that any provision herein shall be determined to be illegal or void by the final order of any court of competent jurisdiction, the remaining provisions shall remain in full force and effect.

D. **Development Agreement**

In addition to these regulations, certain provisions of the development of the Alexander Way Planned Development are controlled by an agreement between the Town of Castle Rock and the PD property owners. The Development Agreement is subject to the Planned Development as approved by the Town on the _____ day of _____, 20____ by Resolution No. _____.

E. Site Development Plans and Plats

Following approval of the Planned Development Plan, the property owners shall submit a Site Development Plan (SDP) for all, or any portion or portions of the general use areas as are then ready for development. No building permit will be issued until an SDP has been approved for the property by the Town Council and the Plat approved by Town administrators, and duly recorded, unless the property is a Town-owned property being developed for Town uses.

SECTION 2
DEFINITIONS

In addition to the standard definitions found in the Town of Castle Rock Zoning Ordinance (Title 17), the following definitions of terms shall apply to this PD:

2.1 Detached Dwelling Units
Dwelling units which are not physically connected to other dwelling units. As used herein, the term detached dwelling units shall include, but not be limited to single family detached dwelling units.

2.2 Single Family Attached Dwelling Unit or Attached Live/Work Unit
A dwelling or live/work unit with primary ground floor access to the outside which shares a common wall with another unit without openings. Single Family Attached dwellings include paired homes and up to four-units attached in a building. Each Single Family Attached Dwelling Unit or Live/Work unit shall be located on its own fee simple lot.

2.3 Live/Work Units
Live/work units are intended to provide a unit which contains residential use with a compatible work use within the same structure which shares a common wall or floor with direct or indirect access between the residential and the compatible work use. A live/work unit: (a) combines a compatible work use as allowed in Section 4.2 – Permitted Uses with a residential living space for the owner of the compatible work use, or the owner's employee, and that person's household; (b) a residence only; and (c) where the activity conducted takes place subject to a valid business license if required. The live/work area shall be further defined and acceptable to the homeowner's association.

2.4 Developer
Tierra Investors, LLC and Alexander 455, LLC or assigns as Developer.

2.5 Open Space - Private
Space which is suitable for landscaping, passive and/or active recreation, trails, gardens, view protections and enhancement, buffers and/or other appropriate uses, which is to remain in private ownership.

2.6 Open Space/Park – Public
Space which is suitable for landscaping, passive and/or active recreation, trails, gardens, view protections and enhancement, buffers and/or other appropriate uses, which are to be dedicated to the Town of Castle Rock and available for use by the public.

2.7 Solar/Wind Energy/Geothermal
A device that is accessory to, and situated on, a private single family attached or detached lot or home for the purpose of providing an alternative energy source for the home. Not intended as a communal feature.

SECTIONS 3 - 6
DEVELOPMENT STANDARDS

3.0 PLANNING AREA- 1 (PA-1)

3.1. Intent

The single family detached neighborhood will include residential lots and accessory uses, open space, streets, landscape tracts, pocket parks, and trail corridors which will connect the residences to the site's amenities and trail networks. A maximum of 55 lots are permitted in PA-1. This Planning Area may be extended to Include Planning Area-2 should the Live/Work units be converted to Single Family Detached Homes See Section 4 below.

3.2 Uses Permitted by Right

A. Detached single family dwellings with attached or detached private garages
B. Public buildings, including but not limited to fire and police stations
C. Public and private open space, parks, and recreational uses, trails, and facilities
D. Public and Private Utilities and appurtenant facilities
E. Drainage and detention facilities

3.3 Prohibited Uses

Accessory Dwelling Units

3.4 Accessory Uses

A. Temporary Uses pursuant to Section.3.5
B. Community information kiosks
C. Accessory structures such as storage shed (120 square feet) and/or green houses (180 square feet), maximum, pool house/cabana 200 square feet; and subject to architectural and maintenance controls/ covenants
D. Private swimming pools and spas
E. Private tennis courts, pickleball, and multi-purpose sport courts

3.5 Temporary Uses

A. Construction offices and material storage shall be permitted in all use areas during and for a period of thirty (30) days after cessation of actual construction in those areas being served by such construction office or material storage area.
B. Temporary sales trailers, model homes with parking area, show home complexes, temporary sales signage, and associated uses.

3.6 Development Standards

A. Minimum standard lot area: 21,780 square feet
B. Maximum Building height: 35 feet for primary structures
C. Minimum lot width:
   1. At the street: 50 feet and a minimum of 70 feet at the front building setback line
   2. At a cul-de-sac, knuckle, or similarly curved frontage at the street: 30 feet
   3. Flag lot width at street or private drive: 20 feet at the flag, between lot lines beyond the flag, the lot width shall be 70 feet at the front
D. Primary structure front setback (from local street right-of-way or private access drive):
   1. 25 feet to face of garage for front loaded attached garage
   2. 20 feet to face of home
   3. 7.5 feet to side of a side loaded garage
   4. 15 feet to unenclosed covered porch without living space above the porch
E. Primary structure rear setback: 25 feet
F. Primary structure side setback: 7.5 feet
G. Corner lot side setback for primary structures adjacent to a local street: 10 feet
H. Accessory structure maximum building height: 25 feet
I. Accessory structure setbacks:
   1. Front yard setback not permitted in front of the front face of the primary structure.
   2. Rear yard setback: 25 feet
   3. Side yard setback: 10 feet; The accessory structure may be located within the side yard by may not extend beyond the front face of the primary structure.
   4. Corner lot side setback: 15-feet
J. No Build Zones:
30-foot wide "No build" zone on a side lot line and a 50-feet "No build" zone on a rear lot line shall be provided on the lots adjacent to the Silver Heights Subdivision and along the northern property line where adjacent to Douglas County un-platted land. No primary or accessory structures are permitted in the "No Build" zones. These "No Build" zones shall satisfy setback requirements.
K. Encroachments:
   1. Cantilevers, window wells, chimneys, entertainment centers, bay or box windows, counterforts, brick or stone ledges and roof overhangs may encroach into any setback a maximum of 36 inches.
   2. Covered or uncovered decks and patios 30 inches or less above grade may encroach the rear or side setback provided they are no closer than five (5) feet to the rear or side property line.
   3. Covered or uncovered decks and patios greater than 30 inches in height above grade may encroach the rear or side setback provided they are no closer than 5 feet to a side lot line and 10 feet to the rear lot line.
   4. Driveways are permitted within the setbacks.
L. Signage:
   1. Two project identification signs are permitted. One is permitted in each Planning Area. Each sign face shall be a maximum of 32 square feet.
   2. The maximum height of the monument shall be eight (8) feet.
   3. There is no maximum square footage requirement for the monument.
   4. The monument/sign shall not be located within sight visibility triangles
   5. Monument/signage shall not be located within public rights-of-way with the exception of within medians in the right-of-way.
   6. The monument/sign may be illuminated by either an internal or external light source.

4.0 PLANNING AREA 2 (PA-2)

4.1 Intent

The live/work units will include single or attached lot/unit intended for live/work units or residential unit as defined in Section 2.3 above. This use area may also be converted to single family detached lots in accordance with the detached standards below. A maximum of 22 live/work units or single family detached units are permitted. A single detached dwelling unit is permitted in the live work area provided the architecture is similar in character to the homes in PA-1 and the Development Standards are maintained as listed in Section 4.6 below.

4.2 Uses Permitted by Right

A. Attached and detached single family dwellings with attached or detached private garages.
B. Attached and detached homes with or without a live/work component (Maximum of 4-units attached are permitted in a building)
C. Public buildings, including but not limited to fire and police stations
D. Public and private open space, parks, and recreational uses, trails, and facilities
E. Utilities and appurtenant facilities
F. Drainage and detention facilities
G. Wireless cellular facilities as per the Town of Castle Rock Municipal Code.

4.3 Prohibited Uses

Accessory Dwelling Units

4.4 Live/ Work Permitted Uses and Regulations

A. Intent for Non-living uses
The intent is to provide complementary work uses permitted if conducted entirely within a principal building. Such use shall be conducted only by the occupants thereof plus not more than five non-resident employees. .

B. General Use Standards and Regulations
1. In-home Child Day Care and Elder Care as permitted by state and federal regulations.
2. Wholesale or retail business must be conducted entirely by mail (U.S. Postal Service, United Parcel Service, and the like) or such wholesale or retail sales on the premises is not substantial.
3. There shall be no outside storage on the premises of materials or equipment used in connection with the business.
4. There shall be no excessive or offensive noise, vibration, smoke, dust, odors, heat, glare or light noticeable or extending beyond the lot.
5. Traffic shall not be generated which significantly affects the residential character of an area or in a volume that would create a need for parking greater than that which can be accommodated on the site, or which is inconsistent with the normal parking usage of the Zoning District; and
6. Personal services such as beauty/nail salon and barber shops (2-chairs maximum).
7. Group classes shall have a maximum of five (5) participants at any one time.
8. Professional and service businesses or any similar uses that does not generate more than occasional or minimal vehicular traffic.

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303.796.6000

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ALEXANDER WAY - PLANNED DEVELOPMENT PLAN AND ZONING REGULATIONS

LOCATED IN THE NORTH HALF OF SECTION 26,
TOWNSHIP 7 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN,
COUNTY OF DOUGLAS, STATE OF COLORADO

ALEXANDER WAY
PLANNED DEVELOPMENT PLAN
AND ZONING REGULATIONS
TOWN OF CASTLE ROCK
PROJECT NO. PDP21-0005
SHEET 4 OF 4
DATE: 10-27-2021
REVISED: 03-18-2022; 06-03-2022
08-15-2022; 10-17-2022
06-07-2023;

4.5 Accessory Uses

A. Temporary Uses pursuant to Section.4.5
B. Community information kiosks
C. Accessory structures not permitted

4.6 Temporary Uses

A. Construction offices and material storage shall be permitted in all use areas during and for a period of thirty (30) days after cessation of actual construction in those areas being served by such construction office or material storage area.
B. Temporary sales trailers, model homes with parking area, show home complexes, temporary sales signage, and associated uses.

4.7 Development Standards

A. Minimum standard lot area: Attached unit: 1,800 square feet
Single unit: 5,000 square feet
B. Maximum Building height: 35 feet for primary structures
C. Minimum lot width:
1. At the street: 20 feet and a minimum 30 feet at the building setback line
2. At a cul-de-sac, knuckle, or similarly curved frontage at the street: 20 feet
3. Flag lot width at street or private drive: 20 feet at the flag, between lot lines beyond the flag, the lot width shall be 35 feet at the front
D. Primary structure front setback (from local street right-of-way or private access drive:
1. 20 feet to face of front-loaded attached garage
2. 15 feet to face of structure
3. 10 feet to side of a side loaded garage
4. 10 feet to unenclosed porch without living space above the porch
E. Primary structure rear setback: 15 feet; 6-feet if the garage is alley loaded
F. Primary structure side setback: 5 feet
G. Primary structure corner lot side setback adjacent to a local street: 10 feet; 20 feet to face of garage for a side loaded garage
H. Encroachments:
1. Cantilevers, window wells, chimneys, entertainment centers, bay or box windows, counterforts, brick or stone ledges and roof overhangs may encroach into the setback a maximum of 36 inches.
2. Covered or uncovered decks and patios 30 inches or less above grade may encroach the rear or side setback provided they are no closer than five (5) feet to the side property line and 20 feet to a rear lot line in PA-1 and 10-feet to a rear lot line in PA-2.
3. Covered or uncovered decks greater than 30 inches above grade may encroach the rear or side setback provided they are no closer than five (5) feet to a side lot line and 25 feet to a rear lot line in PA-1and 10 feet to a rear lot line in PA-2.
I. Parking: Attached live/work units shall provide a minimum of two (2) parking spaces for the unit in an attached garage and an additional two (2) guest spaces for visitors which may include in the tandem driveway.
J. Signage:
1. Signage may be building mounted and flush with the face of the building and a maximum of six (6) square feet in size. The sign shall not be illuminated.
2. Two project identification signs are permitted. One is permitted in each Planning Area. Each sign face shall be a maximum of 32 square feet.
3. The maximum height of the monument shall be eight (8) feet.
4. There is no maximum square footage requirement for the monument.
5. The monument/sign shall not be located within sight visibility triangles
6. Monument/signage shall not be located within public rights-of-way with the exception of within medians in the right-of-way.
7. The monument/sign may be illuminated by either an internal or external light source.

5.0 OPEN SPACE/PUBLIC LANDS - OPEN SPACE – (PL-2)

PL-2 is intended to provide natural open space and preservation of the hillside. The open space will provide a buffer between the Diamond Ridge neighborhood and Alexander Way. The open space is intended to remain undisturbed to the extent practical with the exception of a natural trail which will provide a connection from Alexander Way to the Town's trail network. This Use Area shall conform with the Town's PL-2 zoning requirements as per Chapter 17-30 of the Town of Castle Rock Municipal Code, as amended.

6.0 PARK AND OPEN SPACE REQUIREMENTS (WITHIN PA-1, 2 AND PL-2)

A. A minimum of 40% of the overall site shall be provided in parks, trails, and open space. In addition to PL-2 Open Space, a minimum of 1.5 acres of private open space shall be provided in PA 1 and 2 which may include the pocket park/orchard and trail corridor.
B. Trails shall connect to Town of Castle Rock open space where available.
C. Trails are not permitted to connect into the Diamond Ridge neighborhood to the east and north
D. An additional 15-feet shall be provided along the southern boundary adjacent to the 15-feet owned by the Town creating a 30-foot wide east/west trail corridor.
E. Picnic areas
F. Seating nodes and lookouts
G. Grading and drainage improvements
H. Public utilities and associated structures
I. Neighborhood parks and playgrounds
J. Irrigation, water storage, distribution and well facilities

SECTION 7
OVERALL PROJECT STANDARDS

These PD regulations shall not preclude the application of Town ordinances, including revisions to this Title, which are of general application throughout the Town, unless such application conflicts with an express vested property right. The standard zoning requirements of the Town of Castle Rock Zoning Ordinance including off-street parking, development standards, landscaping, site development, accessory, and temporary uses, and use by special review and variance processes shall apply to this Planned Development, except as modified herein.

7.1 Architectural Design Standards

A. Colors and Materials
Architectural design of the home shall be in accordance with the design guidelines established by the HOA
1. All occupied structures and accessory structures shall be constructed and maintained so that predominant exterior wall colors (including the colors of basement walls on the downhill side of the structure) and roof surfacing materials are high quality and consistent for the majority of the structure.
2. Colors shall predominately be muted on the primary structure with accent colors limited to architectural features.
3. Materials shall include high quality masonry, hardy plank siding, stone, or stucco.
4. Roof materials shall include tile or standing seam metal. Thermoplastic Polyolefin (TPO) materials are permitted on flat roofs.
5. Reflective materials and bright colors that contrast dramatically with the colors of the sky, land, and vegetation around them shall not be used as predominant colors.
6. Colors and materials shall be approved by the Alexander Way HOA as required below.

B. Building Siding
All building siding shall cover exposed foundations to grade level, except as required by Applicable Building Code.

C Architectural Design Approval
All architecture of the homes must be submitted to the Alexander Way HOA for approval prior to submittal for a building permit. Plans not approved shall be modified in accordance with the requirements of the HOA and resubmitted for approval. A building permit may not be obtained if the HOA has not approved the architectural plans.

7.2 Lighting

All lighting shall be in accordance with chapter 17.58 of the Castle Rock Municipal Code, as amended.

7.3 Fencing

The following requirements apply to any new fencing.
A. For Lots adjacent to open space perimeter fences are limited open rail with a maximum height of four (4) feet and shall consist of a minimum level of transparency, such as split rail or open rail. A 2" x 4" wire mesh grid is permitted on the lot side of the open rail fence for pet enclosure.
B. Fences taller than 30 inches in height above the street flowline are prohibited in sight distance easements.
C. Barbed wire and chain link are not allowed fencing.
D. Additional fencing guidelines will be provided in future design guidelines/ covenants established by the HOA.
E. Fencing adjacent to Silver Heights shall be identified at the time of Site Development Plan based on coordination with the adjacent residents.

7.4 Landscaping

A. Landscape design regulations will be provided in future design guidelines/covenants established by the HOA.
B. All landscaping shall be in conformance with Town of Castle Rock Landscape and Irrigation Performance Standards and Specifications.

7.5 Grading / Drainage

The grading/drainage of an individual lot or open space tract shall not vary from the Final Plat Grading Plan without the written approval of the HOA and its Engineer(s). Any unauthorized work performed will be required to be returned to the specified grade by the individual(s) or organization(s) that authorized the change without proper approval. All retaining walls used in the grading concept and materials shall be approved by the HOA prior to construction.

7.6 Compliance with Skyline/Ridgeline Protection District

All areas within Alexander Way that area identified as within the Skyline/Ridgeline protection area as shown on the District Map shall be in compliance with Chapter 17.48 of the Castle Rock Municipal Code, as amended.

7.7 Compliance with the Dissimilar Residential Interface Regulations

The southern property line of Alexander Way may be subject to the Dissimilar Residential Interface Regulations as defined in Chapter 17.51.04 of the Castle Rock Municipal Code, as amended, depending on the adjacent land use and when the adjacent uses are developed.

7.8 Wildland Fire Mitigation

The natural topography and existing vegetation of the development site and adjacent open space suggests that the design of the homes and the neighborhood incorporate methods to limit the potential for the spread of wildland fires into the community. National Fire Protection Association measures approved by the Town of Castle Rock Fire Department shall be incorporated into the Site Development Plan.

7.9 Planning and Design

A. The design and construction of any lot or structure shall consider the relationship of roads and buildings to existing slope grades and drainage-ways and shall achieve a fit with the landscape that is not intrusive.
B. Structures in sloping areas shall be designed to conform to the slope by means of stepped foundations, retaining walls or similar methods that will seek to minimize grading and site preparation.
C. Grading shall be shaped to complement the natural landforms.
D. Roads in steeply sloping or heavily vegetated areas shall be designed to limit, as practical, the area of disturbance.

SECTION 8
SUBMISSION OF SITE DEVELOPMENT PLANS AND/OR PLATS

8.1 Following approval of the Alexander Way Planned Development, the Property Owners shall submit a Site Development Plan for all, or any portion or portions of the general Use Areas as are then ready for development.

8.2 No structural building permit will be issued until a Site Development Plan and Plat have been presented to and approved by the Town.

8.3 In those cases where the Subdivision Regulations of the Town of Castle Rock require approval of a Plat by the Town Council prior to sale or transfer of lands, a sale or transfer of a portion or portions of the Land is permitted without prior approval of a Site Development Plan, provided a Plat has been approved, which must contain the following language:

"Pursuant to the Town of Castle Rock Municipal Code, no building permit will be issued for the erection of any structural improvement in any area described hereon for which a Site Development Plan and Plat has not been approved by the Town of Castle Rock."

SECTION 9
TRANSITIONAL USE

9.1 After approval of the Alexander Way Planned Development Plan incorporated herein by reference, any portion or portions of the property described above, which has not been subjected to a Plat, may be used for agricultural purposes until approval of a Plat for the area or areas in question. Agricultural uses, for purposes of this section, shall mean farming, ranching, pre-existing residential uses, gardening, buildings, and outbuildings pertaining thereto. It shall not be deemed to include commercial feed yards, commercial poultry or pig farms, fur farms or kennels.

9.2 Any activity permitted by this Section shall be considered to be a valid pre-existing non-conforming use within the area described above until a Plat for such area or areas has been approved.

9.3 Such transitional use areas shall be closed to vehicular traffic and off-road recreational motor biking excepting agricultural vehicles and implements, emergency vehicles, vehicles engaged in utility and other maintenance work, and designees of the Developer.

TRAFFIC IMPACT STUDY

For

Alexander Way Residential
Castle Rock, Colorado

October 2022
Revised:
November 2022

Prepared for:

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21-061456

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Appendices

I. Introduction

Project Overview

This traffic impact study addresses the capacity, geometric, and control requirements associated with the development entitled Alexander Way Residential.

This traffic impact study has been revised to address Town review comments made to the previous Alexander Way Residential traffic impact study, dated August 2022, regarding annual growth rates, mitigation for poor intersection level of service and vehicle queuing results, and updates to applicable study figures and tables throughout.

This proposed development consists of single-family and duplex residential land uses. The development is located near the northeast corner of Alexander Place and Brewer Court in unincorporated Douglas County, Colorado. It is understood the development area will be annexed into the Town of Castle Rock in the future.

Study Area Boundaries

The study area to be examined in this analysis encompasses the E Allen Street intersections with Alexander Place, Allen Way, and Front Street, the Founders Parkway intersections with Allen Way, Front Street, and Interstate 25 northbound on/off ramps, and the Alexander Place with Brewer Court intersection.

Figure 1 illustrates location of the site and study intersections.

Site Description

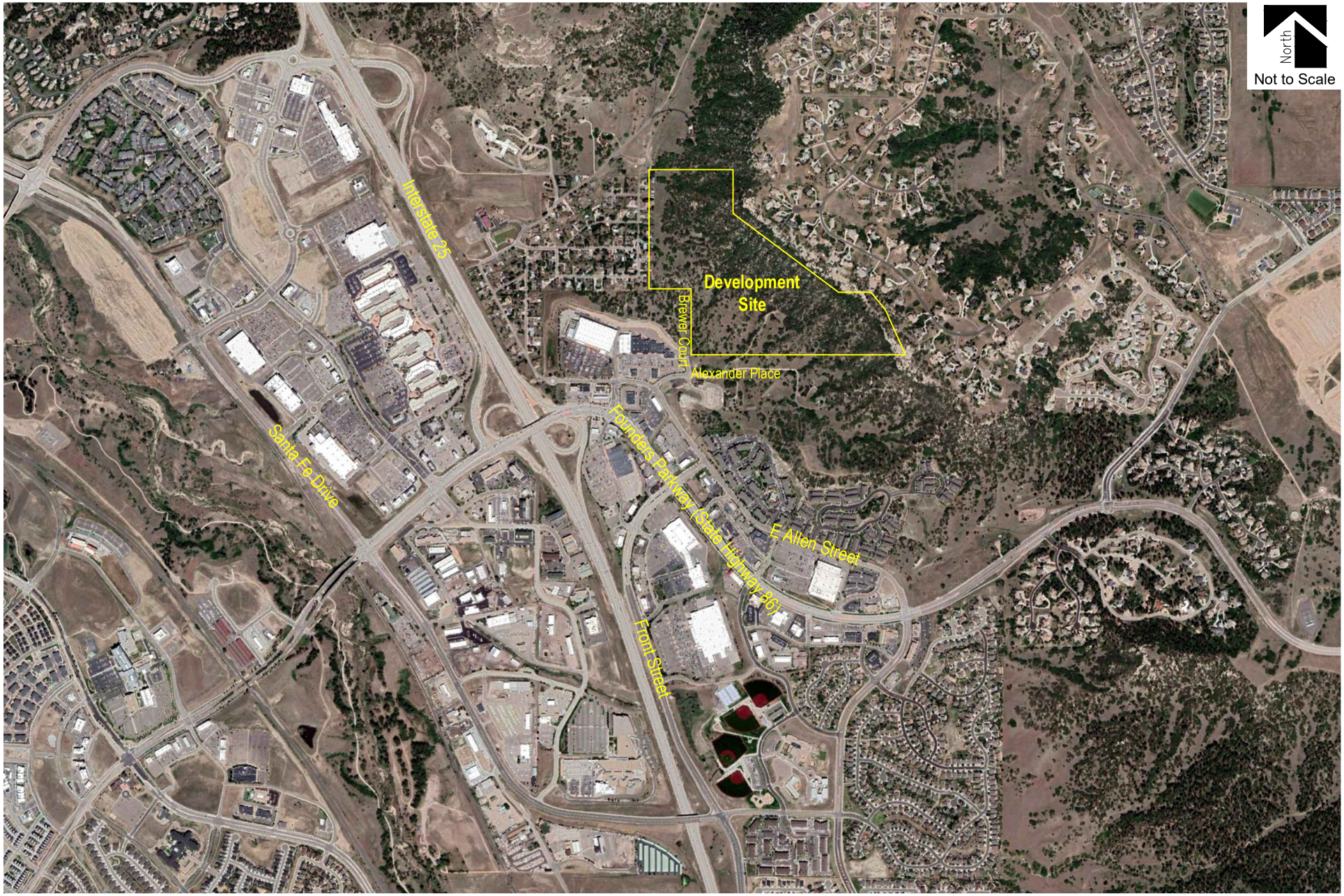
Land for the development is currently vacant and surrounded by a mix of open space, residential, retail, and commercial land uses.

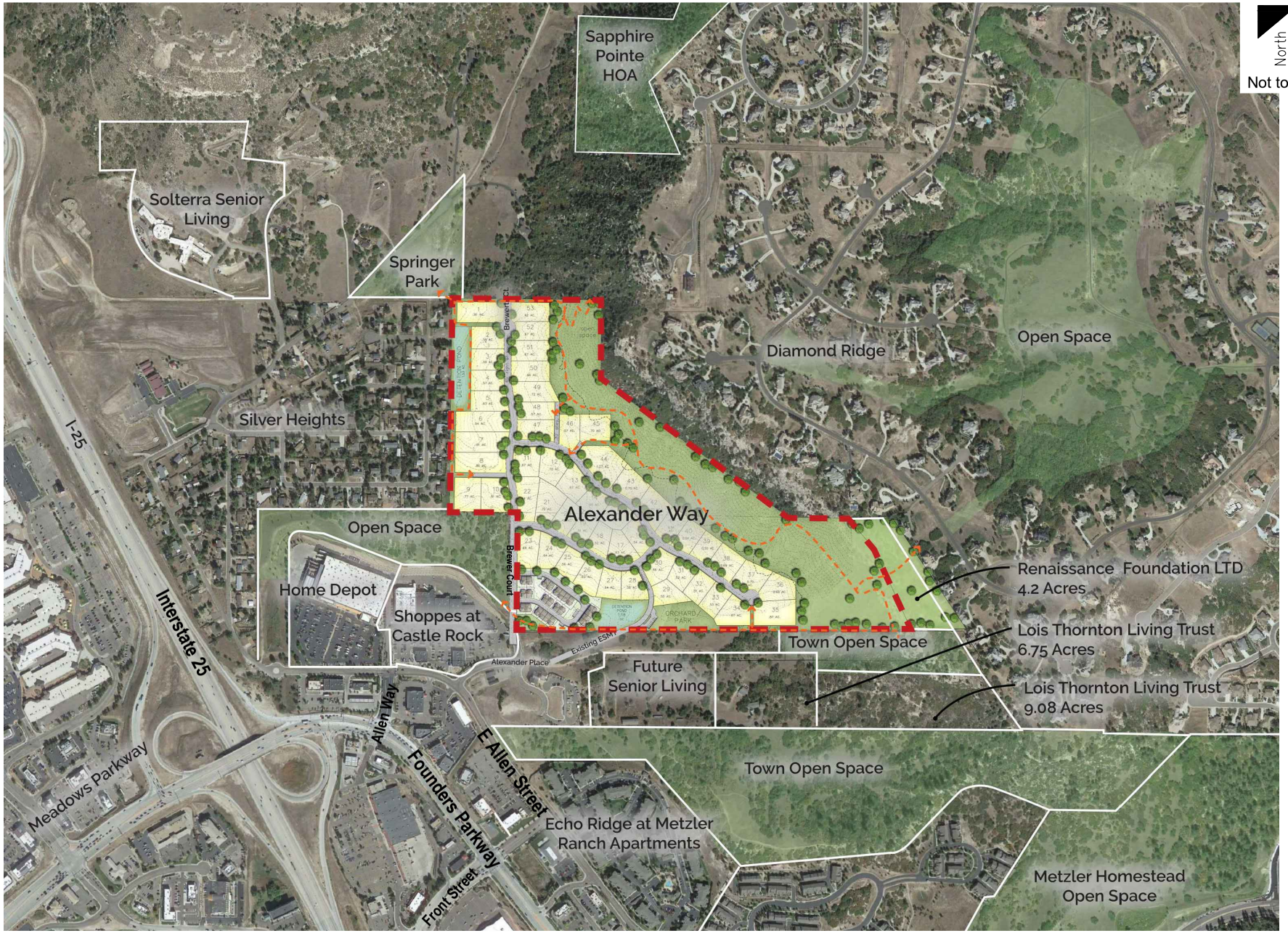
The proposed development is understood to entail the new construction of 55 single-family detached homes and 22 duplex units.

Proposed access to the development is provided by extensions of Brewer Court north of Alexander Place and Alexander Place east of Brewer Court.

It is anticipated that total build-out of development construction would not be completed until at least Year 2028 or 2031 (7 to 10 years). However, for purposes of this study, it is assumed that development construction would be completed by end of Year 2023.

A conceptual site plan, as prepared by Henry Design Group, Inc., is shown on Figure 2. This plan is provided for illustrative purposes.


North
Not to Scale
Development Site
Interstate 25
Brewer Court
Alexander Place
Santa Fe Drive
Founders Parkway (State Highway 86)
E Allen Street
Front Street


North
Not to Scale
Sapphire Pointe HOA
Solterra Senior Living
Springer Park
Diamond Ridge
Open Space
Silver Heights
I-25
Alexander Way
Open Space
Home Depot
Shoppes at Castle Rock
Brewer Court
Existing ESMT
Alexander Place
Town Open Space
Renaissance Foundation LTD
4.2 Acres
Lois Thornton Living Trust
6.75 Acres
Lois Thornton Living Trust
9.08 Acres
Future Senior Living
Interstate 25
Allen Way
E Allen Street
Founders Parkway
Meadows Parkway
Front Street
Town Open Space
Echo Ridge at Metzler Ranch Apartments
Metzler Homestead Open Space

Existing and Committed Surface Transportation Network

Within the study area, Alexander Place and Brewer Court are the primary roadways that will accommodate traffic to and from the proposed development. Secondary roadways include E Allen Street, Allen Way, Front Street, and Founders Parkway. Referencing the Town's Transportation Master Plan[1], a brief description of each roadway is provided below:

Alexander Place is an east-west local roadway having two through lanes (one lane in each direction) with a combination of shared and exclusive turn lanes at the intersections within the study area and a posted speed limit of 25 MPH. Currently, Alexander Place is an unpaved roadway east of Brewer Court.

Brewer Court is a north-south local roadway having two through lanes (one lane in each direction) with shared turn lanes at the intersection within the study area. Brewer Court does not provide a posted speed limit. However, per Table 2.2 of Town's Design Criteria Manual[2], Brewer Court is assumed to have a posted speed limit of 25 MPH.

Founders Parkway is generally an east-west state roadway having six through lanes (three lanes in each direction) with a combination of shared and exclusive turn lanes at the intersections within study area. The Colorado Department of Transportation (CDOT) categorizes the adjacent segment of Founders Parkway (State Highway 86) as a Regional Highway (R-A) and provides a posted speed limit of 35 MPH. Founders Parkway ends at Interstate 25 and continues west as Meadows Parkway.

Front Street is generally a north-south roadway classified as a major arterial. Front Street has four through lanes (two lanes in each direction) with a combination of shared and exclusive turn lanes at the intersections within study area and provides a posted speed limit of 40 MPH.

E Allen Street is generally an east-west roadway having two through lanes (one lane in each direction) with a combination of shared and exclusive turn lanes at the intersections within study area. E Allen Street is classified as a collector roadway and provides a posted speed limit of 30 MPH.

Allen Way is a north-south collector roadway having a variation of two to four through lanes (one to two lanes in each direction) with a combination of shared and exclusive turn lanes at the intersections within study area. Allen Way provides a posted speed limit of 25 MPH.

Interstate 25 at Founders Parkway is an existing partial cloverleaf (type B) interchange with Interstate 25 travel below Founders Parkway. The Northbound off ramp has a posted advisory speed limit of 40 MPH. Both interchange ramps have one travel lane with a combination of shared and exclusive turn lanes at Founders Parkway.

[1] Town of Castle Rock Transportation Master Plan, Felsburg Holt & Ullevig, October 2017.
[2] Town of Castle Rock Transportation Design Criteria Manual, Town of Castle Rock, December 2018.

The study intersections of Founders Parkway with Allen Way, Front Street, and the Interstate 25 northbound on/off ramps, as well as the Allen Way and E Allen Street intersection, are signalized. All other study intersections operate under a stop-controlled condition. A stop-controlled intersection is defined as a roadway intersection where vehicle rights-of-way are controlled by one or more "STOP" signs.

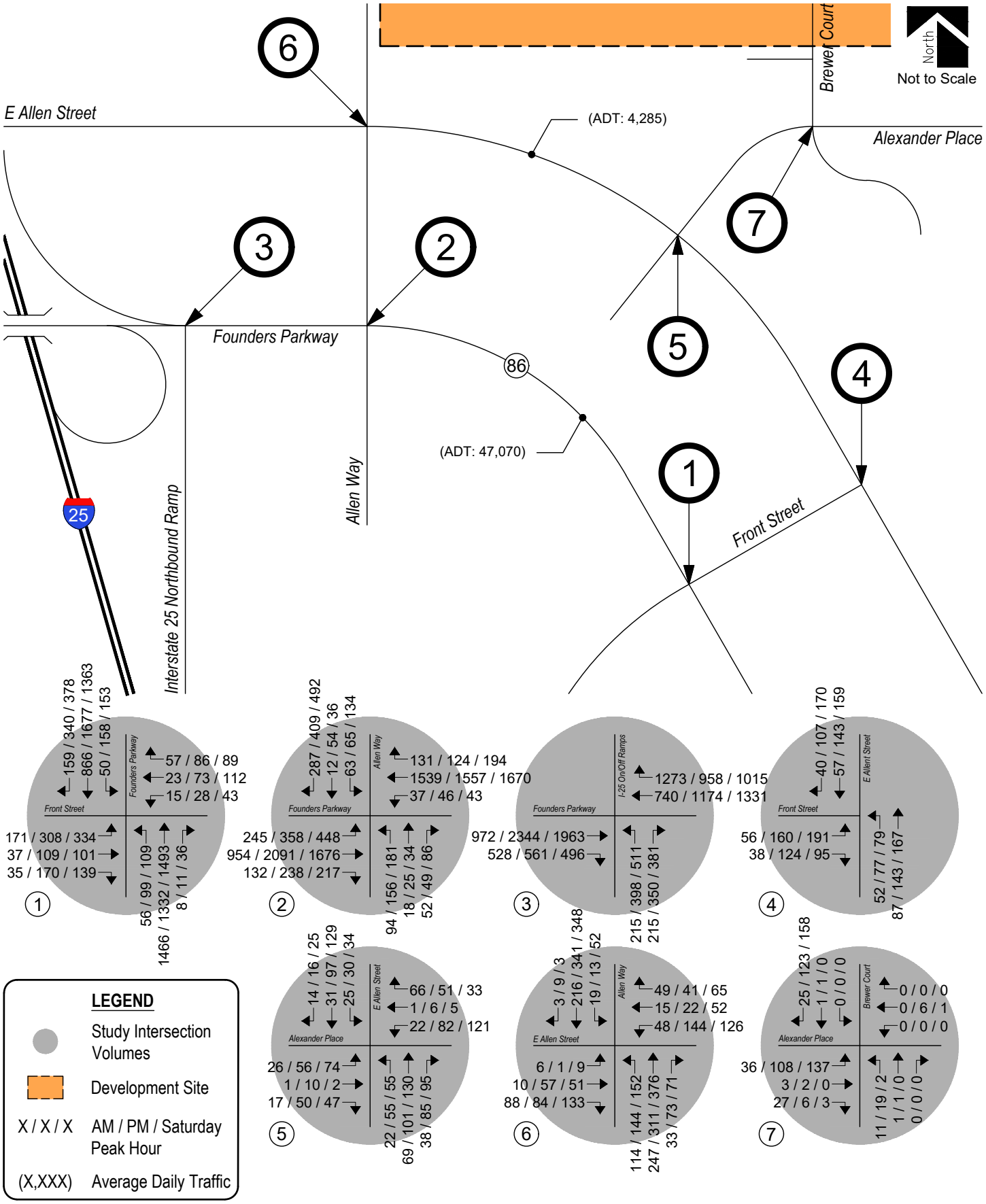
No regional or specific improvements for roadways described above are known to be planned or committed at this time. The study area roadways appear to be built to their ultimate cross-sections.

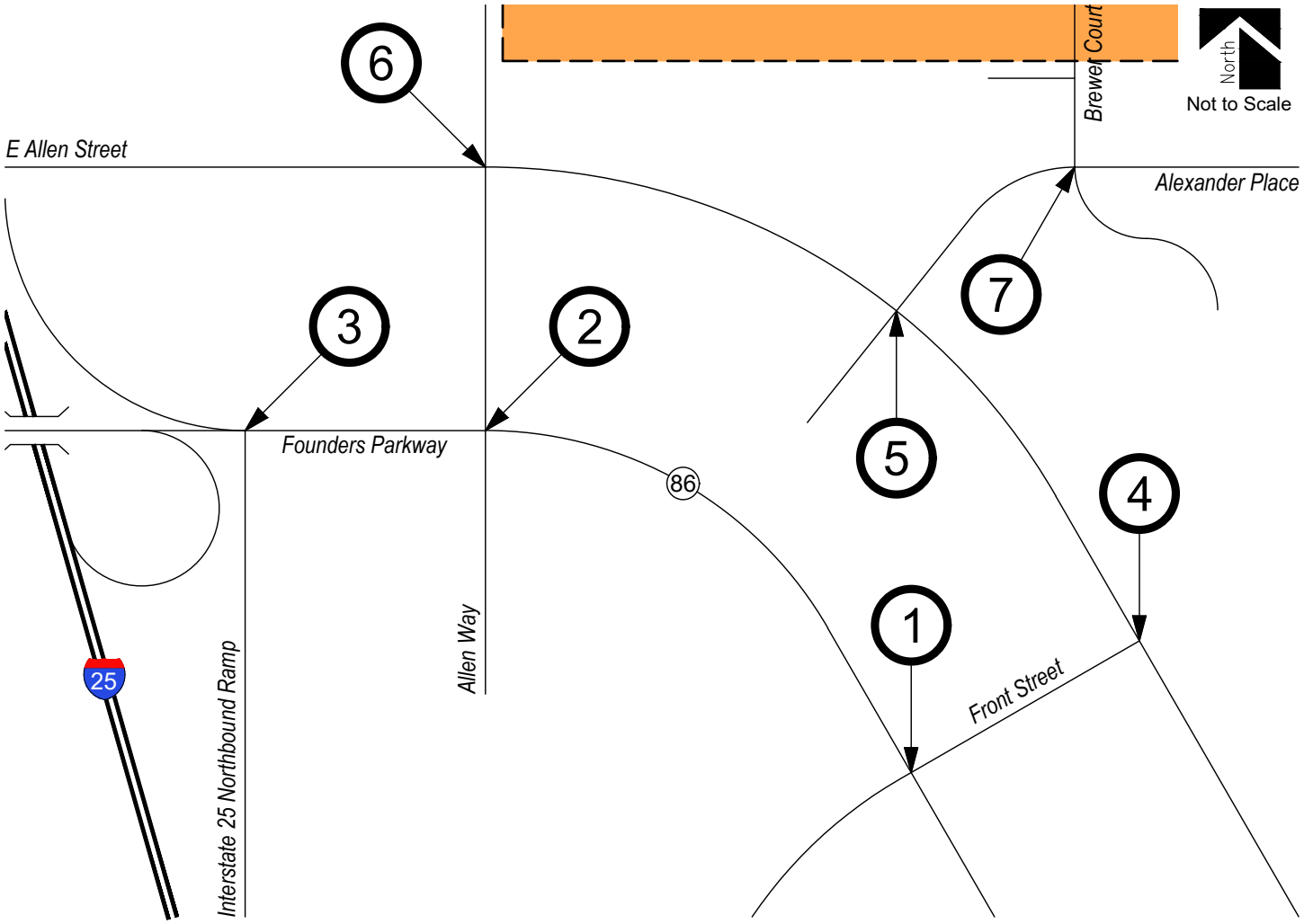
II. Existing Traffic Conditions

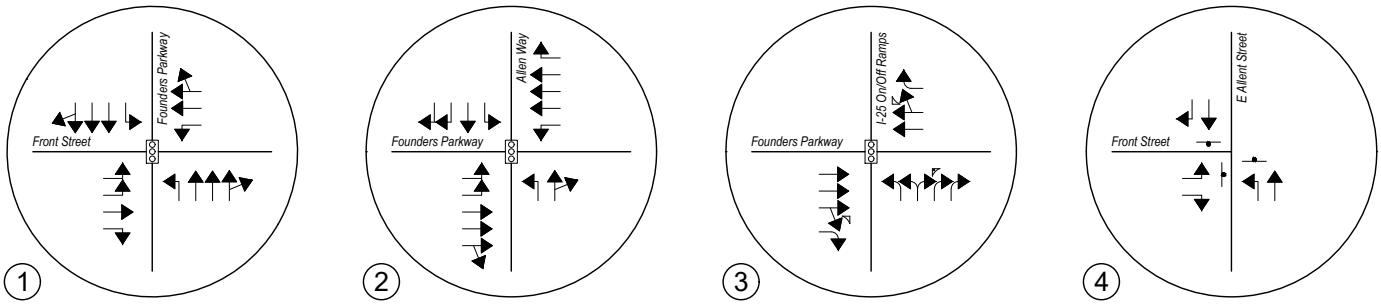
Morning (AM) and afternoon (PM) weekday peak hour traffic counts, as well as Saturday peak hour traffic counts, were collected at the E Allen Street intersections with Alexander Place, Allen Way, and Front Street, the intersection of Alexander Place with Brewer Court, and at the Founders Parkway intersections with Interstate 25 northbound on/off ramps, Allen Way, and Front Street. Average daily (24-hour) traffic volumes were collected on E Allen Street and on Founders Parkway. These counts, along with intersection lane geometry, are shown on Figures 3 and 4.

Traffic count data is included for reference in Appendix A.

Existing signal timing parameters for E Allen Street and Allen Way were obtained from Town Staff, while signal timing parameters along Founders Parkway were obtained from CDOT Staff. Signal timing data was used throughout this study to the best extent possible in order to remain consistent with existing signal coordination plans. Town and CDOT signal timing information received is included for reference in Appendix A.


North
Not to Scale
E Allen Street
Brewer Court
Alexander Place
(ADT: 4,285)
Founders Parkway
86
(ADT: 47,070)
Allen Way
Front Street
Interstate 25 Northbound Ramp
25
1
2
3
4
5
6
7
LEGEND
Study Intersection Volumes
Development Site
X / X / X AM / PM / Saturday Peak Hour
(X,XXX) Average Daily Traffic





LEGEND

Study Intersection
Lane Geometry

Development Site

Figure 4
EXISTING TRAFFIC
Intersection Geometry

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

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

The level of service analyses results for existing conditions are summarized in Table 1. At signalized intersections, the number in parentheses indicates average delay, in seconds per vehicle.

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

Table 1 – Intersection Capacity Analysis Summary – Existing Traffic

INTERSECTION LANE GROUPS	LEVEL OF SERVICE AM PEAK HOUR	 PM PEAK HOUR	 SATURDAY PEAK
Founders Parkway / Front Street (Signalized)	B (13.2)	C (21.8)	C (22.9)
Eastbound Left	D (49.7)	E (77.7)	D (38.8)
Eastbound Right	A (0.7)	B (19.6)	A (5.1)
Westbound Left	D (41.3)	D (37.4)	C (29.3)
Westbound Through and Right	C (22.6)	D (37.4)	C (27.4)
Northbound Left	A (5.5)	D (46.1)	C (26.2)
Northbound Through and Right	B (11.0)	B (13.2)	C (20.9)
Southbound Left	A (6.9)	B (14.1)	C (32.9)
Southbound Through and Right	A (9.0)	B (14.4)	C (20.1)
Founders Parkway / Allen Way (Signalized)	C (23.2)	C (23.4)	C (27.9)
Eastbound Left	E (62.4)	E (75.3)	E (62.6)
Eastbound Through and Right	B (19.0)	B (12.7)	C (20.8)
Westbound Left	B (16.1)	C (33.2)	C (29.9)
Westbound Right	A (2.9)	A (2.4)	A (3.4)
Northbound Left	D (43.5)	E (65.9)	D (40.8)
Northbound Through and Right	C (24.6)	C (28.8)	C (29.3)
Southbound Left	D (44.5)	D (48.7)	D (36.9)
Southbound Right	B (18.7)	C (29.8)	B (13.7)
Founders Parkway / I-25 NB Ramps (Signalized)	A (7.3)	B (13.9)	B (17.6)
Eastbound Right	A (0.5)	A (0.9)	A (0.7)
Westbound Right	A (3.4)	A (2.4)	A (3.7)
Northbound Left	E (57.2)	D (53.4)	D (42.6)
Northbound Right	A (8.7)	D (52.4)	D (39.2)
E Allen Street / Allen Way (Signalized)	A (5.5)	B (12.6)	A (9.9)
Eastbound Left	B (16.7)	B (14.0)	B (14.9)
Eastbound Through and Right	A (7.6)	A (9.4)	A (8.4)
Westbound Left	C (27.5)	D (35.5)	D (37.2)
Westbound Right	A (0.7)	A (0.4)	A (0.7)
Northbound Left	A (3.8)	B (16.4)	A (9.2)
Northbound Right	A (0.0)	A (3.8)	A (0.1)
Southbound Left, Through and Right	A (5.0)	A (6.9)	A (6.9)
E Allen Street / Alexander Place (Two-Way Stop-Controlled)			
Eastbound Left, Through and Right	B	B	B
Westbound Left	B	B	C
Westbound Through and Right	A	A	A
Northbound Left	A	A	A
Southbound Left	A	A	A
E Allen Street / Front Street (Two-Way Stop-Controlled)			
Eastbound Left	A	B	B
Eastbound Right	A	A	A
Northbound Left	A	A	B
Northbound Through	A	B	B
Southbound Through	A	B	B
Southbound Right	A	A	A
Alexander Place / Brewer Court (Two-Way Stop-Controlled)			
Eastbound Left, Through and Right	A	A	A
Westbound Left, Through and Right	A	A	A
Northbound Left, Through and Right	A	B	B
Southbound Left, Through and Right	A	A	A

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

Existing Traffic Analysis Results

Under existing conditions, operational analysis shows that the signalized intersection of Founders Parkway with Front Street has overall operations at LOS B during the morning peak traffic hour and LOS C during the afternoon and Saturday peak traffic hours.

The signalized intersection of Founders Parkway with Allen Way has overall operations at LOS C during morning, afternoon, and Saturday peak traffic hours.

The signalized intersection of Founders Parkway with Interstate 25 northbound on/off ramp shows intersection operations at LOS A during the morning peak traffic hour and LOS B during both the afternoon and Saturday peak traffic hours.

The signalized intersection with E Allen Street with Allen Way has overall operations at LOS A during the morning and Saturday peak traffic hours, while the afternoon peak traffic hour has overall LOS B operations.

The stop-controlled intersection of E Allen Street with Alexander Place has turn movement operations at or better than LOS B during both the morning and afternoon peak traffic hours, and LOS C or better during the Saturday peak traffic hour.

The stop-controlled intersection of E Allen Street with Front Street shows movement operations at LOS A during the morning peak traffic hour and LOS B or better during both the afternoon and Saturday peak traffic hours.

The stop-controlled intersection of Alexander Place with Brewer Court has turn movement operations at LOS A during the morning peak traffic hour and LOS B or better during afternoon and Saturday peak traffic hours.

III. Future Traffic Conditions Without Proposed Development

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

To account for projected increases in background traffic for Years 2023 and 2041, a compounded annual growth rate was determined using traffic data provided by CDOT's Online Transportation Information System (OTIS), which anticipates a 20-year growth rate less than one percent along the adjacent segment of Founders Parkway (State Highway 86). However, in coordination with Town Staff and to provide for a conservative analysis, a growth rate of two percent was applied to existing traffic volumes.

To account for projected traffic from adjacent developments not yet built, trip generations from the Alexander Place Senior Living Traffic Impact Study[3] were added to background traffic volumes.

Pursuant to the non-committed area roadway improvements discussed in Section I, Year 2023 and Year 2041 background traffic conditions assume no roadway improvements to accommodate regional transportation demands. This assumption provides for a conservative analysis.

Pursuant to conversation with Town Staff, the signalized intersections along Founders Parkway will be implemented with adaptive signal control systems. As such, signal timings will be subject to change throughout peak traffic hours which cannot accurately be modeled within the SYNCHRO computer program used within this analysis. Moreover, it is unknown when these improvements along the Founders Parkway corridor will occur. Therefore, Year 2023 and 2041 background traffic conditions assume no improvements to signal timing optimization. This provides a conservative analysis since actual signal timing parameters and operations for Year 2041 background conditions with adaptive signal control are likely better than the level of service values provided within this report.

Projected background traffic volumes and intersection geometry for Year 2023 are shown on Figure 5 and 6, respectively.

Year 2041 projected background traffic volumes and intersection geometry are shown on Figure 7 and Figure 8, respectively.

[3] Alexander Place Senior Living: Traffic Impact Study, SM ROCHA, LLC, August 2019.

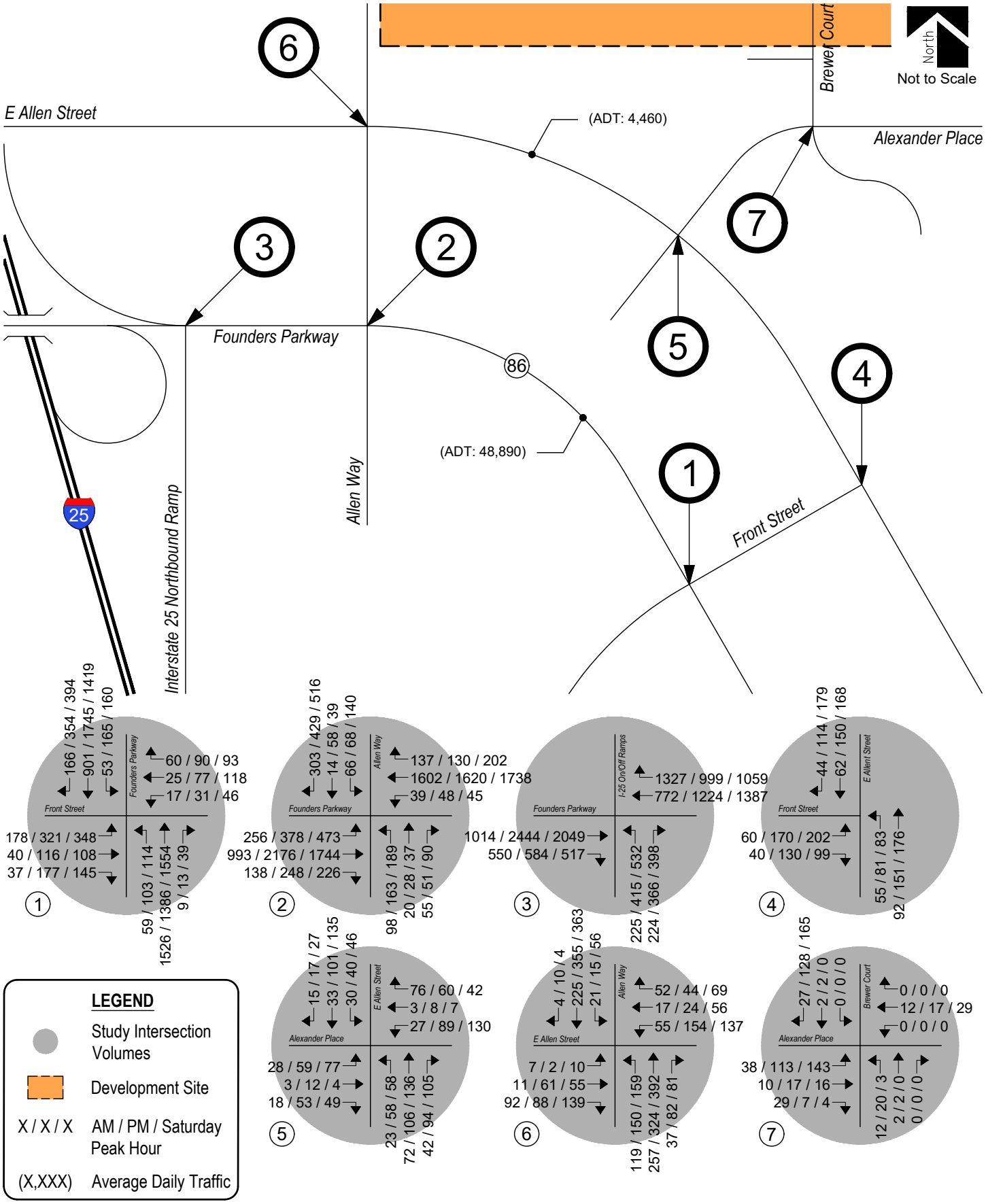


Figure 5
BACKGROUND TRAFFIC - YEAR 2023
Volumes

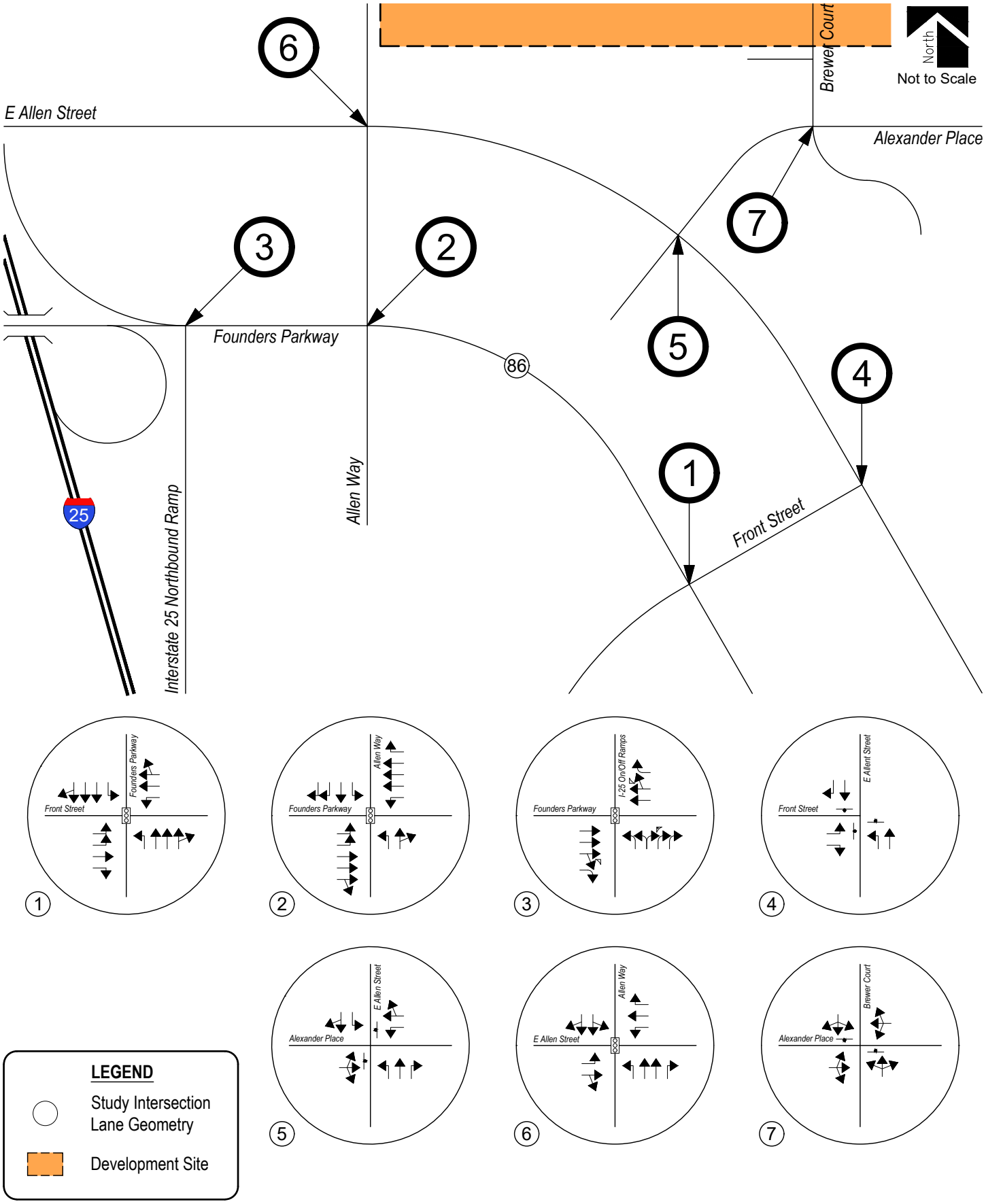


Figure 6
BACKGROUND TRAFFIC - YEAR 2023
Intersection Geometry

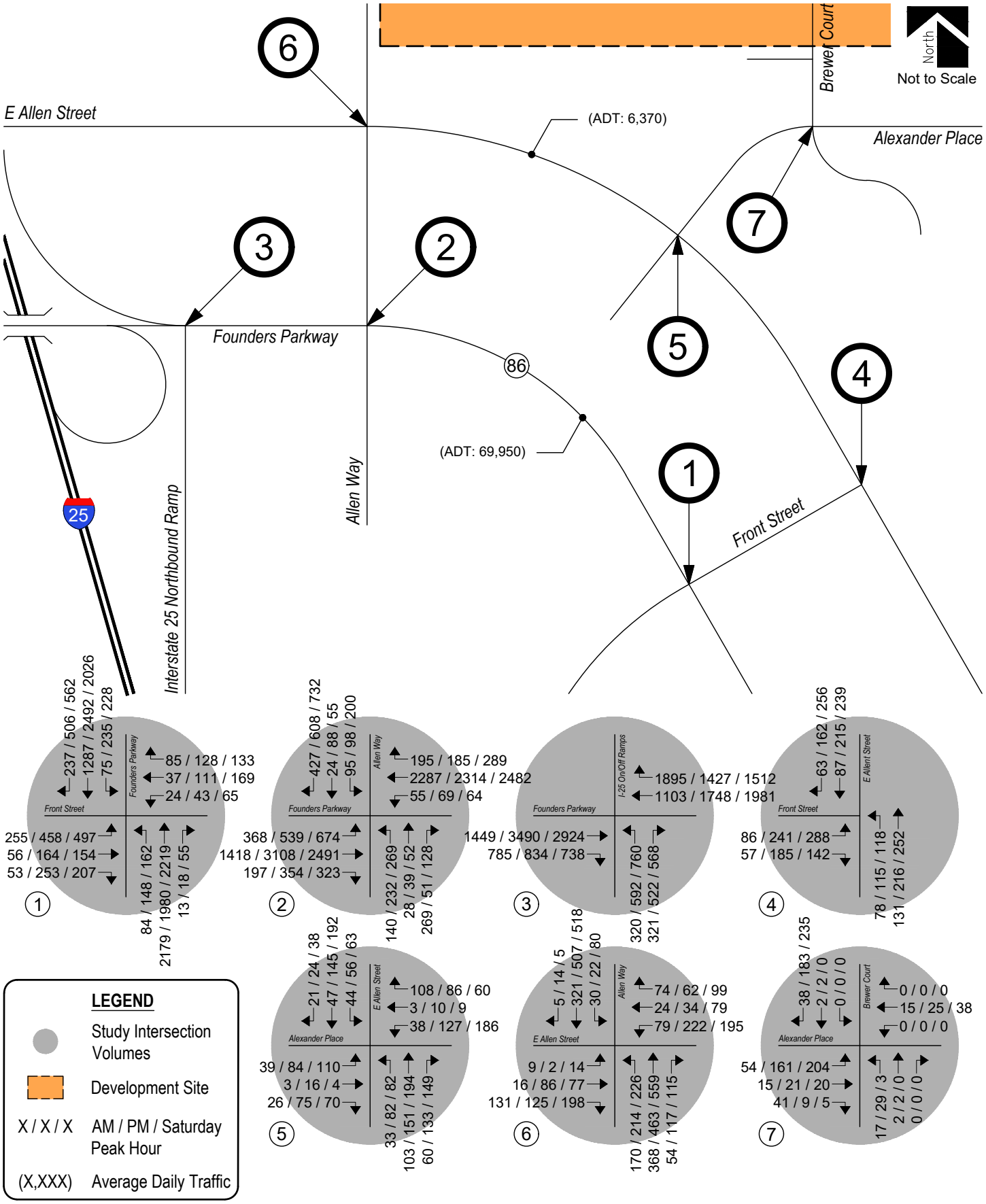


Figure 7
BACKGROUND TRAFFIC - YEAR 2041
Volumes

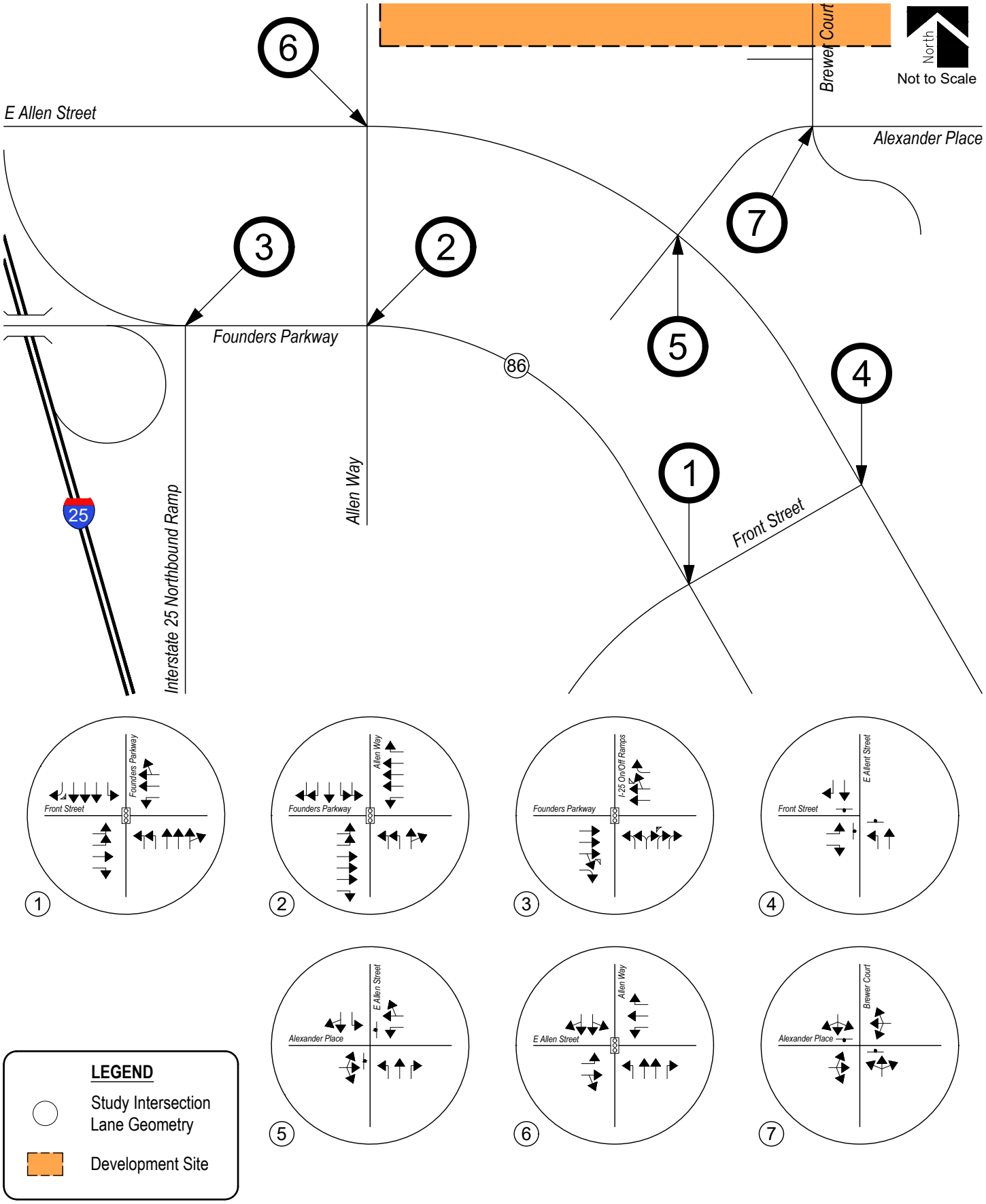


Figure 8
BACKGROUND TRAFFIC - YEAR 2041
Intersection Geometry

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

Background traffic level of service analysis results for Year 2023 are listed in Table 2. Year 2041 operational results are summarized in Table 3. At signalized intersections, the number in parentheses indicates average delay, in seconds per vehicle.

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

Table 2 – Intersection Capacity Analysis Summary – Background Traffic – Year 2023

INTERSECTION LANE GROUPS	LEVEL OF SERVICE AM PEAK HOUR	 PM PEAK HOUR	 SATURDAY PEAK
Founders Parkway / Front Street (Signalized)	B (13.5)	C (23.5)	C (24.1)
Eastbound Left	D (50.1)	F (87.9)	D (39.3)
Eastbound Right	A (0.87)	C (22.5)	A (6.2)
Westbound Left	D (41.2)	D (44.5)	C (29.1)
Westbound Through and Right	C (22.5)	D (38.3)	C (27.3)
Northbound Left	A (5.8)	D (47.7)	C (28.1)
Northbound Through and Right	B (11.3)	B (13.9)	C (22.1)
Southbound Left	A (7.6)	B (17.4)	D (35.0)
Southbound Through and Right	A (9.2)	B (15.1)	C (21.5)
Founders Parkway / Allen Way (Signalized)	C (23.8)	C (25.0)	C (32.3)
Eastbound Left	E (62.6)	E (79.8)	E (63.3)
Eastbound Through and Right	B (18.8)	B (13.4)	C (22.6)
Westbound Left	B (15.8)	C (33.9)	C (30.3)
Westbound Right	A (2.6)	A (2.3)	A (3.4)
Northbound Left	D (44.9)	E (75.3)	D (41.7)
Northbound Through and Right	C (26.5)	C (30.4)	C (31.6)
Southbound Left	D (44.7)	D (50.3)	D (37.8)
Southbound Right	C (23.2)	D (37.5)	B (17.3)
Founders Parkway / I-25 NB Ramps (Signalized)	A (7.3)	B (14.6)	C (27.8)
Eastbound Through and Right	A (0.5)	A (1.0)	A (0.8)
Westbound Through and Right	A (3.6)	A (2.6)	A (3.8)
Northbound Left	E (57.2)	D (52.6)	D (42.7)
Northbound Right	A (9.6)	D (52.2)	F (94.1)
E Allen Street / Allen Way (Signalized)	A (5.8)	B (12.8)	B (10.2)
Eastbound Left	B (16.4)	B (13.5)	B (14.5)
Eastbound Through and Right	A (7.5)	A (9.2)	A (8.2)
Westbound Left	C (28.0)	D (35.8)	D (37.4)
Westbound Right	A (0.7)	A (0.4)	A (0.7)
Northbound Left	A (4.1)	B (17.0)	A (10.0)
Northbound Right	A (0.1)	A (4.2)	A (0.2)
Southbound Left, Through and Right	A (5.2)	A (7.2)	A (7.3)
E Allen Street / Alexander Place (Two-Way Stop-Controlled)			
Eastbound Left, Through and Right	B	A	C
Westbound Left	B	C	C
Westbound Through and Right	A	A	B
Northbound Left	A	A	A
Southbound Left	A	A	A
E Allen Street / Front Street (All-Way Stop-Controlled)			
Eastbound Left	A	B	B
Eastbound Right	A	A	A
Northbound Left	A	B	B
Northbound Through	A	B	B
Southbound Through	A	B	B
Southbound Right	A	A	B
Alexander Place / Brewer Court (Two-Way Stop-Controlled)			
Eastbound Left, Through and Right	A	A	A
Westbound Left, Through and Right	A	A	A
Northbound Left, Through and Right	A	B	B
Southbound Left, Through and Right	A	A	A

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

Background Traffic Analysis Results – Year 2023

Year 2023 background traffic analysis indicates that the signalized intersection of Founders Parkway with Front Street experiences overall operations at LOS B during the morning peak traffic hour and LOS C during both the afternoon and Saturday peak traffic hours.

The signalized intersection of Founders Parkway with Allen Way predicts overall operations at LOS C during the morning, afternoon, and Saturday peak traffic hours.

The signalized intersection of Founders Parkway with Interstate 25 northbound on/off ramp shows intersection operations at LOS A during the morning peak traffic hour, LOS B during the afternoon peak traffic hour, and LOS C during the Saturday peak traffic hour.

The signalized intersection with E Allen Street with Allen Way has overall operations at LOS A during the morning peak traffic hour and LOS B during the afternoon and Saturday peak traffic hours.

The stop-controlled intersection of E Allen Street with Alexander Place experiences turn movement operations at or better than LOS B during the morning peak traffic hour and LOS C or better during the afternoon and Saturday peak traffic hours.

The stop-controlled intersection of E Allen Street with Front Street shows movement operations at LOS A during the morning peak traffic hour and LOS B or better during the afternoon and Saturday peak traffic hours.

The stop-controlled intersection of Alexander Place with Brewer Court has turn movement operations at LOS A during the morning peak traffic hour and LOS B or better during the afternoon and Saturday peak traffic hours.

Table 3 – Intersection Capacity Analysis Summary – Background Traffic – Year 2041

INTERSECTION	LEVEL OF SERVICE		
LANE GROUPS	AM PEAK HOUR	PM PEAK HOUR	SATURDAY PEAK
Founders Parkway / Front Street (Signalized)	B (17.9)	C (32.5)	D (37.9)
Eastbound Left	D (47.6)	E (62.2)	E (67.3)
Eastbound Right	A (1.2)	C (28.7)	B (13.8)
Westbound Left	D (42.2)	D (40.6)	D (37.3)
Westbound Through and Right	C (33.7)	D (38.4)	E (79.6)
Northbound Left	A (6.1)	C (22.7)	B (16.3)
Northbound Through and Right	B (18.4)	C (31.5)	D (48.9)
Southbound Left	C (20.9)	E (62.1)	E (61.6)
Southbound Right	A (1.6)	A (4.7)	A (6.4)
Founders Parkway / Allen Way (Signalized)	D (37.3)	D (51.2)	E (78.4)
Eastbound Left	F (83.0)	E (64.8)	F (152.7)
Eastbound Right	A (1.7)	A (5.0)	A (3.3)
Westbound Left	C (22.2)	D (51.1)	D (35.5)
Westbound Right	A (5.8)	A (5.2)	A (4.8)
Northbound Left	D (38.4)	E (56.2)	E (59.6)
Northbound Through and Right	F (91.5)	D (42.9)	F (143.9)
Southbound Left	D (40.2)	D (45.7)	D (43.5)
Southbound Right	B (13.2)	D (45.9)	F (119.5)
Founders Parkway / I-25 NB Ramps (Signalized)	B (17.1)	E (64.4)	E (70.1)
Eastbound Through and Right	A (5.7)	F (83.0)	E (65.5)
Westbound Through and Right	C (23.4)	E (59.2)	F (92.4)
Northbound Left	E (60.9)	F (84.4)	F (129.9)
Northbound Right	D (41.8)	F (132.4)	F (113.5)
E Allen Street / Allen Way (Signalized)	A (6.3)	B (12.3)	B (13.2)
Eastbound Left	B (16.7)	B (13.5)	B (14.5)
Eastbound Through and Right	A (7.5)	A (8.5)	A (7.5)
Westbound Left	C (32.8)	C (34.1)	C (34.9)
Westbound Right	A (1.0)	A (0.3)	A (0.6)
Northbound Left	A (5.0)	C (22.8)	C (27.6)
Northbound Right	A (0.1)	A (0.3)	A (0.5)
Southbound Left, Through and Right	A (5.3)	A (9.9)	B (10.7)
E Allen Street / Alexander Place (Two-Way Stop-Controlled)			
Eastbound Left, Through and Right	B	C	E
Westbound Left	B	D	F
Westbound Through and Right	A	B	B
Northbound Left	A	A	A
Southbound Left	A	A	A
E Allen Street / Front Street (All-Way Stop-Controlled)			
Eastbound Left	A	B	B
Eastbound Right	A	B	C
Northbound Left	A	C	C
Northbound Through	A	B	B
Southbound Through	A	B	C
Southbound Right	A	B	B
Alexander Place / Brewer Court (Two-Way Stop-Controlled)			
Eastbound Left, Through and Right	A	A	A
Westbound Left, Through and Right	A	A	A
Northbound Left, Through and Right	B	C	C
Southbound Left, Through and Right	A	A	A

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

Background Traffic Analysis Results – Year 2041

By Year 2041 and without the proposed development, the signalized intersection of Founders Parkway with Front Street anticipates overall operations at LOS B, C, and D during the morning, afternoon, and Saturday peak traffic hours, respectively.

The signalized intersection of Founders Parkway with Allen Way projects overall operations at LOS D during the morning peak traffic hour and LOS E during the afternoon and Saturday peak traffic hours. The LOS E operations anticipated during the afternoon and Saturday peak traffic periods is attributed to approach volumes from all directions.

The signalized intersection of Founders Parkway with Interstate 25 northbound on/off ramps experiences intersection operations at LOS B during the morning peak traffic hour and LOS E during the afternoon and Saturday peak traffic hours. The LOS E operations anticipated during the afternoon and Saturday peak traffic periods is attributed to approach volumes from all directions.

The signalized intersection with E Allen Street with Allen Way predicts overall operations at LOS A during the morning peak traffic hour and LOS B during the afternoon and Saturday peak traffic hours.

The stop-controlled intersection of E Allen Street with Alexander Place expects turn movement operations at or better than LOS B during the morning and Saturday peak traffic hours and LOS D or better during the afternoon peak traffic hour. Exceptions would include the eastbound shared movement and westbound left turn movement which operate at LOS E and LOS F, respectively, during the Saturday peak traffic hour. The LOS E and LOS F operations are attributed to the through traffic volume along E Allen Street and the stop-controlled nature of the intersection.

The stop-controlled intersection of E Allen Street with Front Street projects movement operations at LOS A during the morning peak traffic hour and LOS C or better during the afternoon and Saturday peak traffic hours.

The stop-controlled intersection of Alexander Place with Brewer Court anticipates turn movement operations at or better than LOS B during the morning peak traffic hour and LOS C or better during the afternoon and Saturday peak traffic hours.

In order to mitigate the anticipated LOS E and LOS F operations at the signalized intersections of Founders Parkway with Allen Way and Interstate 25 northbound on/off ramps, it is recommended implementing adaptive signal control systems along the Founders Parkway corridor. As previously indicated, Year 2041 background operations are likely better than the results provided within this report as SYNCHRO cannot accurately model the change to signal timings throughout a peak hour.

It is to be noted that it is not uncommon for unsignalized movements to or from an arterial roadway, in urban areas, to operate with noticeable delays during peak traffic hours. It is, however, likely that turn movements will operate better than the results obtained with this HCM Two Way Stop Control (TWSC) level of service analysis would indicate, as the HCM analysis may not accurately account for the effect of vehicle platooning and gaps caused by upstream signals. Upstream signal controls will tend to create additional gaps in the traffic stream for turning movements at Alexander Place and will most likely provide mitigation to the LOS E and F operations projected during the Saturday peak traffic hour.

IV. Proposed Project Traffic

Trip Generation

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

The ITE land use codes 210 (Single-Family Detached Housing) and 215 (Single-Family Attached Housing) were used for estimating trip generation because of their best fit to the proposed land use description.

It is important to note that the proposed duplex units provide opportunities to accommodate professional services or personal home-based businesses. However, trip generation characteristics are not expected to differ from that reported by ITE land use code 215 (Single-Family Attached Housing) considering how the main land use description remains residential.

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

Table 4 – Trip Generation Rates

ITE			TRIP GENERATION RATES									
			24	AM PEAK HOUR			PM PEAK HOUR			SATURDAY		
CODE	LAND USE	UNIT	HOUR	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
210	Single-Family Detached Housing	DU	9.43	0.18	0.52	0.70	0.59	0.35	0.94	0.50	0.42	0.92
215	Single-Family Attached Housing	DU	7.20	0.15	0.33	0.48	0.32	0.25	0.57	0.27	0.30	0.57

Key: DU = Dwelling Units.
* = ITE does not report significant Saturday peak hour generation due to the nature of the business (ie, operating hours typically outside of Satruday peak).
Note: All data and calculations above are subject to being rounded to nearest value.

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

Table 5 – Trip Generation Summary

ITE			TOTAL TRIPS GENERATED									
			24	AM PEAK HOUR			PM PEAK HOUR			SATURDAY		
CODE	LAND USE	SIZE	HOUR	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
210	Single-Family Detached Housing	55 DU	519	10	28	39	33	19	52	27	23	51
215	Single-Family Attached Housing	22 DU	158	3	7	11	7	5	13	6	7	13
		Total:	*677*	*13*	*36*	*49*	*40*	*25*	*64*	*33*	*30*	*63*

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

Upon build-out, Table 5 illustrates that the proposed development has the potential to generate approximately 677 daily trips with 49 of those occurring during the morning peak hour, 64 during the afternoon peak hour, and 63 during the Saturday peak hour.

Adjustments to Trip Generation Rates

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

Trip Distribution

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

Overall trip distribution patterns for the development are shown on Figure 9.

Trip Assignment

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

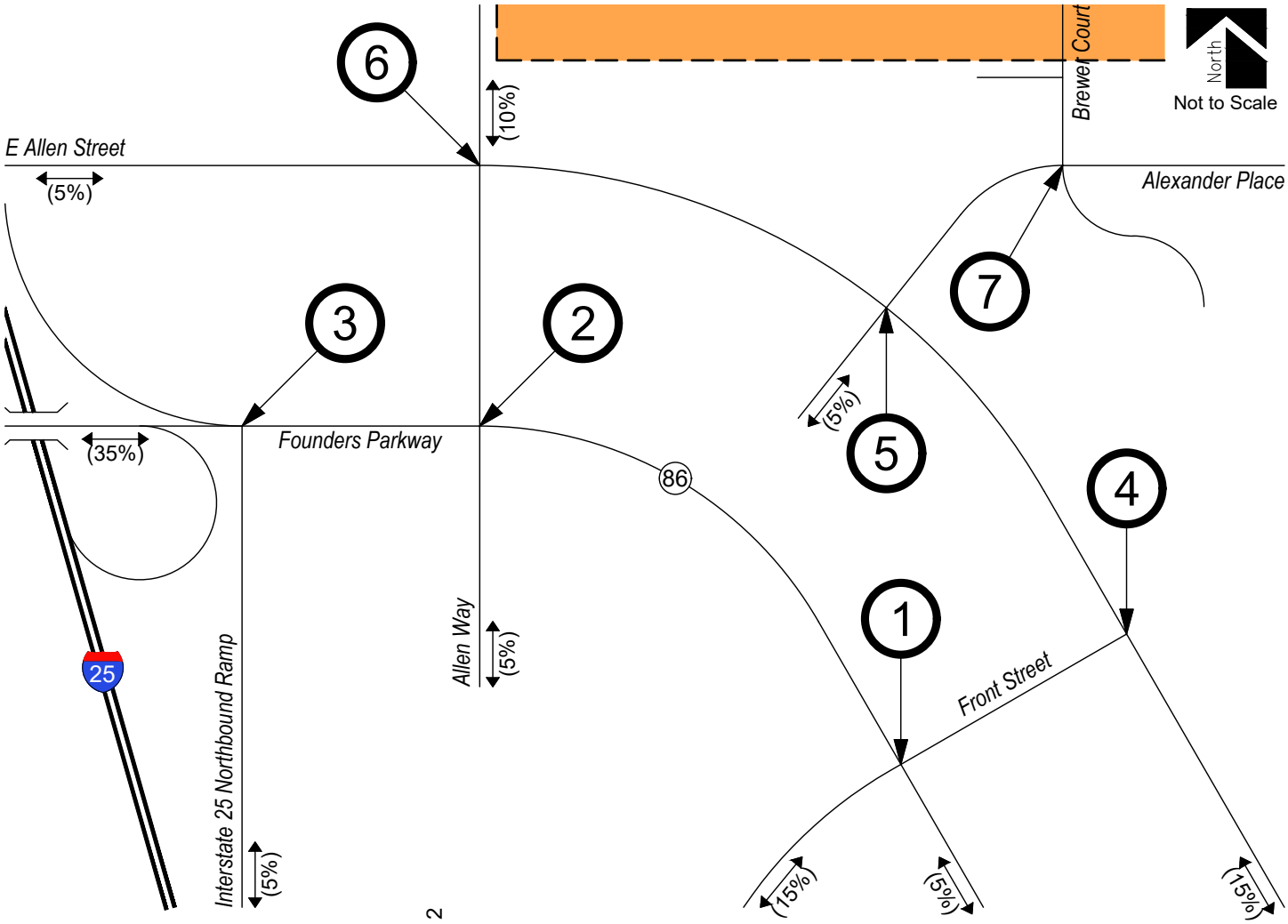
Applying trip distribution patterns to site-generated traffic provides the overall site-generated trip assignments shown on Figure 9.

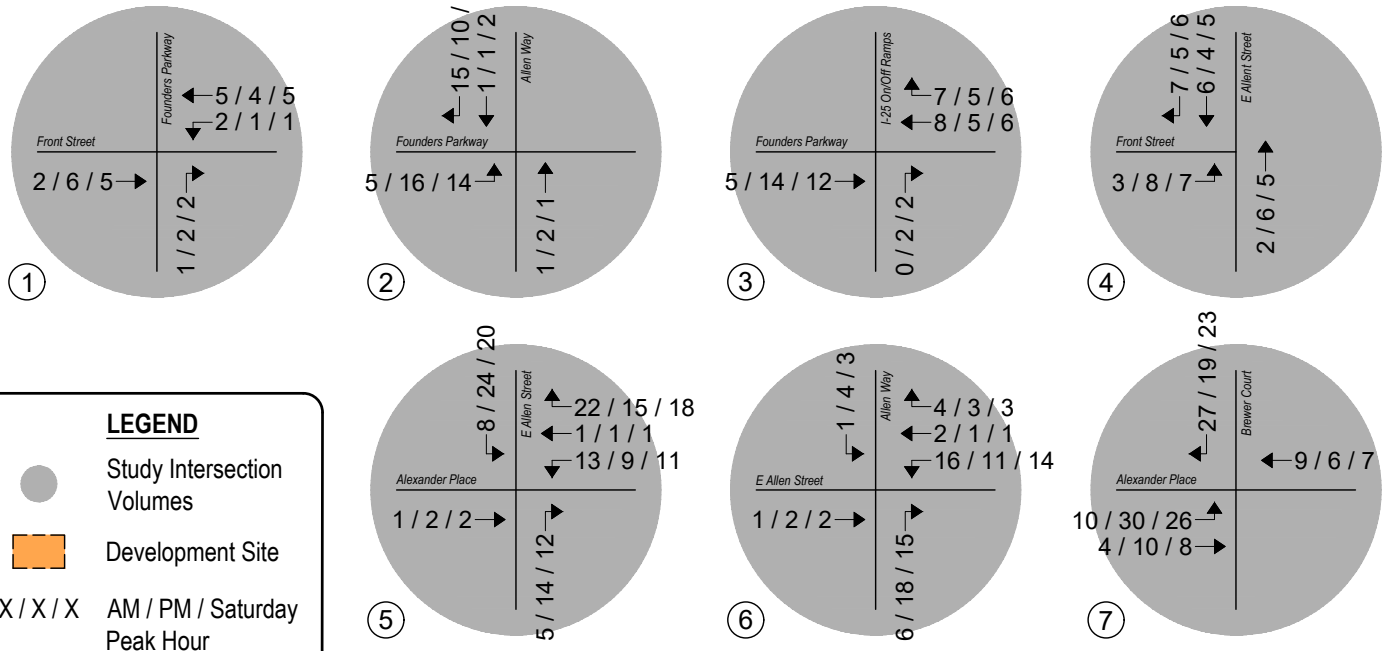
Development Impacts

As Table 5 shows, there is an increase in peak hour traffic volumes anticipated for the proposed development and are considered minor. These minor volumes are not likely to negatively impact operations of Founders Parkway, E Allen Street, nor other adjacent roadways or intersections

Comparison of estimated ADT volumes shown in Figure 8 – Background Traffic – Year 2041 with projected 24-hour volumes shown in Table 5 indicate a minor increase in traffic volumes for the surrounding roadway network.

For example, when distributing the estimated 24-hour volume shown in Table 5 onto the adjacent roadway network for Year 2041, approximately one out of every 15 vehicles along E Allen Street is expected to represent the proposed development (or an increase of approximately seven percent to the ADT volume along E Allen Street). Similarly, approximately one out of every 250 vehicles along Founders Parkway is projected to represent the proposed development (or an increase of less than one percent to the ADT volume along Founders Parkway).





LEGEND

- Study Intersection Volumes
- Development Site
- X / X / X — AM / PM / Saturday Peak Hour
- (X,XXX) — Average Daily Traffic

Figure 9
SITE DEVELOPMENT DISTRIBUTION
(%) : Overall
SITE-GENERATED
AM / PM / Saturday Peak Hour

V. Future Traffic Conditions With Proposed Developments

Site-generated traffic was added to background traffic projections for Years 2023 and 2041 to develop total traffic projections. For analysis purposes, it was assumed that development construction would be completed by end of Year 2023.

Pursuant to area roadway improvement discussions provided in Section III, Year 2023 and Year 2041 total traffic conditions assume no additional roadway improvements to accommodate regional transportation demands. Roadway improvements associated with site development are expected to be limited to site access and frontage as required by the governing agency.

As previously mentioned in Section III, the signalized intersections along Founders Parkway are assumed to be implemented with adaptive signal control systems. Therefore, in coordination with Town Staff, signal timing information for total traffic conditions was reoptimized.

Projected Year 2023 total traffic volumes and intersection geometry are shown in Figure 10 and Figure 11, respectively.

Figure 12 and Figure 13 show projected total traffic volumes and intersection geometry for Year 2041, respectively.

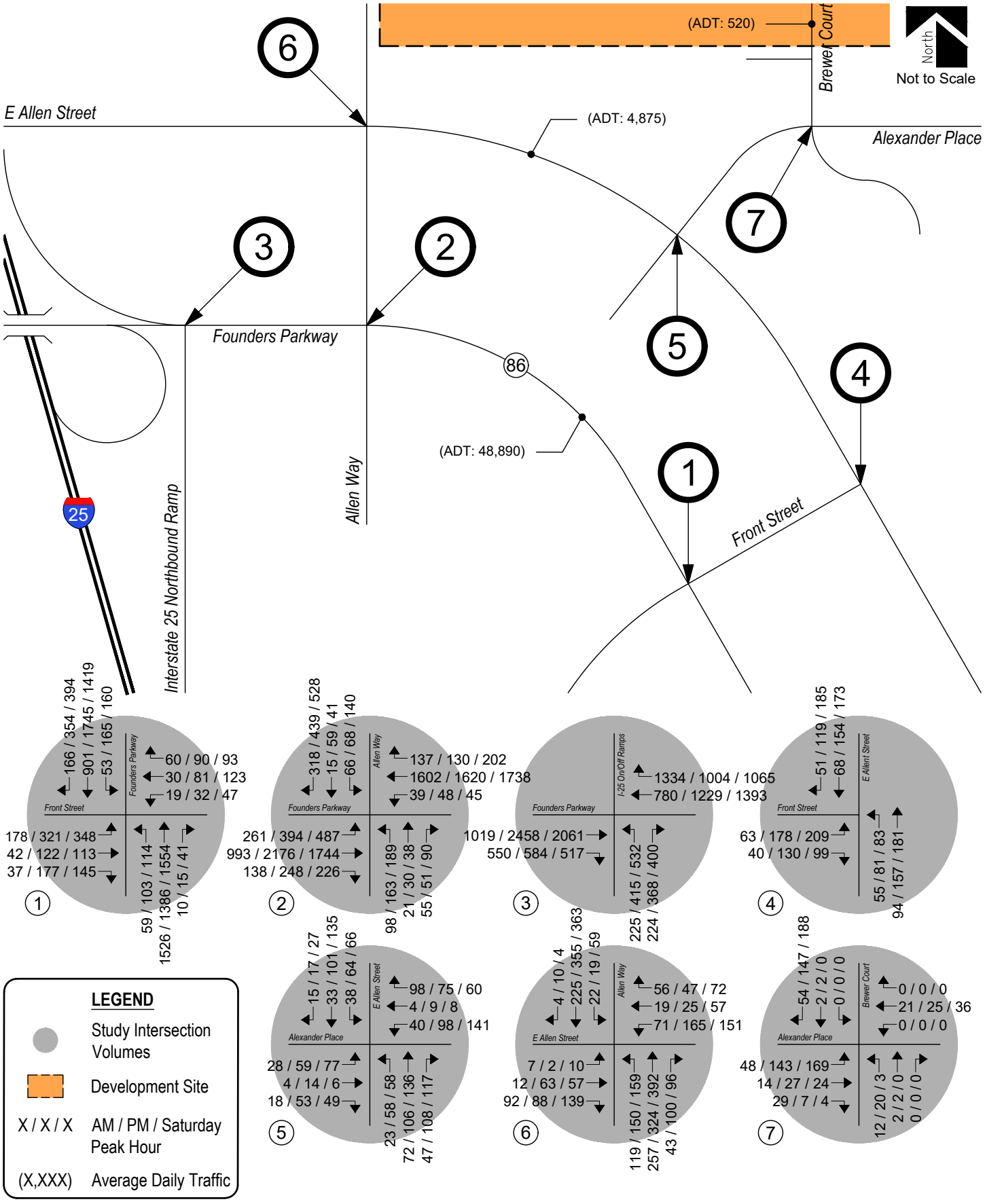
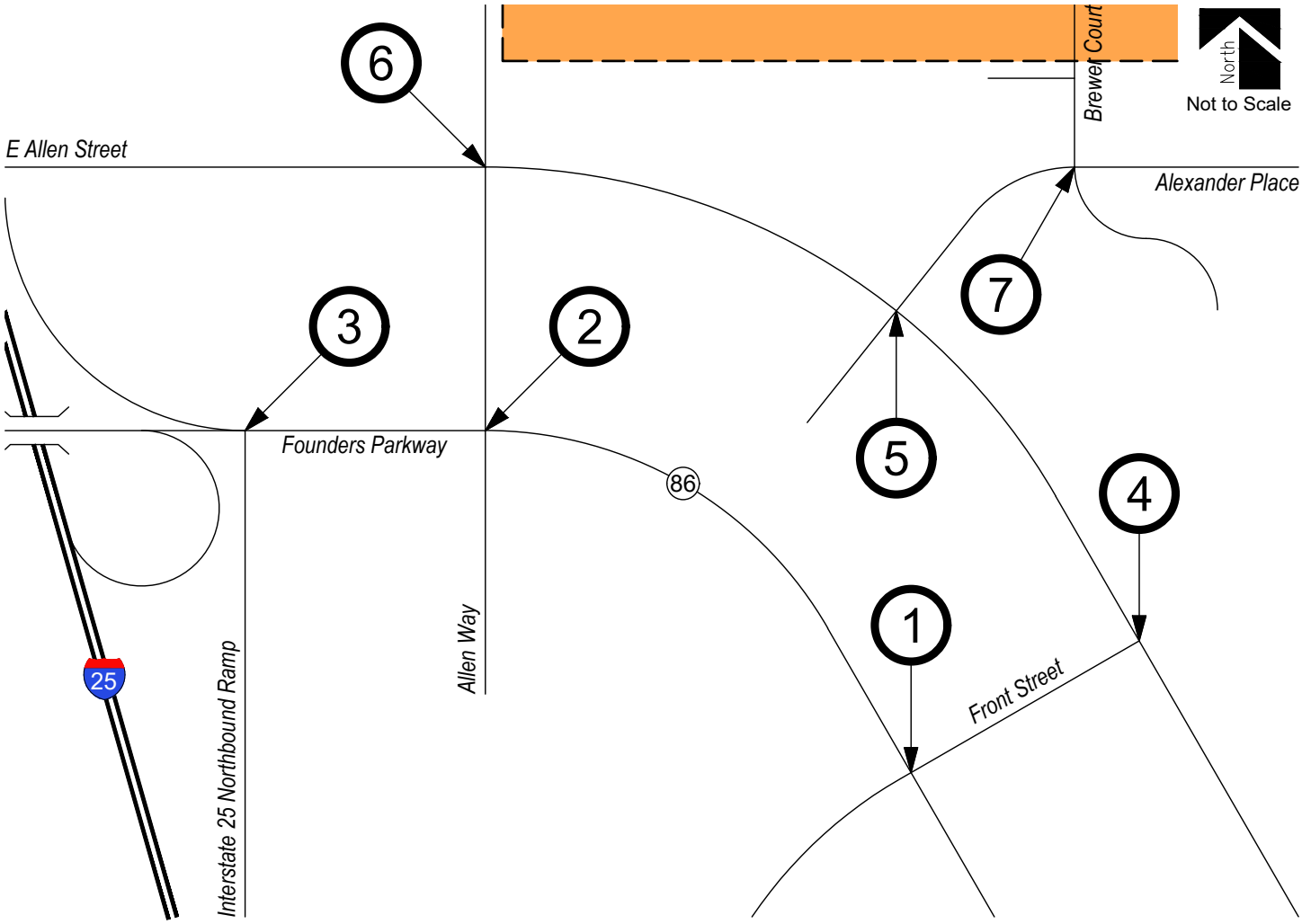
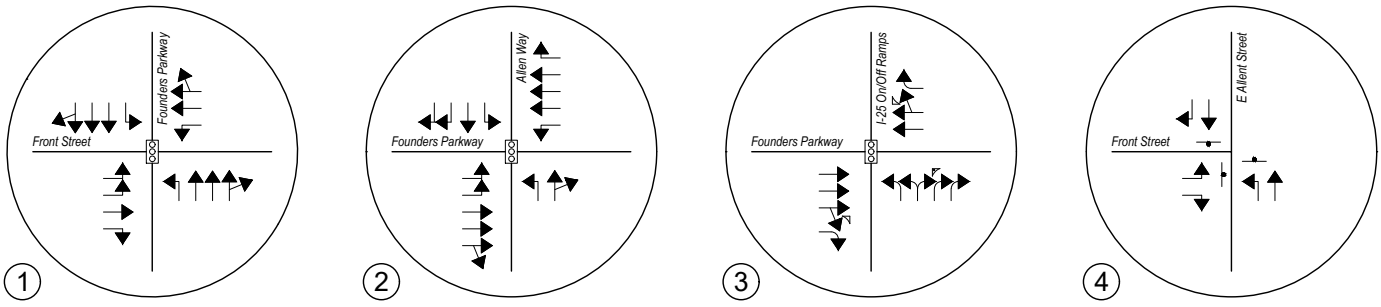


Figure 10
TOTAL TRAFFIC - YEAR 2023
Volumes





LEGEND

Study Intersection
Lane Geometry

Development Site

Figure 11
TOTAL TRAFFIC - YEAR 2023
Intersection Geometry

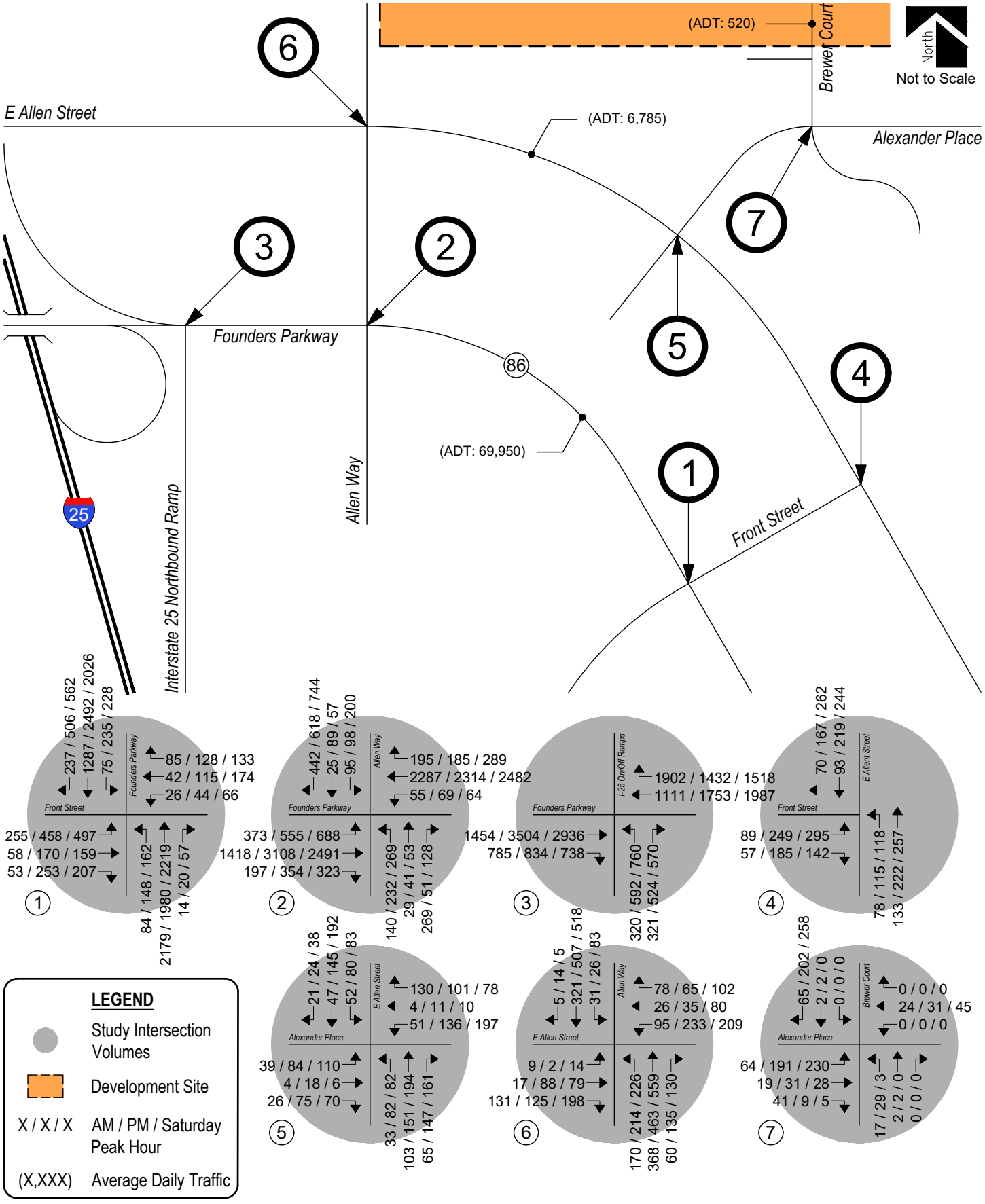


Figure 12
TOTAL TRAFFIC - YEAR 2041
Volumes

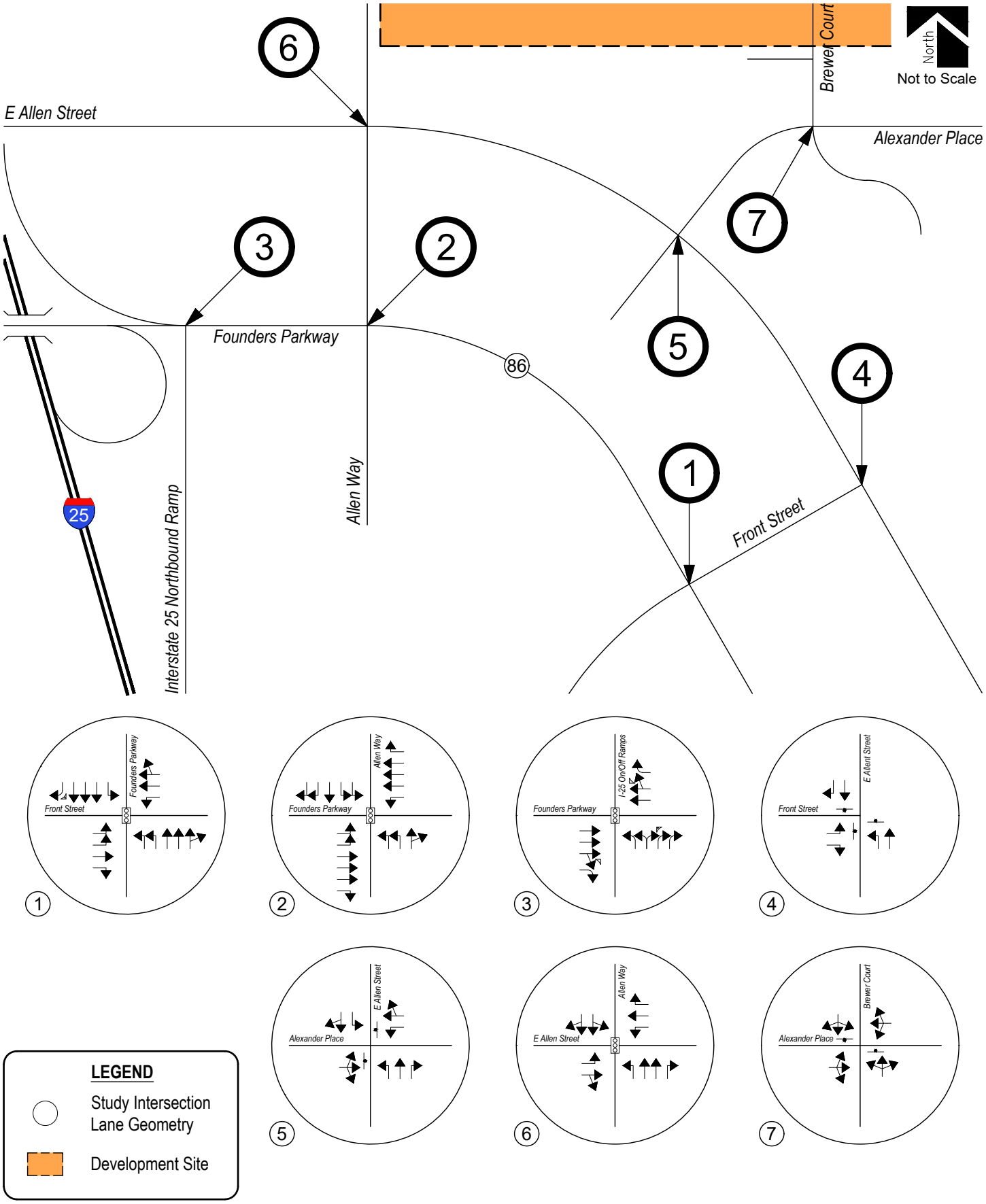


Figure 13
TOTAL TRAFFIC - YEAR 2041
Intersection Geometry

VI. Project Impacts

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

Peak Hour Intersection Levels of Service

As with background traffic, the operations of the study intersections were analyzed under projected total traffic conditions using the SYNCHRO computer program. Total traffic level of service analysis results for Years 2023 and 2041 are summarized in Table 6 and Table 7, respectively. At signalized intersections, the number in parentheses indicates average delay, in seconds per vehicle.

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

Table 6 – Intersection Capacity Analysis Summary – Total Traffic – Year 2023

INTERSECTION	LEVEL OF SERVICE		
LANE GROUPS	AM PEAK HOUR	PM PEAK HOUR	SATURDAY PEAK
Founders Parkway / Front Street (Signalized)	B (13.7)	C (23.5)	C (24.3)
Eastbound Left	D (49.9)	F (85.5)	D (38.9)
Eastbound Right	A (0.7)	C (22.1)	A (6.1)
Westbound Left	D (41.4)	D (44.5)	C (29.0)
Westbound Through and Right	C (24.2)	D (38.3)	C (27.6)
Northbound Left	A (5.8)	D (49.0)	C (28.5)
Northbound Through and Right	B (11.4)	B (14.0)	C (22.3)
Southbound Left	A (7.7)	B (17.8)	D (35.4)
Southbound Through and Right	A (9.3)	B (15.2)	C (21.6)
Founders Parkway / Allen Way (Signalized)	C (24.6)	C (25.7)	C (33.1)
Eastbound Left	E (62.6)	E (79.9)	E (63.3)
Eastbound Through and Right	B (19.2)	B (13.4)	C (22.8)
Westbound Left	B (16.3)	C (33.4)	C (30.2)
Westbound Right	A (2.7)	A (2.3)	A (3.4)
Northbound Left	D (44.3)	E (76.1)	D (41.6)
Northbound Through and Right	C (25.9)	C (32.8)	C (32.7)
Southbound Left	D (44.6)	D (50.7)	D (37.7)
Southbound Right	C (26.1)	E (41.0)	B (19.2)
Founders Parkway / I-25 NB Ramps (Signalized)	A (7.3)	B (14.6)	C (28.5)
Eastbound Through and Right	A (4.0)	B (13.9)	B (13.3)
Westbound Through and Right	A (5.3)	A (6.7)	D (45.7)
Northbound Left	E (57.2)	D (52.4)	D (42.7)
Northbound Right	A (10.0)	D (52.2)	F (94.3)
E Allen Street / Allen Way (Signalized)	A (6.3)	B (13.0)	B (10.5)
Eastbound Left	B (16.0)	B (13.5)	B (14.1)
Eastbound Through and Right	A (7.3)	A (9.0)	A (7.8)
Westbound Left	C (29.5)	D (35.1)	D (37.0)
Westbound Right	A (0.7)	A (0.4)	A (0.6)
Northbound Left	A (4.2)	B (17.4)	B (10.5)
Northbound Right	A (0.0)	A (5.1)	A (0.2)
Southbound Left, Through and Right	A (5.4)	A (7.6)	A (7.8)
E Allen Street / Alexander Place (Two-Way Stop-Controlled)			
Eastbound Left, Through and Right	B	C	C
Westbound Left	B	C	C
Westbound Through and Right	A	A	B
Northbound Left	A	A	A
Southbound Left	A	A	A
E Allen Street / Front Street (All-Way Stop-Controlled)			
Eastbound Left	A	B	B
Eastbound Right	A	A	A
Northbound Left	A	B	B
Northbound Through	A	B	B
Southbound Through	A	B	B
Southbound Right	A	A	B
Alexander Place / Brewer Court (Two-Way Stop-Controlled)			
Eastbound Left, Through and Right	A	A	A
Westbound Left, Through and Right	A	A	A
Northbound Left, Through and Right	B	B	C
Southbound Left, Through and Right	A	A	A

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

Table 7 – Intersection Capacity Analysis Summary – Total Traffic – Year 2041

INTERSECTION	LEVEL OF SERVICE		
LANE GROUPS	AM PEAK HOUR	PM PEAK HOUR	SATURDAY PEAK
Founders Parkway / Front Street (Signalized)	B (18.0)	C (32.6)	D (41.9)
Eastbound Left	D (47.6)	E (62.3)	E (66.9)
Eastbound Right	A (1.2)	C (28.7)	B (18.8)
Westbound Left	D (42.4)	D (40.8)	C (33.8)
Westbound Through and Right	D (35.2)	D (39.2)	E (70.6)
Northbound Left	A (6.1)	C (22.8)	B (14.1)
Northbound Through and Right	B (18.4)	C (31.6)	D (52.6)
Southbound Left	C (20.9)	E (62.1)	D (45.5)
Southbound Right	A (1.6)	A (4.7)	B (14.1)
Founders Parkway / Allen Way (Signalized)	D (37.6)	D (51.2)	E (62.9)
Eastbound Left	F (85.1)	E (62.7)	F (138.7)
Eastbound Right	A (1.7)	A (4.7)	A (1.3)
Westbound Left	C (22.2)	D (51.1)	B (20.0)
Westbound Right	A (5.8)	A (5.2)	A (2.0)
Northbound Left	D (38.4)	E (58.8)	E (60.4)
Northbound Through and Right	F (93.2)	D (49.2)	F (138.1)
Southbound Left	D (40.7)	D (46.4)	D (40.7)
Southbound Right	B (14.5)	D (49.0)	F (106.6)
Founders Parkway / I-25 NB Ramps (Signalized)	B (17.8)	E (65.2)	E (68.7)
Eastbound Through and Right	A (5.7)	F (85.1)	E (62.1)
Westbound Through and Right	C (25.6)	E (58.9)	F (98.1)
Northbound Left	E (60.9)	F (84.4)	F (129.9)
Northbound Right	D (42.0)	F (131.6)	F (85.6)
E Allen Street / Allen Way (Signalized)	A (6.7)	B (12.6)	B (13.7)
Eastbound Left	B (16.7)	B (13.0)	B (13.9)
Eastbound Through and Right	A (7.4)	A (8.3)	A (7.2)
Westbound Left	C (33.1)	C (33.8)	D (35.3)
Westbound Right	A (1.0)	A (0.3)	A (0.6)
Northbound Left	A (4.8)	C (24.1)	C (30.3)
Northbound Right	A (0.0)	A (0.6)	A (9.8)
Southbound Left, Through and Right	A (5.3)	B (10.5)	B (11.2)
E Allen Street / Alexander Place (Two-Way Stop-Controlled)			
Eastbound Left, Through and Right	B	D	E
Westbound Left	B	E	F
Westbound Through and Right	A	B	B
Northbound Left	A	A	A
Southbound Left	A	A	A
E Allen Street / Front Street (All-Way Stop-Controlled)			
Eastbound Left	A	C	C
Eastbound Right	A	B	B
Northbound Left	A	B	B
Northbound Through	A	B	C
Southbound Through	A	B	C
Southbound Right	A	B	B
Alexander Place / Brewer Court (Two-Way Stop-Controlled)			
Eastbound Left, Through and Right	A	A	A
Westbound Left, Through and Right	A	A	A
Northbound Left, Through and Right	B	C	C
Southbound Left, Through and Right	A	A	A

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

Total Traffic Analysis Results Upon Development Build-Out

Table 7 illustrates how, by Year 2041 and upon development build-out, the signalized intersection of Founders Parkway with Front Street anticipates overall operations at LOS B during the morning peak traffic hour, LOS C during the afternoon peak traffic hour, and LOS D during the Saturday peak traffic hour. In order to achieve these LOS results, signal timing was slightly adjusted by taking away 0.5 seconds of green time from the east-west movements along Founders Parkway and adding it to the north-south movements along Front Street.

The signalized intersection of Founders Parkway with Allen Way projects overall operations at LOS D during the morning and afternoon peak traffic hours, and LOS E during the Saturday peak traffic hour. The LOS E operation anticipated during the Saturday peak traffic period continues to be attributed to approach volumes from all directions.

The signalized intersection of Founders Parkway with Interstate 25 northbound on/off ramps experiences intersection operations at LOS B during the morning peak traffic hour and LOS E during the afternoon and Saturday peak traffic hours. The LOS E operations anticipated during the afternoon and Saturday peak traffic periods are attributed to approach volumes from all directions.

The signalized intersection with E Allen Street with Allen Way predicts overall operations at LOS A during the morning peak traffic hour and LOS B during the afternoon and Saturday peak traffic hours.

The stop-controlled intersection of E Allen Street with Alexander Place expects turn movement operations at or better than LOS B during the morning and Saturday peak traffic hours and LOS D or better during the afternoon peak traffic hour. Exceptions still include the eastbound shared movement and westbound left turn movement which operate at LOS E and LOS F, respectively, during the afternoon and Saturday peak traffic hours. The LOS E and LOS F operations are attributed to the through traffic volume along E Allen Street and the stop-controlled nature of the intersection.

The stop-controlled intersection of E Allen Street with Front Street projects turning movement operations at LOS A during the morning peak traffic hour and LOS C or better during the afternoon and Saturday peak traffic hours.

The stop-controlled intersection of Alexander Place with Brewer Court anticipates turn movement operations at or better than LOS B during the morning peak traffic hour and LOS C or better during the afternoon and Saturday peak traffic hours.

It is to be noted that it is not uncommon for unsignalized movements to or from an arterial roadway, in urban areas, to operate with noticeable delays during peak traffic hours. It is, however, likely that turn movements will operate better than the results obtained with this HCM Two-Way Stop-Control (TWSC) level of service analysis would indicate, as the HCM analysis may not accurately account for the effect of vehicle platooning and gaps caused by upstream signals. Upstream signal controls along E Allen Street may create additional gaps in the traffic stream for turning movements at Alexander Place and will most likely provide mitigation to the LOS E and F operations projected during peak traffic hours.

Compared to the background traffic analysis, the traffic generated by the proposed development is not expected to significantly change the operations of the study intersections.

Queue Length Analysis – Founders Parkway & Allen Way

Queue lengths for the Founders Parkway and Allen Way intersection were analyzed using Year 2041 total traffic conditions. The analysis yields estimate of 95th percentile queue lengths, which have only a five percent probability of being exceeded during the analysis time period. Queue lengths were modeled and are included with the Synchro worksheets in Appendix C.

In review of the capacity worksheets against estimated storage lengths at the intersection, significant vehicle queuing at the Founders Parkway and Allen Way intersection was indicated for various turning movements during all analyzed scenarios. During the morning peak traffic period, the northbound through and right turning movement is shown to exceed the existing storage capacity. During the afternoon peak traffic period, the northbound left and southbound right turning movements are projected to exceed existing storage capacities. During the Saturday peak traffic period, the northbound shared through and right turn movement and the southbound right turning movement are shown to exceed capacity. However, compared to Year 2041 background traffic conditions, the traffic generated by the proposed development is not shown to significantly impact vehicle queuing projections for the study intersections.

When updating the cycle length at the Founders Parkway and Allen Way intersection from 120 seconds to 100 seconds (consistent with the Founders Parkway intersection of Front Street and I-25 on/off ramps), turn lane storage lengths are expected to be able to accommodate 95th percentile queues within blocking adjacent intersections or negatively impacting operations of Founders Parkway.

VII. Additional Analysis

Per Town review comments, all-way stop-control and roundabout-control was investigated for the intersection of E Allen Street and Alexander Place.

Peak Hour Intersection Levels of Service

As with previous analysis performed, the operations of the study intersections were analyzed under projected total traffic conditions using the SYNCHRO computer program. Total traffic level of service analysis results for the E Allen Street and Alexander Place intersection, with applied all-way stop-control and roundabout-control conditions for Year 2041, are summarized in Table 8.

Definitions of levels of service are given in Appendix C. Intersection capacity worksheets for this additional analysis are provided in Appendix D.

Table 8 – Additional Intersection Capacity Analysis Summary – Total Traffic – Year 2041
E Allen Street and Alexander Place

INTERSECTION	LEVEL OF SERVICE		
LANE GROUPS	AM PEAK HOUR	PM PEAK HOUR	SATURDAY PEAK
E Allen Street / Alexander Place (All-Way Stop-Controlled)			
Eastbound Left, Through and Right	A	C	C
Westbound Left	A	B	C
Westbound Through and Right	A	B	B
Northbound Left	A	B	B
Northbound Through	A	B	C
Northbound Right	A	B	B
Southbound Left	A	B	B
Southbound Through and Right	A	B	C
E Allen Street / Alexander Place (Roundabout)			
Eastbound Left, Through and Right	A	A	A
Westbound Left, Through and Right	A	A	A
Northbound Left, Through and Right	A	A	A
Southbound Left, Through and Right	A	A	A

Key: Stop-Controlled Intersection: Level of Service
Roundabout Intersection: Level of Service

Total Traffic Analysis Results Upon Development Build-Out – Additional Analysis

Table 8 illustrates how, by Year 2041, upon development build-out, and with consideration of all-way stop-controlled conditions, the intersection of E Allen Street and Alexander Place projects turning movement operations at or better than LOS C during either peak traffic hour.

Under roundabout-controlled conditions, the E Allen Street and Alexander Place intersection anticipates turning movement operations at LOS A during the morning, afternoon, and Saturday peak traffic hours.

Results shown in Table 8 indicate that the implementation of all-way stop-control or a roundabout at the intersection of E Allen Street with Alexander Place is expected to provide long-term intersection operations with acceptable levels of service. Therefore, in order to consider the potential benefits of one alternative over the other, additional factors should be discussed.

It is to be noted that construction of a roundabout at the E Allen Street with Alexander Place intersection would include greater impacts to the traveling public when compared to the simple installation of additional stop signs and associated pavement markings that are required for an all-way stop-control condition. The existing intersection would need to be removed in its entirety in order to install a roundabout. Roundabout construction activities may also involve costly roadway detours as well as other additional, required traffic control activities in order to maintain safe travel for the public during demolition and reconstruction of the intersection and roadway approaches. In contrast, the implementation of all-way stop-control can often times be completed outside of the traveled way or be completed with brief traffic lane closures during non-peak traffic periods. Reconstruction of the intersection has potential to greatly disrupt existing traffic traveling to and from the home improvement store in the area as well as the surrounding businesses and residences served by E Allen Street.

An additional item for consideration is that in order to accommodate a roundabout at this location, a larger, inscribed circle diameter may be required in order to accommodate the required design vehicle resulting in the loss of acreage on all four corners of the E Allen Street and Alexander Place intersection. Appropriate inclusion of new pedestrian crosswalks would be necessary and include relocation of existing sidewalks that may require additional right-of-way. Collectively, these site constraints could be expected to result in a project that includes more impacts when compared to the all-way stop-control condition.

Based on the above considerations, site-specific factors, construction impacts to the traveling public, and existing businesses, the installation of a roundabout at the intersection of E Allen Street with Alexander Place is not recommended as a traffic mitigation solution.

VIII. Conclusion

This traffic impact study addressed the capacity, geometric, and control requirements associated with the development entitled Alexander Way Residential. This proposed residential development consists of single-family and duplex residential land uses. The development is located near the northeast corner of Alexander Place and Brewer Court in Castle Rock, Colorado.

The study area examined in this analysis encompassed the E Allen Street intersections with Alexander Place, Allen Way, and Front Street, the Founders Parkway intersections with Allen Way, Front Street, and Interstate 25 northbound on/off ramps, and the Alexander Place with Brewer Court intersection.

Analysis was conducted for critical AM Peak Hour and PM Peak Hour traffic operations for existing traffic conditions, Year 2023 and Year 2041 background traffic conditions, and Year 2023 and Year 2041 total traffic conditions.

Analysis of existing traffic conditions indicates that all signalized intersections within the study area operate at or better than LOS C during the morning, afternoon, and Saturday peak traffic hours. Similarly, all stop-controlled intersections within the study area show turn movement operations at or better than LOS C during the morning, afternoon, and Saturday peak traffic hours.

Without the proposed development, Year 2023 background operational analysis shows that all signalized intersections within the study area operate at or better than LOS C during the morning, afternoon, and Saturday peak traffic hours. Similarly, all stop-controlled intersections within the study area continue to show turn movement operations at or better than LOS C during the morning, afternoon, and Saturday peak traffic hours.

By Year 2041 and without the proposed development, operational analysis shows that all signalized intersections within the study area operate at or better than LOS D during the morning, afternoon, and Saturday peak traffic hours. Exceptions include the Founders Parkway intersections with Allen Way and Interstate 25 northbound on/off ramps, which operate at LOS E during their respective peak traffic hour. The LOS E operations anticipated during the afternoon and Saturday peak traffic periods are attributed to approach volumes from all directions. All stop-controlled intersections within the study area anticipate turn movement operations at or better than LOS C during the morning, afternoon, and Saturday peak traffic hours. Exceptions would include the eastbound shared movement and westbound left turn movement at E Allen Street and Alexander Place, which operate at LOS E and LOS F, respectively, during the Saturday peak traffic hour. The LOS E and LOS F operations are attributed to the through traffic volume along E Allen Street and the stop-controlled nature of the intersection.

It is to be noted that it is not uncommon for unsignalized movements to or from an arterial roadway, in urban areas, to operate with noticeable delays during peak traffic hours. It is, however, likely that turn movements will operate better than the results obtained with this HCM Two Way Stop Control (TWSC) level of service analysis would indicate, as the HCM analysis may not accurately account for the effect of vehicle platooning and gaps caused by upstream signals. Upstream signal controls will tend to create additional gaps in the traffic stream for turning movements at Alexander Place and will most likely provide mitigation to the LOS E and F operations projected during the Saturday peak traffic hour.

Analysis of future traffic conditions indicates that the addition of site-generated traffic is expected to create minimal negative impact to traffic operations for the existing and surrounding roadway system upon roadway and intersection control improvements assumed within this analysis. With all conservative assumptions defined in this analysis, the study intersections are projected to operate at future levels of service comparable to Year 2041 background traffic conditions. When comparing level of service and vehicle queuing results for Year 2041 background conditions to Year 2041 total traffic conditions, estimated site trips from the proposed development are not expected to add any significant delay to the study intersections.

It is our professional opinion that the proposed site-generated traffic resulting from Alexander Way Residential is expected to create no negative impact to traffic operations for the surrounding roadway network. Analysis of site-generated traffic concludes that proposed development traffic volume is considered minor.

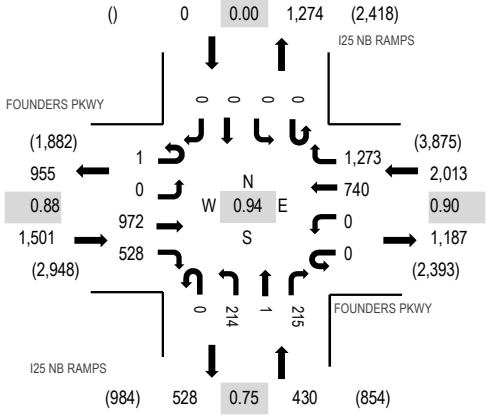
APPENDIX A

Traffic Count Data
Signal Timing Information

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

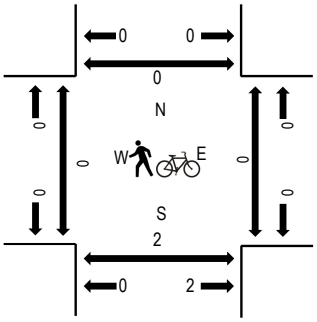
Location: 1 I25 NB RAMPS & FOUNDERS PKWY AM
Date: Thursday, July 22, 2021
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



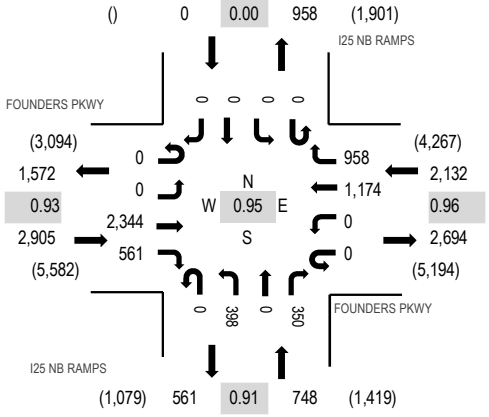
Traffic Counts

Interval Start Time	FOUNDERS PKWY Eastbound				FOUNDERS PKWY Westbound				I25 NB RAMPS Northbound				I25 NB RAMPS Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	177	121	0	0	154	295	0	40	0	41	0	0	0	0	828	3,753	0	0	0	0
7:15 AM	0	0	198	130	0	0	161	298	0	33	0	47	0	0	0	0	867	3,828	0	0	0	0
7:30 AM	0	0	204	145	0	0	187	371	0	62	0	44	0	0	0	0	1,013	3,944	0	0	0	0
7:45 AM	0	0	274	138	0	0	197	303	0	63	0	70	0	0	0	0	1,045	3,887	0	0	1	0
8:00 AM	0	0	224	114	0	0	184	280	0	49	1	51	0	0	0	0	903	3,924	0	0	0	0
8:15 AM	1	0	270	131	0	0	172	319	0	40	0	50	0	0	0	0	983		0	0	0	0
8:30 AM	0	0	272	104	0	0	181	287	0	51	0	61	0	0	0	0	956		0	0	0	0
8:45 AM	0	0	344	101	0	0	222	264	0	85	0	66	0	0	0	0	1,082		0	0	0	0
Count Total	1	0	1,963	984	0	0	1,458	2,417	0	423	1	430	0	0	0	0	7,677		0	0	1	0
Peak Hour	1	0	972	528	0	0	740	1,273	0	214	1	215	0	0	0	0	3,944		0	0	1	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

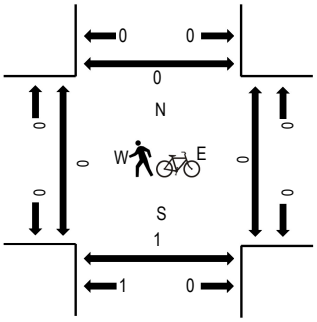
Location: 1 I25 NB RAMPS & FOUNDERS PKWY PM
Date: Thursday, July 22, 2021
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



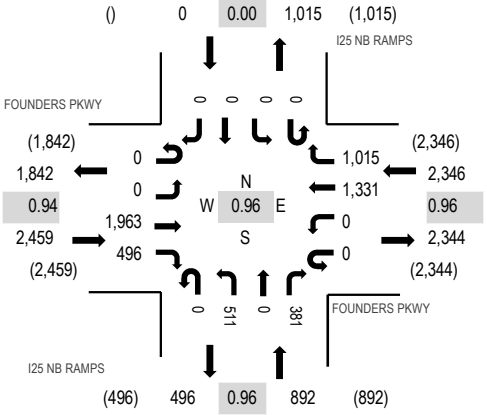
Traffic Counts

Interval Start Time	FOUNDERS PKWY Eastbound				FOUNDERS PKWY Westbound				I25 NB RAMPS Northbound				I25 NB RAMPS Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	518	133	0	0	295	214	0	88	0	81	0	0	0	0	1,329	5,597	0	0	0	0
4:15 PM	0	0	577	136	0	0	301	259	0	79	0	80	0	0	0	0	1,432	5,691	0	0	0	0
4:30 PM	0	0	578	145	0	0	304	246	0	97	0	73	0	0	0	0	1,443	5,785	0	0	0	0
4:45 PM	0	0	571	121	0	0	281	224	0	107	0	89	0	0	0	0	1,393	5,699	0	0	0	0
5:00 PM	0	0	559	151	0	0	296	240	0	83	0	94	0	0	0	0	1,423	5,671	0	0	1	0
5:15 PM	0	0	636	144	0	0	293	248	0	111	0	94	0	0	0	0	1,526		0	0	0	0
5:30 PM	0	0	562	130	0	0	295	226	0	60	0	84	0	0	0	0	1,357		0	0	0	0
5:45 PM	0	0	502	119	0	0	301	244	0	103	0	96	0	0	0	0	1,365		0	0	0	0
Count Total	0	0	4,503	1,079	0	0	2,366	1,901	0	728	0	691	0	0	0	0	11,268		0	0	1	0
Peak Hour	0	0	2,344	561	0	0	1,174	958	0	398	0	350	0	0	0	0	5,785		0	0	1	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

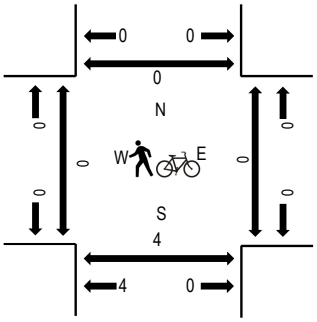
Location: 1 I25 NB RAMPS & FOUNDERS PKWY Noon
Date: Saturday, July 24, 2021
Peak Hour: 11:45 AM - 12:45 PM
Peak 15-Minutes: 12:15 PM - 12:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



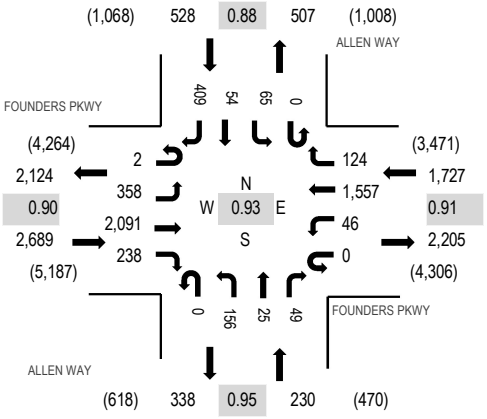
Traffic Counts

Interval Start Time	FOUNDERS PKWY Eastbound				FOUNDERS PKWY Westbound				I25 NB RAMPS Northbound				I25 NB RAMPS Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
11:45 AM	0	0	444	122	0	0	349	257	0	135	0	97	0	0	0	0	1,404	5,697	0	0	0	0
12:00 PM	0	0	476	122	0	0	324	230	0	120	0	95	0	0	0	0	1,367		0	0	2	0
12:15 PM	0	0	523	129	0	0	337	277	0	119	0	96	0	0	0	0	1,481		0	0	0	0
12:30 PM	0	0	520	123	0	0	321	251	0	137	0	93	0	0	0	0	1,445		0	0	0	0
Count Total	0	0	1,963	496	0	0	1,331	1,015	0	511	0	381	0	0	0	0	5,697		0	0	2	0
Peak Hour	0	0	1,963	496	0	0	1,331	1,015	0	511	0	381	0	0	0	0	5,697		0	0	2	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

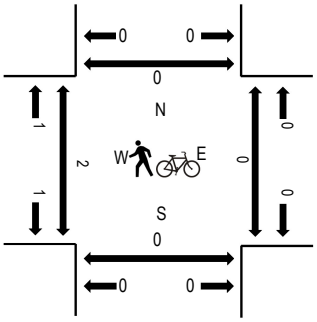
Location: 2 ALLEN WAY & FOUNDERS PKWY PM
Date: Thursday, July 22, 2021
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



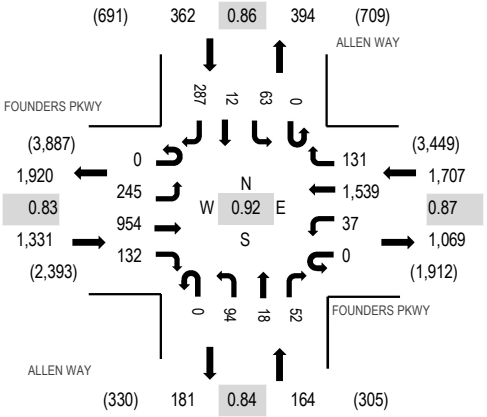
Traffic Counts

Interval Start Time	FOUNDERS PKWY Eastbound				FOUNDERS PKWY Westbound				ALLEN WAY Northbound				ALLEN WAY Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	93	474	44	0	19	364	20	0	36	7	14	0	18	11	125	1,225	5,057	1	0	0	0
4:15 PM	0	75	514	35	0	16	439	27	0	43	10	12	1	15	12	90	1,289	5,075	0	0	1	0
4:30 PM	1	92	505	57	0	15	420	22	0	37	9	17	0	15	11	107	1,308	5,174	0	0	0	0
4:45 PM	1	82	509	56	0	6	372	40	0	45	4	14	0	14	10	82	1,235	5,120	0	0	0	0
5:00 PM	0	86	498	53	0	12	355	32	0	35	8	5	0	18	15	126	1,243	5,139	1	0	0	0
5:15 PM	0	98	579	72	0	13	410	30	0	39	4	13	0	18	18	94	1,388		0	0	0	0
5:30 PM	0	99	505	44	0	19	359	35	0	36	5	9	0	24	12	107	1,254		0	0	0	0
5:45 PM	0	90	470	55	0	9	402	35	0	38	4	26	0	20	4	101	1,254		0	1	0	0
Count Total	2	715	4,054	416	0	109	3,121	241	0	309	51	110	1	142	93	832	10,196		2	1	1	0
Peak Hour	2	358	2,091	238	0	46	1,557	124	0	156	25	49	0	65	54	409	5,174		1	0	0	0

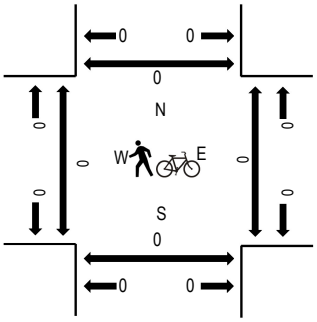
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 ALLEN WAY & FOUNDERS PKWY AM
Date: Thursday, July 22, 2021
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

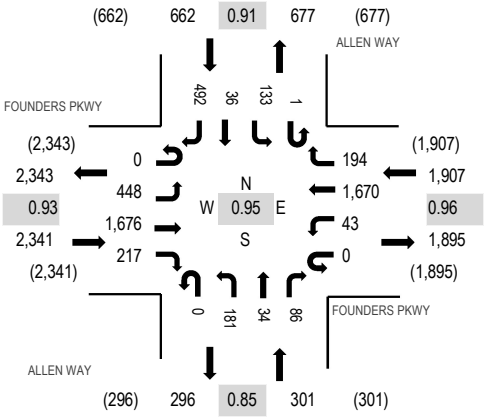
Traffic Counts

Interval Start Time	FOUNDERS PKWY Eastbound				FOUNDERS PKWY Westbound				ALLEN WAY Northbound				ALLEN WAY Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	50	148	19	0	1	375	29	0	17	3	11	0	9	2	64	728	3,274	0	0	0	0
7:15 AM	0	41	177	31	0	8	382	25	0	21	2	6	0	6	4	59	762	3,360	0	0	0	0
7:30 AM	0	45	175	28	0	7	465	38	0	29	5	10	0	11	3	65	881	3,475	0	0	0	0
7:45 AM	0	58	258	32	0	10	384	18	0	23	1	13	0	19	4	83	903	3,499	1	0	0	0
8:00 AM	0	51	191	30	0	7	397	29	0	19	8	4	0	15	1	62	814	3,564	0	0	0	0
8:15 AM	0	63	236	28	0	10	380	24	0	17	1	17	0	13	5	83	877		0	0	0	0
8:30 AM	0	56	236	37	0	7	396	44	0	30	4	15	0	17	4	59	905		0	0	0	0
8:45 AM	0	75	291	37	0	13	366	34	0	28	5	16	0	18	2	83	968		0	0	0	0
Count Total	0	439	1,712	242	0	63	3,145	241	0	184	29	92	0	108	25	558	6,838		1	0	0	0
Peak Hour	0	245	954	132	0	37	1,539	131	0	94	18	52	0	63	12	287	3,564		0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

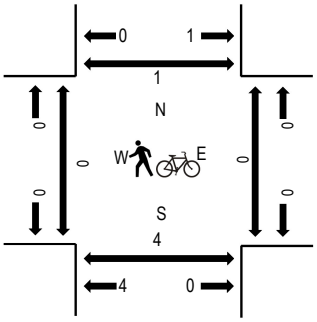
Location: 2 ALLEN WAY & FOUNDERS PKWY Noon
Date: Saturday, July 24, 2021
Peak Hour: 11:45 AM - 12:45 PM
Peak 15-Minutes: 12:15 PM - 12:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



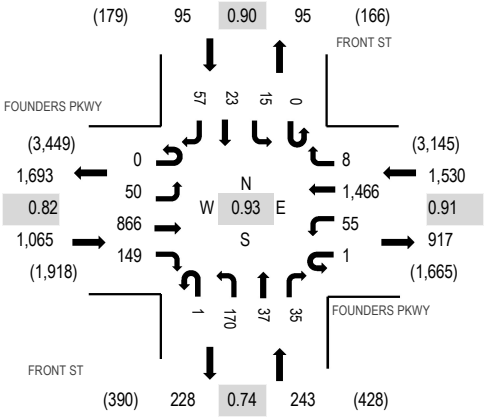
Traffic Counts

Interval Start Time	FOUNDERS PKWY Eastbound				FOUNDERS PKWY Westbound				ALLEN WAY Northbound				ALLEN WAY Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
11:45 AM	0	101	397	49	0	9	431	50	0	47	17	25	0	39	9	133	1,307	5,211	0	0	0	0
12:00 PM	0	103	396	47	0	15	404	46	0	46	5	19	0	31	8	111	1,231		0	0	2	0
12:15 PM	0	117	454	56	0	10	432	57	0	37	9	25	1	34	8	128	1,368		0	0	0	0
12:30 PM	0	127	429	65	0	9	403	41	0	51	3	17	0	29	11	120	1,305		0	0	0	1
Count Total	0	448	1,676	217	0	43	1,670	194	0	181	34	86	1	133	36	492	5,211		0	0	2	1
Peak Hour	0	448	1,676	217	0	43	1,670	194	0	181	34	86	1	133	36	492	5,211		0	0	2	1

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

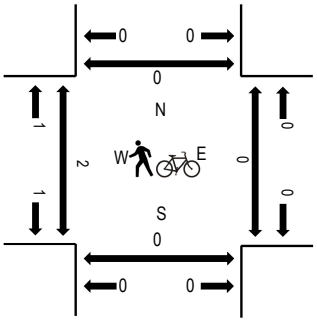
Location: 3 FRONT ST & FOUNDERS PKWY AM
Date: Thursday, July 22, 2021
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



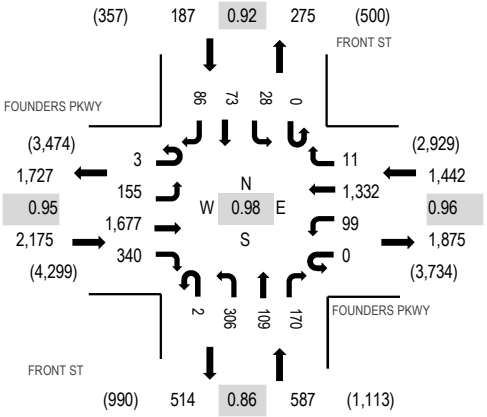
Traffic Counts

Interval Start Time	FOUNDERS PKWY Eastbound				FOUNDERS PKWY Westbound				FRONT ST Northbound				FRONT ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	1	3	145	22	0	3	342	1	0	29	5	1	0	0	4	14	570	2,737	0	0	0	0
7:15 AM	0	11	158	20	0	7	391	7	0	37	11	7	0	3	4	15	671	2,827	0	0	0	0
7:30 AM	0	12	162	23	0	13	436	0	0	45	3	6	0	1	7	8	716	2,869	0	0	0	0
7:45 AM	0	11	249	36	0	15	399	1	0	22	6	13	0	3	8	17	780	2,923	0	0	0	0
8:00 AM	0	12	168	30	0	9	360	0	0	38	9	6	0	2	7	19	660	2,933	1	0	0	0
8:15 AM	0	11	222	37	0	10	368	3	0	24	9	8	0	3	6	12	713		0	0	0	0
8:30 AM	0	7	211	43	0	18	383	2	1	59	9	13	0	5	7	12	770		1	0	0	0
8:45 AM	0	20	265	39	1	18	355	3	0	49	10	8	0	5	3	14	790		0	0	0	0
Count Total	1	87	1,580	250	1	93	3,034	17	1	303	62	62	0	22	46	111	5,670		2	0	0	0
Peak Hour	0	50	866	149	1	55	1,466	8	1	170	37	35	0	15	23	57	2,933		2	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

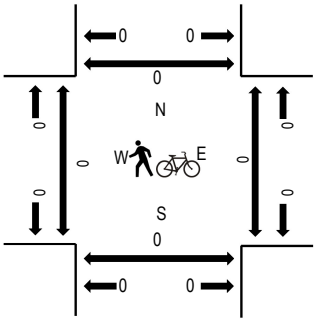
Location: 3 FRONT ST & FOUNDERS PKWY PM
Date: Thursday, July 22, 2021
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:30 PM - 05:45 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



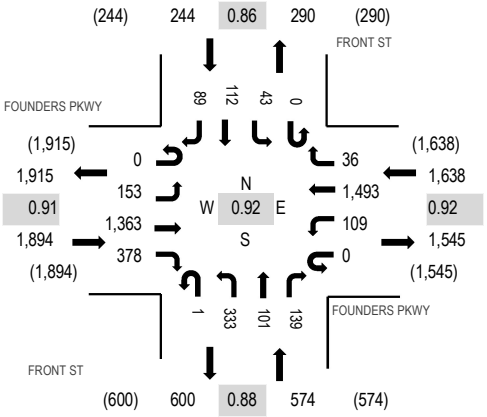
Traffic Counts

Interval Start Time	FOUNDERS PKWY Eastbound				FOUNDERS PKWY Westbound				FRONT ST Northbound				FRONT ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	2	33	399	88	0	14	334	9	0	67	19	30	0	8	17	21	1,041	4,307	0	0	0	0
4:15 PM	0	28	425	76	0	24	366	6	1	77	26	40	0	8	16	17	1,110	4,361	1	0	0	0
4:30 PM	0	25	436	90	0	25	364	3	0	74	24	50	0	6	19	10	1,126	4,352	0	0	0	0
4:45 PM	1	31	421	69	0	21	317	4	0	75	17	26	0	10	16	22	1,030	4,343	0	0	0	0
5:00 PM	3	34	422	87	0	23	362	1	1	68	19	36	0	5	16	18	1,095	4,391	0	0	0	0
5:15 PM	0	47	450	78	0	24	296	2	0	80	32	41	0	7	23	21	1,101		0	0	0	0
5:30 PM	0	36	419	96	0	25	348	3	0	73	23	44	0	8	17	25	1,117		0	0	0	0
5:45 PM	0	38	386	79	0	27	326	5	1	85	35	49	0	8	17	22	1,078		0	0	0	0
Count Total	6	272	3,358	663	0	183	2,713	33	3	599	195	316	0	60	141	156	8,698		1	0	0	0
Peak Hour	3	155	1,677	340	0	99	1,332	11	2	306	109	170	0	28	73	86	4,391		0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

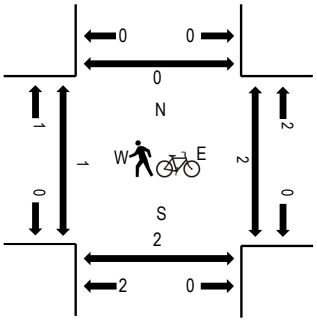
Location: 3 FRONT ST & FOUNDERS PKWY Noon
Date: Saturday, July 24, 2021
Peak Hour: 11:45 AM - 12:45 PM
Peak 15-Minutes: 12:15 PM - 12:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



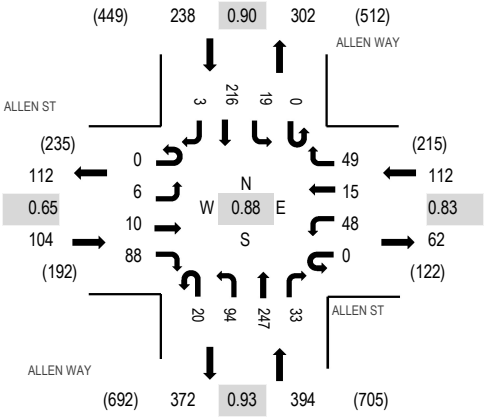
Traffic Counts

Interval Start Time	FOUNDERS PKWY Eastbound				FOUNDERS PKWY Westbound				FRONT ST Northbound				FRONT ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
11:45 AM	0	42	330	102	0	40	385	8	1	86	18	41	0	9	31	15	1,108	4,350	0	0	0	0
12:00 PM	0	38	313	80	0	32	340	8	0	78	28	32	0	13	24	27	1,013		1	0	0	0
12:15 PM	0	34	384	103	0	22	409	13	0	92	34	38	0	5	25	24	1,183		0	1	0	0
12:30 PM	0	39	336	93	0	15	359	7	0	77	21	28	0	16	32	23	1,046		0	0	0	0
Count Total	0	153	1,363	378	0	109	1,493	36	1	333	101	139	0	43	112	89	4,350		1	1	0	0
Peak Hour	0	153	1,363	378	0	109	1,493	36	1	333	101	139	0	43	112	89	4,350		1	1	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

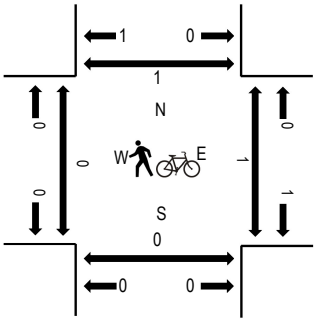
Location: 4 ALLEN WAY & ALLEN ST AM
Date: Thursday, July 22, 2021
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



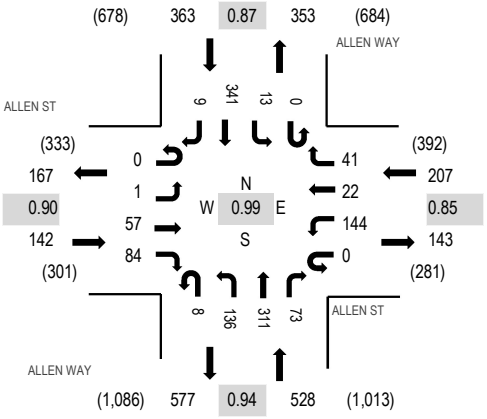
Traffic Counts

Interval Start Time	ALLEN ST Eastbound				ALLEN ST Westbound				ALLEN WAY Northbound				ALLEN WAY Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	1	1	16	0	9	3	7	1	24	41	6	0	1	49	3	162	713	0	0	0	0
7:15 AM	0	0	1	17	0	6	7	11	4	14	40	12	0	2	47	2	163	741	0	0	0	0
7:30 AM	0	2	1	23	0	12	9	13	3	27	42	15	0	1	37	2	187	789	0	0	0	0
7:45 AM	0	1	6	19	0	10	8	8	1	24	44	13	0	1	66	0	201	808	1	0	0	0
8:00 AM	0	0	1	16	0	10	5	6	6	16	65	11	0	5	49	0	190	848	0	0	0	0
8:15 AM	0	0	2	21	0	16	3	16	4	22	58	7	0	5	57	0	211		0	0	0	0
8:30 AM	0	1	1	22	0	13	1	11	7	24	59	9	0	3	55	0	206		0	1	0	0
8:45 AM	0	5	6	29	0	9	6	16	3	32	65	6	0	6	55	3	241		0	0	0	0
Count Total	0	10	19	163	0	85	42	88	29	183	414	79	0	24	415	10	1,561		1	1	0	0
Peak Hour	0	6	10	88	0	48	15	49	20	94	247	33	0	19	216	3	848		0	1	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

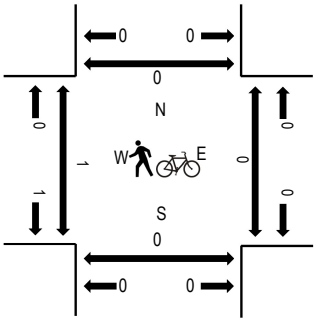
Location: 4 ALLEN WAY & ALLEN ST PM
Date: Thursday, July 22, 2021
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:30 PM - 05:45 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



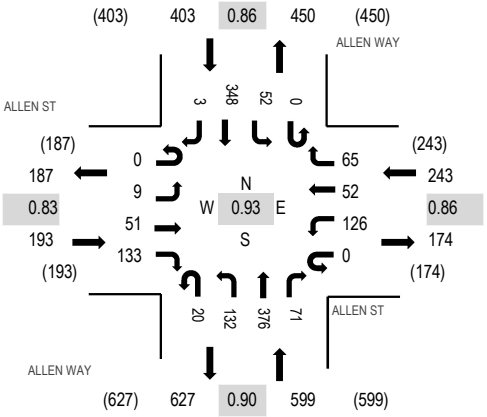
Traffic Counts

Interval Start Time	ALLEN ST Eastbound				ALLEN ST Westbound				ALLEN WAY Northbound				ALLEN WAY Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	3	15	26	0	43	9	9	4	32	74	12	0	10	87	0	324	1,144	0	0	1	0
4:15 PM	0	3	13	18	0	28	6	11	4	25	75	11	0	3	70	2	269	1,132	0	0	1	0
4:30 PM	0	0	21	17	0	20	6	9	3	41	68	13	0	2	85	1	286	1,175	0	0	0	0
4:45 PM	0	0	21	22	0	28	7	9	0	37	70	16	0	1	54	0	265	1,203	0	0	0	0
5:00 PM	0	0	13	24	0	37	5	5	1	31	82	10	0	3	97	4	312	1,240	1	0	0	0
5:15 PM	0	1	17	21	0	34	5	13	5	30	82	18	0	2	80	4	312		0	0	0	0
5:30 PM	0	0	10	17	0	32	4	11	2	35	77	27	0	4	94	1	314		0	0	0	0
5:45 PM	0	0	17	22	0	41	8	12	0	40	70	18	0	4	70	0	302		0	0	0	0
Count Total	0	7	127	167	0	263	50	79	19	271	598	125	0	29	637	12	2,384		1	0	2	0
Peak Hour	0	1	57	84	0	144	22	41	8	136	311	73	0	13	341	9	1,240		1	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

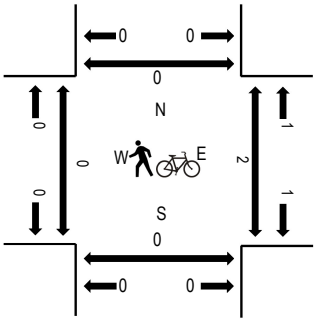
Location: 4 ALLEN WAY & ALLEN ST Noon
Date: Saturday, July 24, 2021
Peak Hour: 11:45 AM - 12:45 PM
Peak 15-Minutes: 12:15 PM - 12:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



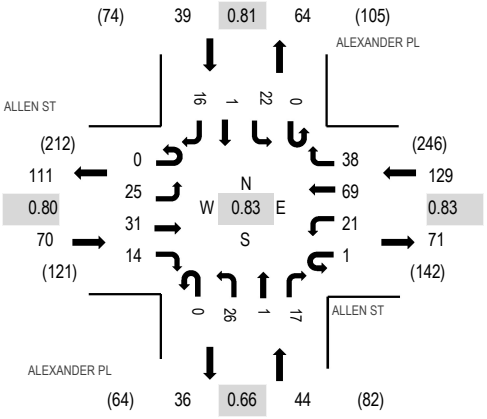
Traffic Counts

Interval Start Time	ALLEN ST Eastbound				ALLEN ST Westbound				ALLEN WAY Northbound				ALLEN WAY Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
11:45 AM	0	4	10	29	0	30	9	18	4	34	84	15	0	15	102	0	354	1,438	0	0	0	0
12:00 PM	0	2	20	36	0	36	15	14	4	28	85	17	0	14	69	1	341		0	0	0	0
12:15 PM	0	2	11	37	0	35	20	16	4	32	108	23	0	11	87	0	386		0	0	0	0
12:30 PM	0	1	10	31	0	25	8	17	8	38	99	16	0	12	90	2	357		0	2	0	0
Count Total	0	9	51	133	0	126	52	65	20	132	376	71	0	52	348	3	1,438		0	2	0	0
Peak Hour	0	9	51	133	0	126	52	65	20	132	376	71	0	52	348	3	1,438		0	2	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

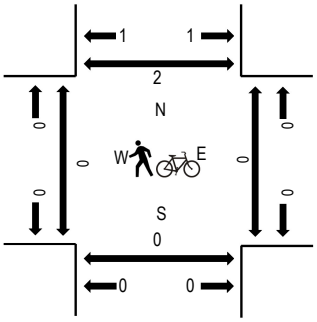
Location: 5 ALEXANDER PL & ALLEN ST AM
Date: Thursday, July 22, 2021
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



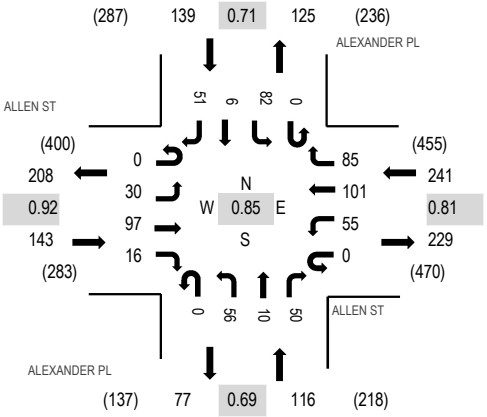
Traffic Counts

Interval Start Time	ALLEN ST Eastbound				ALLEN ST Westbound				ALEXANDER PL Northbound				ALEXANDER PL Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	4	0	1	0	0	13	4	0	5	0	4	0	5	0	1	37	241	0	0	0	0
7:15 AM	0	7	7	3	0	3	23	7	0	4	0	3	0	7	1	0	65	262	0	0	0	1
7:30 AM	0	9	3	4	0	1	23	10	0	3	0	3	0	4	0	6	66	282	0	0	0	0
7:45 AM	0	8	9	5	0	3	14	12	0	7	0	3	0	8	0	4	73	277	0	0	0	1
8:00 AM	0	5	8	2	0	6	13	9	0	5	0	4	0	3	1	2	58	282	0	0	0	1
8:15 AM	0	3	11	3	1	11	19	7	0	11	1	7	0	7	0	4	85		0	0	0	0
8:30 AM	1	4	6	1	0	9	15	3	0	4	0	8	0	7	1	2	61		0	0	0	0
8:45 AM	0	1	13	3	0	5	24	11	0	6	0	4	0	7	1	3	78		0	0	0	0
Count Total	1	41	57	22	1	38	144	63	0	45	1	36	0	48	4	22	523		0	0	0	3
Peak Hour	0	25	31	14	1	21	69	38	0	26	1	17	0	22	1	16	282		0	0	0	2

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

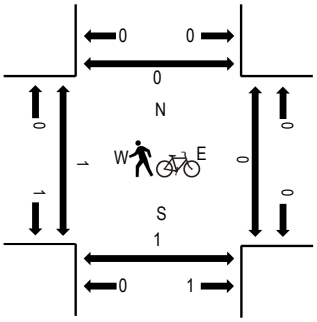
Location: 5 ALEXANDER PL & ALLEN ST PM
Date: Thursday, July 22, 2021
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:45 PM - 06:00 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



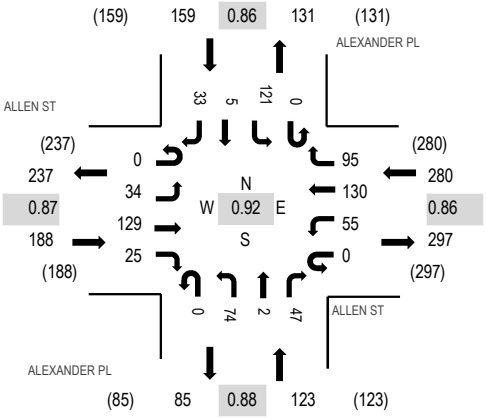
Traffic Counts

Interval Start Time	ALLEN ST Eastbound				ALLEN ST Westbound				ALEXANDER PL Northbound				ALEXANDER PL Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	4	34	1	0	12	28	22	0	14	0	10	0	34	0	18	177	604	1	0	0	1
4:15 PM	0	8	18	3	0	6	21	22	0	12	0	9	0	19	0	11	129	568	0	0	0	0
4:30 PM	0	7	24	6	0	11	16	14	0	10	2	11	0	26	3	7	137	594	1	0	2	0
4:45 PM	0	14	20	1	0	15	29	18	0	16	0	18	0	18	2	10	161	611	0	0	0	0
5:00 PM	0	7	23	2	0	9	15	20	0	13	1	13	0	18	1	19	141	639	0	0	0	0
5:15 PM	0	7	28	4	0	13	28	20	0	10	4	10	0	18	1	12	155		0	0	0	0
5:30 PM	0	7	24	5	0	13	29	20	0	9	1	13	0	22	0	11	154		0	0	0	0
5:45 PM	0	9	22	5	0	20	29	25	0	24	4	14	0	24	4	9	189		1	0	1	0
Count Total	0	63	193	27	0	99	195	161	0	108	12	98	0	179	11	97	1,243		3	0	3	1
Peak Hour	0	30	97	16	0	55	101	85	0	56	10	50	0	82	6	51	639		1	0	1	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

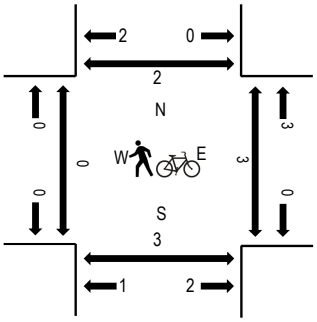
Location: 5 ALEXANDER PL & ALLEN ST Noon
Date: Saturday, July 24, 2021
Peak Hour: 11:45 AM - 12:45 PM
Peak 15-Minutes: 12:15 PM - 12:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



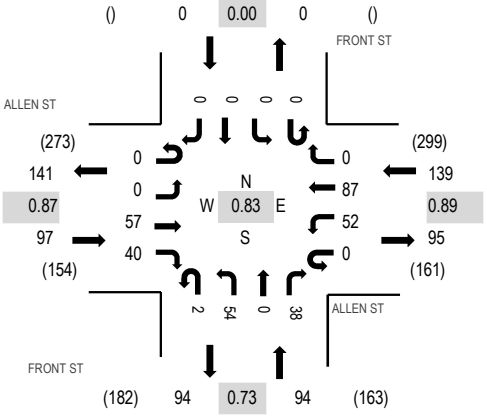
Traffic Counts

Interval Start Time	ALLEN ST Eastbound				ALLEN ST Westbound				ALEXANDER PL Northbound				ALEXANDER PL Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
11:45 AM	0	9	32	5	0	10	32	17	0	15	0	13	0	27	0	6	166	750	0	0	0	0
12:00 PM	0	8	41	5	0	15	32	25	0	20	0	9	0	27	2	10	194		0	2	0	2
12:15 PM	0	9	28	9	0	13	39	29	0	22	1	12	0	28	3	10	203		0	0	3	0
12:30 PM	0	8	28	6	0	17	27	24	0	17	1	13	0	39	0	7	187		0	1	0	0
Count Total	0	34	129	25	0	55	130	95	0	74	2	47	0	121	5	33	750		0	3	3	2
Peak Hour	0	34	129	25	0	55	130	95	0	74	2	47	0	121	5	33	750		0	3	3	2

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

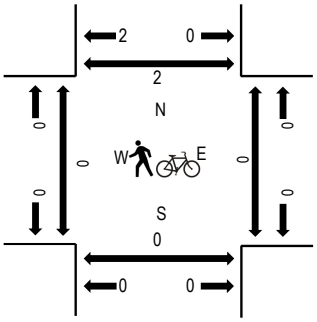
Location: 6 FRONT ST & ALLEN ST AM
Date: Thursday, July 22, 2021
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



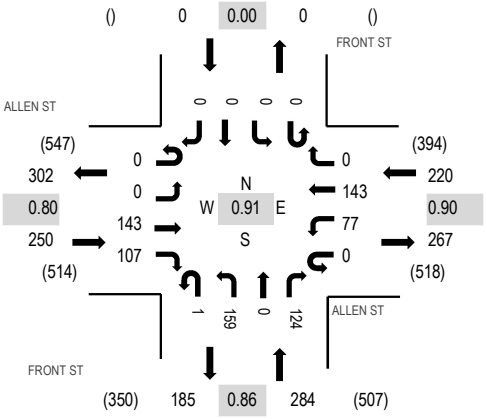
Traffic Counts

Interval Start Time	ALLEN ST Eastbound				ALLEN ST Westbound				FRONT ST Northbound				FRONT ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	5	4	0	13	12	0	0	6	0	3	0	0	0	0	43	286	0	0	0	0
7:15 AM	0	0	9	7	0	15	24	0	0	14	0	12	0	0	0	0	81	317	0	0	0	0
7:30 AM	0	0	8	5	0	13	35	0	0	10	0	6	0	0	0	0	77	321	0	0	0	0
7:45 AM	0	0	15	4	0	27	21	0	0	10	0	8	0	0	0	0	85	315	0	0	0	0
8:00 AM	0	0	10	7	0	17	19	0	1	11	0	9	0	0	0	0	74	330	0	0	0	0
8:15 AM	0	0	14	11	0	14	22	0	0	18	0	6	0	0	0	0	85		0	0	0	0
8:30 AM	0	0	14	13	0	9	18	0	0	8	0	9	0	0	0	0	71		0	0	0	1
8:45 AM	0	0	19	9	0	12	28	0	1	17	0	14	0	0	0	0	100		0	0	0	1
Count Total	0	0	94	60	0	120	179	0	2	94	0	67	0	0	0	0	616		0	0	0	2
Peak Hour	0	0	57	40	0	52	87	0	2	54	0	38	0	0	0	0	330		0	0	0	2

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

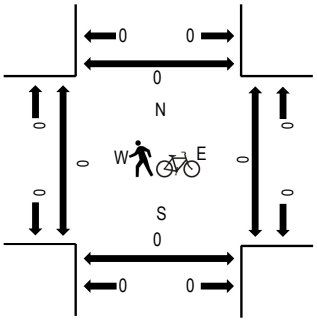
Location: 6 FRONT ST & ALLEN ST PM
Date: Thursday, July 22, 2021
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:45 PM - 06:00 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



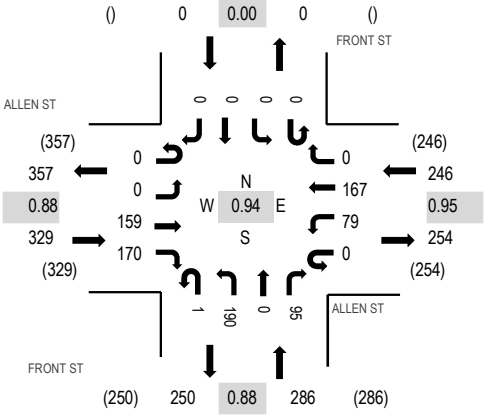
Traffic Counts

Interval Start Time	ALLEN ST Eastbound				ALLEN ST Westbound				FRONT ST Northbound				FRONT ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	48	34	0	16	30	0	0	41	0	21	0	0	0	0	190	661	0	0	0	0
4:15 PM	0	0	34	19	0	16	18	0	0	31	0	26	0	0	0	0	144	629	0	0	0	2
4:30 PM	1	0	35	26	0	10	27	0	0	28	0	25	0	0	0	0	152	683	0	0	0	0
4:45 PM	0	0	36	31	0	13	44	0	0	25	0	26	0	0	0	0	175	722	0	0	0	0
5:00 PM	0	0	30	25	0	17	26	0	0	28	0	32	0	0	0	0	158	754	0	0	0	0
5:15 PM	0	0	35	28	0	21	38	0	0	36	0	40	0	0	0	0	198		0	0	0	0
5:30 PM	0	0	36	29	0	22	39	0	0	35	0	30	0	0	0	0	191		0	0	0	0
5:45 PM	0	0	42	25	0	17	40	0	1	60	0	22	0	0	0	0	207		0	0	0	0
Count Total	1	0	296	217	0	132	262	0	1	284	0	222	0	0	0	0	1,415		0	0	0	2
Peak Hour	0	0	143	107	0	77	143	0	1	159	0	124	0	0	0	0	754		0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

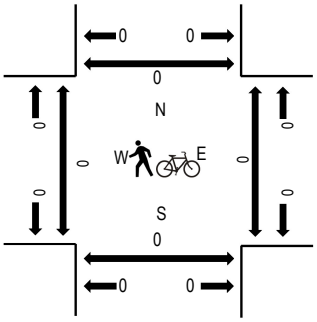
Location: 6 FRONT ST & ALLEN ST Noon
Date: Saturday, July 24, 2021
Peak Hour: 11:45 AM - 12:45 PM
Peak 15-Minutes: 12:00 PM - 12:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



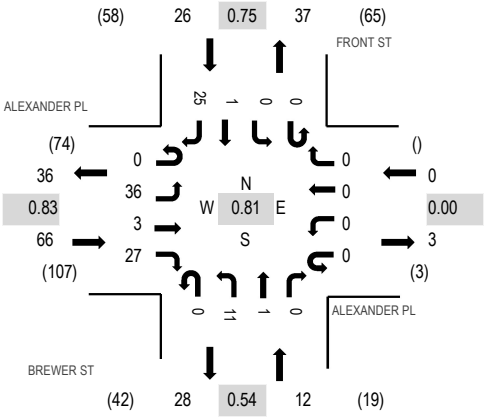
Traffic Counts

Interval Start Time	ALLEN ST Eastbound				ALLEN ST Westbound				FRONT ST Northbound				FRONT ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
11:45 AM	0	0	39	32	0	25	40	0	0	38	0	19	0	0	0	0	193	861	0	0	0	0
12:00 PM	0	0	40	45	0	21	44	0	0	54	0	24	0	0	0	0	228		0	0	0	0
12:15 PM	0	0	41	38	0	17	48	0	0	50	0	31	0	0	0	0	225		0	0	0	0
12:30 PM	0	0	39	55	0	16	35	0	1	48	0	21	0	0	0	0	215		0	0	0	0
Count Total	0	0	159	170	0	79	167	0	1	190	0	95	0	0	0	0	861		0	0	0	0
Peak Hour	0	0	159	170	0	79	167	0	1	190	0	95	0	0	0	0	861		0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

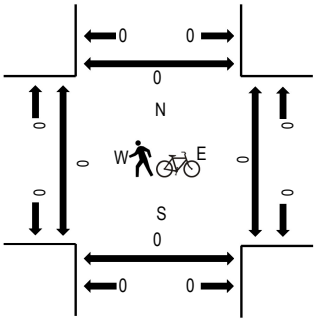
Location: 7 BREWER ST & ALEXANDER PL AM
Date: Thursday, July 22, 2021
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



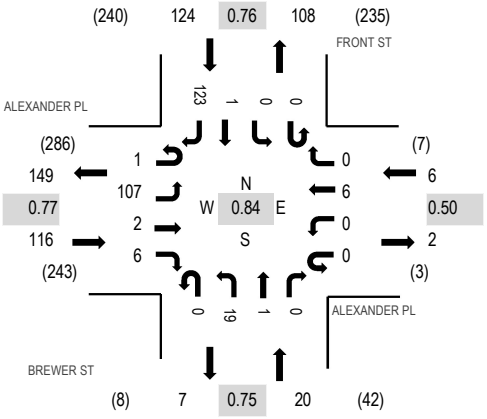
Traffic Counts

Interval Start Time	ALEXANDER PL Eastbound				ALEXANDER PL Westbound				BREWER ST Northbound				FRONT ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	4	0	4	0	0	0	0	0	2	0	0	0	0	1	4	15	99	0	0	0	0
7:15 AM	0	7	0	7	0	0	0	0	0	0	0	0	0	0	0	8	22	104	0	0	0	0
7:30 AM	0	11	2	6	0	0	0	0	0	5	1	0	0	0	0	5	30	104	0	0	0	0
7:45 AM	0	13	0	7	0	0	0	0	0	5	0	0	0	0	0	7	32	94	0	0	0	0
8:00 AM	0	5	1	7	0	0	0	0	0	1	0	0	0	0	1	5	20	85	0	0	0	0
8:15 AM	1	8	0	4	0	0	0	0	0	1	0	0	0	0	0	8	22		0	0	0	0
8:30 AM	0	4	0	3	0	0	0	0	0	2	0	0	0	0	1	10	20		0	0	0	0
8:45 AM	1	12	0	0	0	0	0	0	0	2	0	0	0	0	1	7	23		0	0	0	0
Count Total	2	64	3	38	0	0	0	0	0	18	1	0	0	0	4	54	184		0	0	0	0
Peak Hour	0	36	3	27	0	0	0	0	0	11	1	0	0	0	1	25	104		0	0	0	0

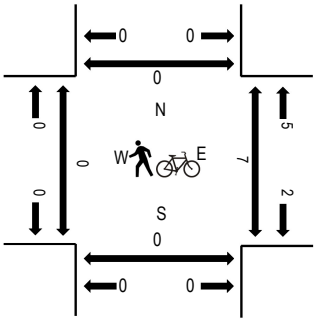
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 7 BREWER ST & ALEXANDER PL PM
Date: Thursday, July 22, 2021
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

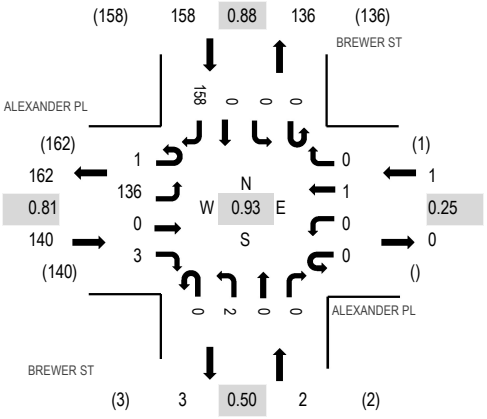
Traffic Counts

Interval Start Time	ALEXANDER PL Eastbound				ALEXANDER PL Westbound				BREWER ST Northbound				FRONT ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	1	24	1	1	0	0	3	0	0	7	1	0	0	0	0	41	79	266	0	3	0	0
4:15 PM	0	32	0	0	0	0	1	0	0	3	0	0	0	0	0	28	64	256	0	3	0	0
4:30 PM	0	22	0	1	0	0	2	0	0	4	0	0	0	0	1	30	60	253	0	1	0	0
4:45 PM	0	29	1	4	0	0	0	0	0	5	0	0	0	0	0	24	63	252	0	0	0	0
5:00 PM	0	29	0	0	0	0	1	0	0	7	0	0	0	0	1	31	69	266	0	0	0	0
5:15 PM	0	31	1	0	0	0	0	0	0	4	0	0	0	0	0	25	61		0	0	0	0
5:30 PM	0	25	0	0	0	0	0	0	0	7	1	0	0	0	0	26	59		0	0	0	0
5:45 PM	0	41	0	0	0	0	0	0	0	3	0	0	0	0	0	33	77		0	0	0	0
Count Total	1	233	3	6	0	0	7	0	0	40	2	0	0	0	2	238	532		0	7	0	0
Peak Hour	1	107	2	6	0	0	6	0	0	19	1	0	0	0	1	123	266		0	7	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

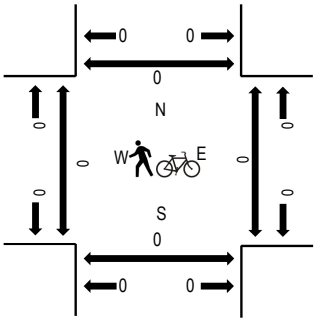
Location: 7 BREWER ST & ALEXANDER PL Noon
Date: Saturday, July 24, 2021
Peak Hour: 11:45 AM - 12:45 PM
Peak 15-Minutes: 12:00 PM - 12:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	ALEXANDER PL Eastbound				ALEXANDER PL Westbound				BREWER ST Northbound				BREWER ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
11:45 AM	0	25	0	1	0	0	0	0	0	0	0	0	0	0	0	38	64	301	0	0	0	0
12:00 PM	0	41	0	2	0	0	1	0	0	1	0	0	0	0	0	36	81		0	0	0	0
12:15 PM	0	38	0	0	0	0	0	0	0	1	0	0	0	0	0	39	78		0	0	0	0
12:30 PM	1	32	0	0	0	0	0	0	0	0	0	0	0	0	0	45	78		0	0	0	0
Count Total	1	136	0	3	0	0	1	0	0	2	0	0	0	0	0	158	301		0	0	0	0
Peak Hour	1	136	0	3	0	0	1	0	0	2	0	0	0	0	0	158	301		0	0	0	0

All Traffic Data Services

www.alltrafficdata.net

Date Start: 22-Jul-21
Site Code: 8
Station ID: 8
ALLEN ST W.O. ALEXANDER PL

Start Time	22-Jul-21 Thu	EB	WB							Total
12:00 AM		1	3							4
01:00		1	1							2
02:00		0	2							2
03:00		0	3							3
04:00		3	6							9
05:00		8	23							31
06:00		32	38							70
07:00		60	103							163
08:00		61	109							170
09:00		96	132							228
10:00		129	161							290
11:00		**153**	**207**							**360**
12:00 PM		**171**	**251**							**422**
01:00		142	208							350
02:00		147	214							361
03:00		121	207							328
04:00		140	192							332
05:00		143	208							351
06:00		133	159							292
07:00		99	141							240
08:00		57	101							158
09:00		27	56							83
10:00		11	18							29
11:00		4	2							6
Total		1739	2545							4284
Percent		40.6%	59.4%							
AM Peak	-	11:00	11:00	-	-	-	-	-	-	11:00
Vol.	-	153	207	-	-	-	-	-	-	360
PM Peak	-	12:00	12:00	-	-	-	-	-	-	12:00
Vol.	-	171	251	-	-	-	-	-	-	422
Grand Total		1739	2545							4284
Percent		40.6%	59.4%							
ADT		ADT 4,284		AADT 4,284						

All Traffic Data Services

www.alltrafficdata.net

Date Start: 24-Jul-21
Site Code: 8
Station ID: 8
ALLEN ST W.O. ALEXANDER PL

Start Time	24-Jul-21 Sat	EB	WB							Total
12:00 AM		4	2							6
01:00		2	1							3
02:00		4	2							6
03:00		0	0							0
04:00		1	5							6
05:00		6	17							23
06:00		11	29							40
07:00		45	63							108
08:00		62	104							166
09:00		91	144							235
10:00		113	156							269
11:00		**157**	**215**							**372**
12:00 PM		**185**	**257**							**442**
01:00		181	237							418
02:00		159	227							386
03:00		145	179							324
04:00		149	176							325
05:00		165	169							334
06:00		115	160							275
07:00		129	178							307
08:00		56	123							179
09:00		26	61							87
10:00		24	27							51
11:00		6	8							14
Total		1836	2540							4376
Percent		42.0%	58.0%							
AM Peak	-	11:00	11:00	-	-	-	-	-	-	11:00
Vol.	-	157	215	-	-	-	-	-	-	372
PM Peak	-	12:00	12:00	-	-	-	-	-	-	12:00
Vol.	-	185	257	-	-	-	-	-	-	442
Grand Total		1836	2540							4376
Percent		42.0%	58.0%							
ADT		ADT 4,376		AADT 4,376						

All Traffic Data Services

www.alltrafficdata.net

Date Start: 22-Jul-21
Site Code: 9
Station ID: 9
FOUNDERS PKWY W.O. FRONT ST

Start Time	22-Jul-21 Thu	EB	WB							Total
12:00 AM		90	41							131
01:00		52	39							91
02:00		31	25							56
03:00		26	46							72
04:00		50	198							248
05:00		165	562							727
06:00		510	1260							1770
07:00		853	**1756**							2609
08:00		1065	1693							2758
09:00		1207	1488							2695
10:00		1319	1532							2851
11:00		**1510**	1685							**3195**
12:00 PM		1738	1655							3393
01:00		1630	1540							3170
02:00		1695	1587							3282
03:00		1792	1616							3408
04:00		2124	**1747**							3871
05:00		**2175**	1727							**3902**
06:00		1757	1280							3037
07:00		1239	909							2148
08:00		964	649							1613
09:00		685	456							1141
10:00		349	234							583
11:00		200	119							319
Total		23226	23844							47070
Percent		49.3%	50.7%							
AM Peak	-	11:00	07:00	-	-	-	-	-	-	11:00
Vol.	-	1510	1756	-	-	-	-	-	-	3195
PM Peak	-	17:00	16:00	-	-	-	-	-	-	17:00
Vol.	-	2175	1747	-	-	-	-	-	-	3902
Grand Total		23226	23844							47070
Percent		49.3%	50.7%							

ADT ADT 47,070 AADT 47,070

All Traffic Data Services

www.alltrafficdata.net

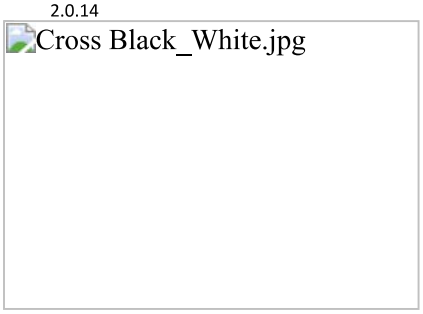
Date Start: 24-Jul-21
Site Code: 9
Station ID: 9
FOUNDERS PKWY W.O. FRONT ST

Start Time	24-Jul-21 Sat	EB	WB							Total
12:00 AM		136	88							224
01:00		86	41							127
02:00		44	31							75
03:00		40	53							93
04:00		41	91							132
05:00		93	207							300
06:00		313	434							747
07:00		617	743							1360
08:00		864	1109							1973
09:00		1268	1517							2785
10:00		1434	1793							3227
11:00		**1674**	**1913**							**3587**
12:00 PM		**1855**	**1897**							**3752**
01:00		1847	1846							3693
02:00		1730	1744							3474
03:00		1635	1545							3180
04:00		1649	1535							3184
05:00		1202	1259							2461
06:00		1318	1227							2545
07:00		1180	919							2099
08:00		978	757							1735
09:00		697	593							1290
10:00		481	341							822
11:00		292	180							472
Total		21474	21863							43337
Percent		49.6%	50.4%							
AM Peak	-	11:00	11:00	-	-	-	-	-	-	11:00
Vol.	-	1674	1913	-	-	-	-	-	-	3587
PM Peak	-	12:00	12:00	-	-	-	-	-	-	12:00
Vol.	-	1855	1897	-	-	-	-	-	-	3752
Grand Total		21474	21863							43337
Percent		49.6%	50.4%							
ADT		ADT 43,337		AADT 43,337						

Colo Dept of Trans.

MaxTime Timing Shee 2.0.14

Administration



Unit Information

Controller ID	0
Main St.	SH86
Side St.	Front St

Adapter	IP Address	Subnet Mask	Default Gateway	ARP	DHCP
1	10.11.79.127	255.255.255.0	10.11.79.1	Disable	
2	10.20.70.51	255.255.255.0	0.0.0.0	Disable	

Serial Ports:

Port	Description	Function	Address	Baud	Bits	Stop	Parity	Flow	CTS	RTS
1	Port 2/C21S	None	1	9600	8	1	None	None	0	0
2	Aux_P3/C22S	None	1	9600	8	1	None	None	0	0
3	SDLC Port 1	None	1	9600	8	1	None	None	0	0
4	Com A/C50S	None	1	9600	8	1	None	None	0	0
5	FIO	None	1	9600	8	1	None	None	0	0
6	DISPLAY/C60M	None	1	9600	8	1	None	None	0	0
7	SP7	None	1	9600	8	1	None	None	0	0
8	SP8/Com B	None	1	9600	8	1	None	None	0	0

Unit Parameters

Startup Flash	0	Auto Ped Clr	Enable	Red Revert	4.0	Backup Time	600	Ext Mode	Disable
All Red Exit	6	Grn Flash Freq.	60	Yel Flash Freq.	60	MCE Enable	Enable	Free Seq.	1
MCE Seq.	1	Start Yellow	0.0	Start Red	0.0	Start Clear Hold	6		

Phase Parameters

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Walk Time	0	7	0	7	0	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0
Clear Time	0	33	0	28	0	24	0	27	0	0	0	0	0	0	0	0	0	0	0	0
Don't Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	3	20	3	5	3	20	3	5	1	1	1	1	1	1	1	1	1	1	1	1
Min Green 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passage	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max-1	20	75	20	35	20	75	20	35	0	0	0	0	0	0	0	0	0	0	0	0
Max-2	10	30	10	15	10	30	10	15	0	0	0	0	0	0	0	0	0	0	0	0
Max-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yel Change	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Add Red Clear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red Revert	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time B4 Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars B4 Reduce	0	0	0	0	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	0	0	0	0
Reduce By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dyn Max Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dyn Max Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advance Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Ped	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Ped Clr																				
Pre Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pre Clearance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phases	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Walk Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Clear Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Don't Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Min Green 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yel Change	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Add Red Clear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red Revert	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time B4 Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars B4 Reduce	0	0	0	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	0	0	0
Reduce By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dyn Max Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dyn Max Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advance Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Ped	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Ped Clr																			
Pre Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pre Clearance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Options

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Enable	X	X	X	X	X	X	X	X												
Auto Flash Ent.		X				X														
Auto Flash Exit		X				X														
Non Actuated I																				
Non Actuated II																				
Non Lock Mem	X	X	X	X	X	X	X	X												
Min Veh Recall		X				X														
Max Veh Recall																				
Ped Recall																				
Soft Veh Recall																				
Dual Entry																				
Sim Gap Dis																				
Guaranteed Pass																				
Act Rest Walk																				
Cond Service																				
Add Initial																				

Phases	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Enable																				
Auto Flash Ent.																				
Auto Flash Exit																				
Non Actuated I																				
Non Actuated II																				
Non Lock Mem																				
Min Veh Recall																				
Max Veh Recall																				
Ped Recall																				
Soft Veh Recall																				
Dual Entry																				
Sim Gap Dis																				
Guaranteed Pass																				
Act Rest Walk																				
Cond Service																				
Add Initial																				

Additional Phase Options

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Ped Clr During Yel																				
Ped Clr During Red																				
Cond Reservice																				
Yel Min Override																				
No Startup Call																				
Adv. Warn Flasher																				
No Ped Str Up Call																				
Ped Clr OVTG																				
Flash Exit Call																				
Flash Exit Ped Call																				
MinGreen2																				
MaxGreen2																				
MaxGreen3																				
Ped2																				
Ped Clear Pre Clear																				
Ped NA+ Mode																				
Red Rest																				
Serve Evy Oth Even																				
Serve Evy Oth Odd																				

Phases	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Ped Clr During Yel																				
Ped Clr During Red																				
Cond Reservice																				
Yel Min Override																				
No Startup Call																				
Adv. Warn Flasher																				
No Ped Str Up Call																				
Ped Clr OVTG																				
Flash Exit Call																				
Flash Exit Ped Call																				
MinGreen2																				
MaxGreen2																				
MaxGreen3																				
Ped2																				
Ped Clear Pre Clear																				
Ped NA+ Mode																				
Red Rest																				
Serve Evy Oth Even																				
Serve Evy Oth Odd																				

Phase Configuration

Ph.	Startup	Ring	Concurrent	No Served Phases	Startup Min	Description
1	Phase Not On	1	5,6		0	
2	Green No Walk	1	5,6		0	
3	Phase Not On	1	7,8		0	
4	Phase Not On	1	7,8		0	
5	Phase Not On	2	1,2		0	
6	Green No Walk	2	1,2		0	
7	Phase Not On	2	3,4		0	
8	Phase Not On	2	3,4		0	
9	None	0			0	
10	None	0			0	
11	None	0			0	
12	None	0			0	
13	None	0			0	
14	None	0			0	
15	None	0			0	
16	None	0			0	
17	None	0			0	
18	None	0			0	
19	None	0			0	
20	None	0			0	

21	None	0			0	
22	None	0			0	
23	None	0			0	
24	None	0			0	
25	None	0			0	
26	None	0			0	
27	None	0			0	
28	None	0			0	
29	None	0			0	
30	None	0			0	
31	None	0			0	
32	None	0			0	
33	None	0			0	
34	None	0			0	
35	None	0			0	
36	None	0			0	
37	None	0			0	
38	None	0			0	
39	None	0			0	
40	None	0			0	

Sequence Configuration

Sequence 1

Ring	Phases
1	1,2,a,3,4,b
2	5,6,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 2

Ring	Phases
1	1,2,a,3,4,b
2	5,6,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 3

Ring	Phases
1	1,2,a,3,4,b
2	5,6,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 4

Ring	Phases
1	1,2,a,3,4,b
2	5,6,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 5

Ring	Phases
1	1,2,a,3,4,b
2	6,5,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 6

Ring	Phases
1	2,1,a,3,4,b
2	6,5,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 7

Ring	Phases
1	1,2,a,4,3,b
2	6,5,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 8

Ring	Phases
1	2,1,a,4,3,b
2	6,5,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 9

Ring	Phases
1	1,2,a,3,4,b

Sequence 10

Ring	Phases
1	2,1,a,3,4,b

Sequence 11

Ring	Phases
1	1,2,a,4,3,b

Sequence 12

Ring	Phases
1	2,1,a,4,3,b

2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 13

Ring	Phases
1	1,2,a,3,4,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	

Sequence 14

Ring	Phases
1	2,1,a,3,4,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	

Sequence 15

Ring	Phases
1	1,2,a,4,3,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	

Sequence 16

Ring	Phases
1	2,1,a,4,3,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	

Sequence 13

11	
12	
13	
14	
15	
16	

Sequence 14

11	
12	
13	
14	
15	
16	

Sequence 15

11	
12	
13	
14	
15	
16	

Sequence 16

11	
12	
13	
14	
15	
16	

Sequence 17

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

Sequence 18

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

Sequence 19

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

Sequence 20

Ring	Phases
1	1,2,a,3,4,b
2	5,6,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Vehicle Detection Parameters

Det.	Call Phs	Call Ovl	Additional Call Phase	Switch Phase	Delay	Extend	Queue Limit	No Activity	Max Presence	Erratic Counts	Failed Time	Description
1	1	0		0	0.0	0.0	0	0	0	0	0	
2	2	0		0	0.0	0.0	0	0	0	0	0	
3	2	0		0	0.0	0.0	0	0	0	0	0	
4	2	0		0	0.0	0.0	0	0	0	0	0	

5	2	0		0	0.0	0.0	0	0	0	0	0	
6	2	0		0	0.0	0.0	0	0	0	0	0	
7	3	0		0	0.0	0.0	0	0	0	0	0	
8	4	0		0	0.0	0.0	0	0	0	0	0	
9	4	0		0	0.0	0.0	0	0	0	0	0	
10	4	0		0	0.0	0.0	0	0	0	0	0	
11	4	0		0	0.0	0.0	0	0	0	0	0	
12	4	0		0	0.0	0.0	0	0	0	0	0	
13	1	0		0	0.0	0.0	0	0	0	0	0	
14	3	0		0	0.0	0.0	0	0	0	0	0	
15	5	0		0	0.0	0.0	0	0	0	0	0	
16	6	0		0	0.0	0.0	0	0	0	0	0	
17	6	0		0	0.0	0.0	0	0	0	0	0	
18	6	0		0	0.0	0.0	0	0	0	0	0	
19	6	0		0	0.0	0.0	0	0	0	0	0	
20	6	0		0	0.0	0.0	0	0	0	0	0	
21	7	0		0	0.0	0.0	0	0	0	0	0	
22	8	0		0	0.0	0.0	0	0	0	0	0	
23	8	0		0	0.0	0.0	0	0	0	0	0	
24	8	0		0	0.0	0.0	0	0	0	0	0	
25	8	0		0	0.0	0.0	0	0	0	0	0	
26	8	0		0	0.0	0.0	0	0	0	0	0	
27	5	0		0	0.0	0.0	0	0	0	0	0	
28	7	0		0	0.0	0.0	0	0	0	0	0	
29	0	0		0	0.0	0.0	0	0	0	0	0	
30	0	0		0	0.0	0.0	0	0	0	0	0	
31	0	0		0	0.0	0.0	0	0	0	0	0	
32	0	0		0	0.0	0.0	0	0	0	0	0	
33	0	0		0	0.0	0.0	0	0	0	0	0	
34	0	0		0	0.0	0.0	0	0	0	0	0	
35	0	0		0	0.0	0.0	0	0	0	0	0	
36	0	0		0	0.0	0.0	0	0	0	0	0	
37	0	0		0	0.0	0.0	0	0	0	0	0	
38	0	0		0	0.0	0.0	0	0	0	0	0	
39	0	0		0	0.0	0.0	0	0	0	0	0	
40	0	0		0	0.0	0.0	0	0	0	0	0	
41	0	0		0	0.0	0.0	0	0	0	0	0	
42	0	0		0	0.0	0.0	0	0	0	0	0	
43	0	0		0	0.0	0.0	0	0	0	0	0	
44	0	0		0	0.0	0.0	0	0	0	0	0	
45	0	0		0	0.0	0.0	0	0	0	0	0	
46	0	0		0	0.0	0.0	0	0	0	0	0	
47	0	0		0	0.0	0.0	0	0	0	0	0	
48	0	0		0	0.0	0.0	0	0	0	0	0	
49	0	0		0	0.0	0.0	0	0	0	0	0	
50	0	0		0	0.0	0.0	0	0	0	0	0	
51	0	0		0	0.0	0.0	0	0	0	0	0	
52	0	0		0	0.0	0.0	0	0	0	0	0	
53	0	0		0	0.0	0.0	0	0	0	0	0	
54	0	0		0	0.0	0.0	0	0	0	0	0	
55	0	0		0	0.0	0.0	0	0	0	0	0	
56	0	0		0	0.0	0.0	0	0	0	0	0	
57	0	0		0	0.0	0.0	0	0	0	0	0	
58	0	0		0	0.0	0.0	0	0	0	0	0	
59	0	0		0	0.0	0.0	0	0	0	0	0	
60	0	0		0	0.0	0.0	0	0	0	0	0	
61	0	0		0	0.0	0.0	0	0	0	0	0	
62	0	0		0	0.0	0.0	0	0	0	0	0	
63	0	0		0	0.0	0.0	0	0	0	0	0	
64	0	0		0	0.0	0.0	0	0	0	0	0	
65	0	0		0	0.0	0.0	0	0	0	0	0	
66	0	0		0	0.0	0.0	0	0	0	0	0	
67	0	0		0	0.0	0.0	0	0	0	0	0	
68	0	0		0	0.0	0.0	0	0	0	0	0	

69	0	0		0	0.0	0.0	0	0	0	0	0	
70	0	0		0	0.0	0.0	0	0	0	0	0	
71	0	0		0	0.0	0.0	0	0	0	0	0	
72	0	0		0	0.0	0.0	0	0	0	0	0	

Vehicle Detection Options

Detector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Volume Detector	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Occupancy	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Yellow Lock Call																				
Red Lock call																				
Passage	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Queue																				
Call	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Terminate																				

Detector	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Volume Detector	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Occupancy	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Yellow Lock Call																				
Red Lock call			X																	
Passage	X	X	X	X	X	X	X	X												
Queue																				
Call	X	X	X	X	X	X	X	X												
Terminate																				

Detector	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Volume Detector	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Occupancy	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Yellow Lock Call																				
Red Lock call			X																	
Passage																				
Queue																				
Call																				
Terminate																				

Detector	61	62	63	64	65	66	67	68	69	70	71	72
Volume Detector	X	X	X	X	X	X	X	X	X	X	X	X
Occupancy	X	X	X	X	X	X	X	X	X	X	X	X
Yellow Lock Call												
Red Lock call												
Passage												
Queue												
Call												
Terminate												

Data Collection Period	0

Pedestrian Detectors

Det	Call Phase	Call Ovlp	No Act	Max Presence	Erratic Count
1	0	0	0	0	0
2	2	0	0	0	0
3	0	0	0	0	0
4	4	0	0	0	0
5	0	0	0	0	0
6	6	0	0	0	0
7	0	0	0	0	0
8	8	0	0	0	0
9	0	0	0	0	0
10	0	0	0	0	0
11	0	0	0	0	0
12	0	0	0	0	0
13	0	0	0	0	0
14	0	0	0	0	0

Det	Call Phase	Call Ovlp	No Act	Max Presence	Erratic Count
21	0	0	0	0	0
22	0	0	0	0	0
23	0	0	0	0	0
24	0	0	0	0	0
25	0	0	0	0	0
26	0	0	0	0	0
27	0	0	0	0	0
28	0	0	0	0	0
29	0	0	0	0	0
30	0	0	0	0	0
31	0	0	0	0	0
32	0	0	0	0	0
33	0	0	0	0	0
34	0	0	0	0	0

15	0	0	0	0	0
16	0	0	0	0	0
17	0	0	0	0	0
18	0	0	0	0	0
19	0	0	0	0	0
20	0	0	0	0	0

35	0	0	0	0	0
36	0	0	0	0	0
37	0	0	0	0	0
38	0	0	0	0	0
39	0	0	0	0	0
40	0	0	0	0	0

Overlaps

OLP	Type	Included Phases	Modifier Phases	Trail GRN	Trail YEL	Trail RED	Walk 1	Ped Clr 1	Walk 2	Ped Clr 2	Delay	Flash	Descriptions
1	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
2	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
3	FYA - 4 Sec	4	3	0	0.0	0.0	0	0	0	0	0.0	Off	
4	Thur FYA Ped	4		0	0.0	0.0	0	0	0	0	0.0	Off	
5	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
6	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
7	FRA - 4 Section	8	7	0	0.0	0.0	0	0	0	0	0.0	Off	
8	Thur FYA Ped	8		0	0.0	0.0	0	0	0	0	0.0	Off	
9	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
10	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
11	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
12	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
13	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
14	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
15	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
16	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
17	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
18	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
19	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
20	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
21	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
22	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
23	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
24	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
25	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
26	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
27	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
28	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
29	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
30	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
31	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
32	Off			0	0.0	0.0	0	0	0	0	0.0	Off	

Coordination Parameters

Operational Mode	Correction Mode	Maximum Mode	Force Mode
Automatic	Shortway (Auto)	Max Inhibit	Floating

Patterns

Patt.	Cycle	Offset 1	Offset 2	Offset 2	Split	Sequence	Ref. Color	Max Mode	Phs Pln	Det Pln	Ped Pln
1	120	42	0	0	1	1	Yel	Inh	1	1	1
2	90	62	0	0	2	2	Yel	Inh	1	1	1
3	120	112	0	0	3	3	Yel	Inh	1	1	1
4	100	62	0	0	4	4	Yel	Inh	1	1	1
5	0	0	0	0	0	0	Yel	Inh	1	1	1
6	0	0	0	0	0	0	Yel	Inh	1	1	1
7	0	0	0	0	0	0	Yel	Inh	1	1	1
8	0	0	0	0	0	0	Yel	Inh	1	1	1
9	0	0	0	0	0	0	Yel	Inh	1	1	1
10	0	0	0	0	0	0	Yel	Inh	1	1	1
11	0	0	0	0	0	0	Yel	Inh	1	1	1
12	0	0	0	0	0	0	Yel	Inh	1	1	1
13	0	0	0	0	0	0	Yel	Inh	1	1	1
14	0	0	0	0	0	0	Yel	Inh	1	1	1
15	0	0	0	0	0	0	Yel	Inh	1	1	1
16	0	0	0	0	0	0	Yel	Inh	1	1	1

17	0	0	0	0	0	0	Yel	Inh	1	1	1
18	0	0	0	0	0	0	Yel	Inh	1	1	1
19	0	0	0	0	0	0	Yel	Inh	1	1	1
20	0	0	0	0	20	20	Yel	Max2	1	1	1
21	0	0	0	0	0	0	Yel	Inh	1	1	1
22	0	0	0	0	0	0	Yel	Inh	1	1	1
23	0	0	0	0	0	0	Yel	Inh	1	1	1
24	0	0	0	0	0	0	Yel	Inh	1	1	1
25	0	0	0	0	0	0	Yel	Inh	1	1	1
26	0	0	0	0	0	0	Yel	Inh	1	1	1
27	0	0	0	0	0	0	Yel	Inh	1	1	1
28	0	0	0	0	0	0	Yel	Inh	1	1	1
29	0	0	0	0	0	0	Yel	Inh	1	1	1
30	0	0	0	0	0	0	Yel	Inh	1	1	1
31	0	0	0	0	0	0	Yel	Inh	1	1	1
32	0	0	0	0	0	0	Yel	Inh	1	1	1
33	0	0	0	0	0	0	Yel	Inh	1	1	1
34	0	0	0	0	0	0	Yel	Inh	1	1	1
35	0	0	0	0	0	0	Yel	Inh	1	1	1
36	0	0	0	0	0	0	Yel	Inh	1	1	1
37	0	0	0	0	0	0	Yel	Inh	1	1	1
38	0	0	0	0	0	0	Yel	Inh	1	1	1
39	0	0	0	0	0	0	Yel	Inh	1	1	1
40	0	0	0	0	0	0	Yel	Inh	1	1	1
41	0	0	0	0	0	0	Yel	Inh	1	1	1
42	0	0	0	0	0	0	Yel	Inh	1	1	1
43	0	0	0	0	0	0	Yel	Inh	1	1	1
44	0	0	0	0	0	0	Yel	Inh	1	1	1
45	0	0	0	0	0	0	Yel	Inh	1	1	1
46	0	0	0	0	0	0	Yel	Inh	1	1	1
47	0	0	0	0	0	0	Yel	Inh	1	1	1
48	0	0	0	0	0	0	Yel	Inh	1	1	1
49	0	0	0	0	0	0	Yel	Inh	1	1	1
50	0	0	0	0	0	0	Yel	Inh	1	1	1
51	0	0	0	0	0	0	Yel	Inh	1	1	1
52	0	0	0	0	0	0	Yel	Inh	1	1	1
53	0	0	0	0	0	0	Yel	Inh	1	1	1
54	0	0	0	0	0	0	Yel	Inh	1	1	1
55	0	0	0	0	0	0	Yel	Inh	1	1	1
56	0	0	0	0	0	0	Yel	Inh	1	1	1
57	0	0	0	0	0	0	Yel	Inh	1	1	1
58	0	0	0	0	0	0	Yel	Inh	1	1	1
59	0	0	0	0	0	0	Yel	Inh	1	1	1
60	0	0	0	0	0	0	Yel	Inh	1	1	1
61	0	0	0	0	0	0	Yel	Inh	1	1	1
62	0	0	0	0	0	0	Yel	Inh	1	1	1
63	0	0	0	0	0	0	Yel	Inh	1	1	1
64	0	0	0	0	0	0	Yel	Inh	1	1	1
65	0	0	0	0	0	0	Yel	Inh	1	1	1
66	0	0	0	0	0	0	Yel	Inh	1	1	1
67	0	0	0	0	0	0	Yel	Inh	1	1	1
68	0	0	0	0	0	0	Yel	Inh	1	1	1
69	0	0	0	0	0	0	Yel	Inh	1	1	1
70	0	0	0	0	0	0	Yel	Inh	1	1	1
71	0	0	0	0	0	0	Yel	Inh	1	1	1
72	0	0	0	0	0	0	Yel	Inh	1	1	1
73	0	0	0	0	0	0	Yel	Inh	1	1	1
74	0	0	0	0	0	0	Yel	Inh	1	1	1
75	0	0	0	0	0	0	Yel	Inh	1	1	1
76	0	0	0	0	0	0	Yel	Inh	1	1	1
77	0	0	0	0	0	0	Yel	Inh	1	1	1
78	0	0	0	0	0	0	Yel	Inh	1	1	1
79	0	0	0	0	0	0	Yel	Inh	1	1	1

80	0	0	0	0	0	0	Yel	Inh	1	1	1
81	0	0	0	0	0	0	Yel	Inh	1	1	1
82	0	0	0	0	0	0	Yel	Inh	1	1	1
83	0	0	0	0	0	0	Yel	Inh	1	1	1
84	0	0	0	0	0	0	Yel	Inh	1	1	1
85	0	0	0	0	0	0	Yel	Inh	1	1	1
86	0	0	0	0	0	0	Yel	Inh	1	1	1
87	0	0	0	0	0	0	Yel	Inh	1	1	1
88	0	0	0	0	0	0	Yel	Inh	1	1	1
89	0	0	0	0	0	0	Yel	Inh	1	1	1
90	0	0	0	0	0	0	Yel	Inh	1	1	1
91	0	0	0	0	0	0	Yel	Inh	1	1	1
92	0	0	0	0	0	0	Yel	Inh	1	1	1
93	0	0	0	0	0	0	Yel	Inh	1	1	1
94	0	0	0	0	0	0	Yel	Inh	1	1	1
95	0	0	0	0	0	0	Yel	Inh	1	1	1
96	0	0	0	0	0	0	Yel	Inh	1	1	1
97	0	0	0	0	0	0	Yel	Inh	1	1	1
98	0	0	0	0	0	0	Yel	Inh	1	1	1
99	0	0	0	0	0	0	Yel	Inh	1	1	1
100	0	0	0	0	0	0	Yel	Inh	1	1	1
101	0	0	0	0	0	0	Yel	Inh	1	1	1
102	0	0	0	0	0	0	Yel	Inh	1	1	1
103	0	0	0	0	0	0	Yel	Inh	1	1	1
104	0	0	0	0	0	0	Yel	Inh	1	1	1
105	0	0	0	0	0	0	Yel	Inh	1	1	1
106	0	0	0	0	0	0	Yel	Inh	1	1	1
107	0	0	0	0	0	0	Yel	Inh	1	1	1
108	0	0	0	0	0	0	Yel	Inh	1	1	1
109	0	0	0	0	0	0	Yel	Inh	1	1	1
110	0	0	0	0	0	0	Yel	Inh	1	1	1
111	0	0	0	0	0	0	Yel	Inh	1	1	1
112	0	0	0	0	0	0	Yel	Inh	1	1	1
113	0	0	0	0	0	0	Yel	Inh	1	1	1
114	0	0	0	0	0	0	Yel	Inh	1	1	1
115	0	0	0	0	0	0	Yel	Inh	1	1	1
116	0	0	0	0	0	0	Yel	Inh	1	1	1
117	0	0	0	0	0	0	Yel	Inh	1	1	1
118	0	0	0	0	0	0	Yel	Inh	1	1	1
119	0	0	0	0	0	0	Yel	Inh	1	1	1
120	0	0	0	0	0	0	Yel	Inh	1	1	1
121	0	0	0	0	0	0	Yel	Inh	1	1	1
122	0	0	0	0	0	0	Yel	Inh	1	1	1
123	0	0	0	0	0	0	Yel	Inh	1	1	1
124	0	0	0	0	0	0	Yel	Inh	1	1	1
125	0	0	0	0	0	0	Yel	Inh	1	1	1
126	0	0	0	0	0	0	Yel	Inh	1	1	1
127	0	0	0	0	0	0	Yel	Inh	1	1	1
128	0	0	0	0	0	0	Yel	Inh	1	1	1

Split Parameters

Split 1		Coord	Ref	
PH.	Time	PH	PH	Mode
1	10			None
2	80	X	X	None
3	18			None
4	12			None
5	10			None
6	80	X	X	None
7	11			None
8	19			None
9	0			None
10	0			None
11	0			None

Split 2		Coord	Ref	
PH.	Time	PH	PH	Mode
1	12			None
2	47	X	X	None
3	15			None
4	16			None
5	18			None
6	41	X	X	None
7	18			None
8	13			None
9	0			None
10	0			None
11	0			None

12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 3		Coord	Ref	
PH.	Time	PH	PH	Mode
1	11			None
2	83	X	X	None
3	13			None
4	13			None
5	20			None
6	74	X	X	None
7	13			None
8	13			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 4		Coord	Ref	
PH.	Time	PH	PH	Mode
1	12			None
2	55	X	X	None
3	20			None
4	13			None
5	15			None
6	52	X	X	None
7	14			None
8	19			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 5		Coord	Ref	
PH.	Time	PH	PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 6		Coord	Ref	
PH.	Time	PH	PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 7		Coord	Ref	
PH.	Time	PH	PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 8		Coord	Ref	
PH.	Time	PH	PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 9

Split 10

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None

Split 9

PH.	Time	Coord PH	Ref PH	Mode
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 10

PH.	Time	Coord PH	Ref PH	Mode
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 11

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 12

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 13

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 14

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 15

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None

Split 16

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None

3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 17

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 18

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 19

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None

Split 20

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0	X	X	None
3	0			None
4	0			None
5	0			None
6	0	X	X	None

Split 19

PH.	Time	Coord PH	Ref PH	Mode
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 20

PH.	Time	Coord PH	Ref PH	Mode
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

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

Day Plan 1

Month of Year						Days of Week							Days of Month														
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 2

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 3

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 4

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 5

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 6

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 7

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 8

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 9

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 10

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

J	A	S	O	N	D
X	X	X	X	X	X

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Day Plan 11

Month of Year						Days of Week							Days of Month														
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

J	A	S	O	N	D

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Day Plan 12

Month of Year						Days of Week							Days of Month														
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

J	A	S	O	N	D

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Day Plan 13

Month of Year						Days of Week							Days of Month														
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

J	A	S	O	N	D

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Day Plan 14

Month of Year						Days of Week							Days of Month														
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

J	A	S	O	N	D

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Day Plan 15

Month of Year						Days of Week							Days of Month														
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

J	A	S	O	N	D

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Day Plan 1

Event	Hour	Min.	Act
1	6	0	1
2	9	0	2
3	15	0	3
4	19	0	2
5	22	0	20

Day Plan 2

Event	Hour	Min.	Act
1	6	0	1
2	9	0	4
3	21	0	20
4	0	0	
5	0	0	

Day Plan 3

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	

Day Plan 4

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	

Day Plan 1

Event	Hour	Min.	Act
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 2

Event	Hour	Min.	Act
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 3

Event	Hour	Min.	Act
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 4

Event	Hour	Min.	Act
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 5

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	

Day Plan 6

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	

Day Plan 7

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	

Day Plan 8

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	

7	0	0	
8	0	0	
9	0	0	
10	0	0	

7	0	0	
8	0	0	
9	0	0	
10	0	0	

7	0	0	
8	0	0	
9	0	0	
10	0	0	

7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 9

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 10

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 11

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 12

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 13

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 14

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 15

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 16

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 17

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 18

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 19

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 20

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Actions

		Aux.			Special Functions							
Act	Pattern	1	2	3	1	2	3	4	5	6	7	8
1	Pattern 1											
2	Pattern 2											
3	Pattern 3											
4	Pattern 4											
5	Pattern 5											
6	Pattern 6											
7	Pattern 7											
8	Pattern 8											
9	Pattern 9											
10	Pattern 10											
11	None											
12	None											
13	None											
14	None											
15	None											
16	None											
17	None											
18	None											
19	None											

Actions

		Aux.			Special Functions							
Act	Pattern	1	2	3	1	2	3	4	5	6	7	8
33	None											
34	None											
35	None											
36	None											
37	None											
38	None											
39	None											
40	None											
41	None											
42	None											
43	None											
44	None											
45	None											
46	None											
47	None											
48	None											
49	None											
50	None											
51	None											

20	None									
21	None									
22	None									
23	None									
24	None									
25	None									
26	None									
27	None									
28	None									
29	None									
30	None									
31	None									
32	None									

52	None									
53	None									
54	None									
55	None									
56	None									
57	None									
58	None									
59	None									
60	None									
61	None									
62	None									
63	None									
64	None									

Preemption Parameters

Preempt	1	2	3	4	5	6	7	8
Link	0	0	0	0	0	0	0	0
Delay	0	0	0	0	0	0	0	0
Min Duration	0	0	10	10	10	10	0	0
Min Green	0	0	0	0	0	0	0	0
Min Walk	0	0	0	0	0	0	0	0
Ent. Ped Clear	255	255	255	255	255	255	255	255
Track Green	0	0	0	0	0	0	0	0
Dwell Green	0	0	5	5	5	5	0	0
Max Presence	0	0	0	0	0	0	0	0
Enter Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Ent. Red Clear	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5

Preemption Parameters

Preempt	1	2	3	4	5	6	7	8
Track Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Track Red Clear	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Exit Red	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Exit Ped Clear	255	255	255	255	255	255	255	255
Exit Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Exit Red	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5

Preempt	1	2	3	4	5	6	7	8
Non Lock Mem								
Not Overide Flash								
NotOverideNextPre								
Flash Dwell								

Preemption Configuration

Preempt	1	2	3	4	5	6	7	8
Track phase								
Dwell Phase			4,7	1,6	3,8	2,5		
Dwell Ped								
Exit Phase								
Track Overlap								
Dwell overlap								
Cycling phase								
Cycling Ped								
Cycling Overlap								

IO Modules

IO Mod	TYPE
1	Caltrans 332
2	None
3	None
4	None
5	None
6	None
7	None
8	None
9	None
10	None

Channel Configuration

Chan	Ctrl Type	Source
1	Phs Veh	1
2	Phs Veh	2
3	Olp	3
4	Olp	4
5	Phs Veh	5
6	Phs Veh	6
7	Olp	7
8	Olp	8
9	Olp	1
10	Olp	2

Chan	Ctrl Type	Source
11	Olp	3
12	Olp	4
13	Phs Ped	2
14	Phs Ped	4
15	Phs Ped	6
16	Phs Ped	8
17	Olp	5
18	Olp	6
19	None	0
20	None	0

Channel Options

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flash Yellow																
Flash Red	X	X	X	X	X	X	X	X								
Alt Flash	X			X	X			X								
Channel	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Flash Yellow																
Flash Red																
Alt Flash																

Startup Clearance Hold Type

1=off, 2=On, 3=Flash and 4= Alt Flash

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Red																
Yellow																
Green																
Channel	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Red																
Yellow																
Green																

Phase Intervals

Interval	Description	Red	Yel	Grn	Type
1	notActive	On	Off	Off	Red
2	dltGrn	On	Off	Off	Red
3	PreGrn	Off	Off	On	Green
4	minGrn	Off	Off	On	Green
5	grnExt	Off	Off	On	Green
6	grnDwell	Off	Off	On	Green
7	preClear	Off	Off	On	Green
8	yelChange	Off	On	Off	Yellow
9	redClear	On	Off	Off	Red
10	redDwell	On	Off	Off	Red
11	Barrier	On	Off	Off	Red
12					

Pedestrian Intervals

Interval	Description	DWK	CLR	Wlk	Type
1	notActive	On	Off	Off	Dont Walk
2	dltPed	On	Off	Off	Dont Walk
3	walk	Off	Off	On	Walk
4	walkDwell	Off	Off	On	Walk
5	flashDtWlk	Flash	Off	Off	Ped Clear
6	dWalk	On	Off	Off	Dont Walk
7					
8					

Countdown Display

Display	Addr	Phase	Time
1			
2			
3			
4			
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Display	Addr	Phase	Time
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Display	Addr	Phase	Time
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19			
20			
21			
22			
23			
24			

Display	Addr	Phase	Time
25			
26			
27			
28			
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30			
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32			

Manual Control Phase Groups

Grp 1		Grp 2		Grp 3		Grp 4		Grp 5		Grp 6		Grp 7		Grp 8	
Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph
1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
3	0	3	0	3	0	3	0	3	0	3	0	3	0	3	0
4	0	4	0	4	0	4	0	4	0	4	0	4	0	4	0
5	0	5	0	5	0	5	0	5	0	5	0	5	0	5	0
6	0	6	0	6	0	6	0	6	0	6	0	6	0	6	0
7	0	7	0	7	0	7	0	7	0	7	0	7	0	7	0
8	0	8	0	8	0	8	0	8	0	8	0	8	0	8	0
9	0	9	0	9	0	9	0	9	0	9	0	9	0	9	0
10	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0
11	0	11	0	11	0	11	0	11	0	11	0	11	0	11	0
12	0	12	0	12	0	12	0	12	0	12	0	12	0	12	0
13	0	13	0	13	0	13	0	13	0	13	0	13	0	13	0
14	0	14	0	14	0	14	0	14	0	14	0	14	0	14	0
15	0	15	0	15	0	15	0	15	0	15	0	15	0	15	0
16	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0

Prioritor Settings

Prioritor	Priority Ph	Output Dly
1		0
2		0
3		0
4		0
5		0

Enabled	Lock Out Time
No	0

6		0
7		0
8		0

Loopback Functions

Func	Result Function Type	Index	Source Function Type	Index
1				
2				
3				
4				
5				
6				
7				
8				
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11				
12				
13				
14				
15				
16				
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45				
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47				
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49				
50				

Func	Result Function Type	Index	Source Function Type	Index
51				
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100				

Peer Configuration

Ctrl	Peer ID	IP address	SNMP Port	Hot Port	Serial Port	Serial Addr.	Master Sect.	P2P TO	Description
1	0		161	80	0	0	0	15	
2	0		161	80	0	0	0	15	
3	0		161	80	0	0	0	15	

4	0		161	80	0	0	0	15	
5	0		161	80	0	0	0	15	
6	0		161	80	0	0	0	15	
7	0		161	80	0	0	0	15	
8	0		161	80	0	0	0	15	
9	0		161	80	0	0	0	15	
10	0		161	80	0	0	0	15	
11	0		161	80	0	0	0	15	
12	0		161	80	0	0	0	15	
13	0		161	80	0	0	0	15	
14	0		161	80	0	0	0	15	
15	0		161	80	0	0	0	15	
16	0		161	80	0	0	0	15	
17	0		161	80	0	0	0	15	
18	0		161	80	0	0	0	15	
19	0		161	80	0	0	0	15	
20	0		161	80	0	0	0	15	
21	0		161	80	0	0	0	15	
22	0		161	80	0	0	0	15	
23	0		161	80	0	0	0	15	
24	0		161	80	0	0	0	15	
25	0		161	80	0	0	0	15	
26	0		161	80	0	0	0	15	
27	0		161	80	0	0	0	15	
28	0		161	80	0	0	0	15	
29	0		161	80	0	0	0	15	
30	0		161	80	0	0	0	15	
31	0		161	80	0	0	0	15	
32	0		161	80	0	0	0	15	
33	0		161	80	0	0	0	15	
34	0		161	80	0	0	0	15	
35	0		161	80	0	0	0	15	
36	0		161	80	0	0	0	15	
37	0		161	80	0	0	0	15	
38	0		161	80	0	0	0	15	
39	0		161	80	0	0	0	15	
40	0		161	80	0	0	0	15	
41	0		161	80	0	0	0	15	
42	0		161	80	0	0	0	15	
43	0		161	80	0	0	0	15	
44	0		161	80	0	0	0	15	
45	0		161	80	0	0	0	15	
46	0		161	80	0	0	0	15	
47	0		161	80	0	0	0	15	
48	0		161	80	0	0	0	15	
49	0		161	80	0	0	0	15	
50	0		161	80	0	0	0	15	
51	0		161	80	0	0	0	15	
52	0		161	80	0	0	0	15	
53	0		161	80	0	0	0	15	
54	0		161	80	0	0	0	15	
55	0		161	80	0	0	0	15	
56	0		161	80	0	0	0	15	
57	0		161	80	0	0	0	15	
58	0		161	80	0	0	0	15	
59	0		161	80	0	0	0	15	
60	0		161	80	0	0	0	15	
61	0		161	80	0	0	0	15	
62	0		161	80	0	0	0	15	
63	0		161	80	0	0	0	15	
64	0		161	80	0	0	0	15	
65	0		161	80	0	0	0	15	
66	0		161	80	0	0	0	15	
67	0		161	80	0	0	0	15	

68	0		161	80	0	0	0	15	
69	0		161	80	0	0	0	15	
70	0		161	80	0	0	0	15	
71	0		161	80	0	0	0	15	
72	0		161	80	0	0	0	15	
73	0		161	80	0	0	0	15	
74	0		161	80	0	0	0	15	
75	0		161	80	0	0	0	15	
76	0		161	80	0	0	0	15	
77	0		161	80	0	0	0	15	
78	0		161	80	0	0	0	15	
79	0		161	80	0	0	0	15	
80	0		161	80	0	0	0	15	
81	0		161	80	0	0	0	15	
82	0		161	80	0	0	0	15	
83	0		161	80	0	0	0	15	
84	0		161	80	0	0	0	15	
85	0		161	80	0	0	0	15	
86	0		161	80	0	0	0	15	
87	0		161	80	0	0	0	15	
88	0		161	80	0	0	0	15	
89	0		161	80	0	0	0	15	
90	0		161	80	0	0	0	15	
91	0		161	80	0	0	0	15	
92	0		161	80	0	0	0	15	
93	0		161	80	0	0	0	15	
94	0		161	80	0	0	0	15	
95	0		161	80	0	0	0	15	
96	0		161	80	0	0	0	15	
97	0		161	80	0	0	0	15	
98	0		161	80	0	0	0	15	
99	0		161	80	0	0	0	15	
100	0		161	80	0	0	0	15	
101	0		161	80	0	0	0	15	
102	0		161	80	0	0	0	15	
103	0		161	80	0	0	0	15	
104	0		161	80	0	0	0	15	
105	0		161	80	0	0	0	15	
106	0		161	80	0	0	0	15	
107	0		161	80	0	0	0	15	
108	0		161	80	0	0	0	15	
109	0		161	80	0	0	0	15	
110	0		161	80	0	0	0	15	
111	0		161	80	0	0	0	15	
112	0		161	80	0	0	0	15	
113	0		161	80	0	0	0	15	
114	0		161	80	0	0	0	15	
115	0		161	80	0	0	0	15	
116	0		161	80	0	0	0	15	
117	0		161	80	0	0	0	15	
118	0		161	80	0	0	0	15	
119	0		161	80	0	0	0	15	
120	0		161	80	0	0	0	15	
121	0		161	80	0	0	0	15	
122	0		161	80	0	0	0	15	
123	0		161	80	0	0	0	15	
124	0		161	80	0	0	0	15	
125	0		161	80	0	0	0	15	
126	0		161	80	0	0	0	15	
127	0		161	80	0	0	0	15	
128	0		161	80	0	0	0	15	
129	0		161	80	0	0	0	15	
130	0		161	80	0	0	0	15	

131	0		161	80	0	0	0	15	
132	0		161	80	0	0	0	15	
133	0		161	80	0	0	0	15	
134	0		161	80	0	0	0	15	
135	0		161	80	0	0	0	15	
136	0		161	80	0	0	0	15	
137	0		161	80	0	0	0	15	
138	0		161	80	0	0	0	15	
139	0		161	80	0	0	0	15	
140	0		161	80	0	0	0	15	
141	0		161	80	0	0	0	15	
142	0		161	80	0	0	0	15	
143	0		161	80	0	0	0	15	
144	0		161	80	0	0	0	15	
145	0		161	80	0	0	0	15	
146	0		161	80	0	0	0	15	
147	0		161	80	0	0	0	15	
148	0		161	80	0	0	0	15	
149	0		161	80	0	0	0	15	
150	0		161	80	0	0	0	15	
151	0		161	80	0	0	0	15	
152	0		161	80	0	0	0	15	
153	0		161	80	0	0	0	15	
154	0		161	80	0	0	0	15	
155	0		161	80	0	0	0	15	
156	0		161	80	0	0	0	15	
157	0		161	80	0	0	0	15	
158	0		161	80	0	0	0	15	
159	0		161	80	0	0	0	15	
160	0		161	80	0	0	0	15	
161	0		161	80	0	0	0	15	
162	0		161	80	0	0	0	15	
163	0		161	80	0	0	0	15	
164	0		161	80	0	0	0	15	
165	0		161	80	0	0	0	15	
166	0		161	80	0	0	0	15	
167	0		161	80	0	0	0	15	
168	0		161	80	0	0	0	15	
169	0		161	80	0	0	0	15	
170	0		161	80	0	0	0	15	
171	0		161	80	0	0	0	15	
172	0		161	80	0	0	0	15	
173	0		161	80	0	0	0	15	
174	0		161	80	0	0	0	15	
175	0		161	80	0	0	0	15	
176	0		161	80	0	0	0	15	
177	0		161	80	0	0	0	15	
178	0		161	80	0	0	0	15	
179	0		161	80	0	0	0	15	
180	0		161	80	0	0	0	15	
181	0		161	80	0	0	0	15	
182	0		161	80	0	0	0	15	
183	0		161	80	0	0	0	15	
184	0		161	80	0	0	0	15	
185	0		161	80	0	0	0	15	
186	0		161	80	0	0	0	15	
187	0		161	80	0	0	0	15	
188	0		161	80	0	0	0	15	
189	0		161	80	0	0	0	15	
190	0		161	80	0	0	0	15	
191	0		161	80	0	0	0	15	
192	0		161	80	0	0	0	15	
193	0		161	80	0	0	0	15	
194	0		161	80	0	0	0	15	

195	0		161	80	0	0	0	15	
196	0		161	80	0	0	0	15	
197	0		161	80	0	0	0	15	
198	0		161	80	0	0	0	15	
199	0		161	80	0	0	0	15	
200	0		161	80	0	0	0	15	
201	0		161	80	0	0	0	15	
202	0		161	80	0	0	0	15	
203	0		161	80	0	0	0	15	
204	0		161	80	0	0	0	15	
205	0		161	80	0	0	0	15	
206	0		161	80	0	0	0	15	
207	0		161	80	0	0	0	15	
208	0		161	80	0	0	0	15	
209	0		161	80	0	0	0	15	
210	0		161	80	0	0	0	15	
211	0		161	80	0	0	0	15	
212	0		161	80	0	0	0	15	
213	0		161	80	0	0	0	15	
214	0		161	80	0	0	0	15	
215	0		161	80	0	0	0	15	
216	0		161	80	0	0	0	15	
217	0		161	80	0	0	0	15	
218	0		161	80	0	0	0	15	
219	0		161	80	0	0	0	15	
220	0		161	80	0	0	0	15	
221	0		161	80	0	0	0	15	
222	0		161	80	0	0	0	15	
223	0		161	80	0	0	0	15	
224	0		161	80	0	0	0	15	
225	0		161	80	0	0	0	15	
226	0		161	80	0	0	0	15	
227	0		161	80	0	0	0	15	
228	0		161	80	0	0	0	15	
229	0		161	80	0	0	0	15	
230	0		161	80	0	0	0	15	
231	0		161	80	0	0	0	15	
232	0		161	80	0	0	0	15	
233	0		161	80	0	0	0	15	
234	0		161	80	0	0	0	15	
235	0		161	80	0	0	0	15	
236	0		161	80	0	0	0	15	
237	0		161	80	0	0	0	15	
238	0		161	80	0	0	0	15	
239	0		161	80	0	0	0	15	
240	0		161	80	0	0	0	15	
241	0		161	80	0	0	0	15	
242	0		161	80	0	0	0	15	
243	0		161	80	0	0	0	15	
244	0		161	80	0	0	0	15	
245	0		161	80	0	0	0	15	
246	0		161	80	0	0	0	15	
247	0		161	80	0	0	0	15	
248	0		161	80	0	0	0	15	
249	0		161	80	0	0	0	15	
250	0		161	80	0	0	0	15	
251	0		161	80	0	0	0	15	
252	0		161	80	0	0	0	15	
253	0		161	80	0	0	0	15	
254	0		161	80	0	0	0	15	
255	0		161	80	0	0	0	15	

Section Configuration

Section	Control	Poll	Req #	Fail Time	Algorithm Period	Description
1	None	60	1	300	240	
2	None	60	1	300	240	
3	None	60	1	300	240	
4	None	60	1	300	240	
5	None	60	1	300	240	
6	None	60	1	300	240	
7	None	60	1	300	240	
8	None	60	1	300	240	
9	None	60	1	300	240	
10	None	60	1	300	240	
11	None	60	1	300	240	
12	None	60	1	300	240	
13	None	60	1	300	240	
14	None	60	1	300	240	
15	None	60	1	300	240	
16	None	60	1	300	240	

User Program Info

Pgrm	Description
1	Stop Time
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Colo Dept of Trans.

MaxTime Timing Shee 2.0.14

Administration

Unit Information

Controller ID	0
Main St.	SH 86
Side St.	Allen Pkwy

Adapter	IP Address	Subnet Mask	Default Gateway	ARP	DHCP
1	10.11.79.126	255.255.255.0	10.11.79.1	Disable	
2	10.20.70.51	255.255.255.0	0.0.0.0	Disable	

Serial Ports:

Port	Description	Function	Address	Baud	Bits	Stop	Parity	Flow	CTS	RTS
1	Port 2/C21S	None	1	9600	8	1	None	None	0	0
2	Aux_P3/C22S	None	1	9600	8	1	None	None	0	0
3	SDLC Port 1	None	1	9600	8	1	None	None	0	0
4	Com A/C50S	None	1	9600	8	1	None	None	0	0
5	FIO	None	1	9600	8	1	None	None	0	0
6	DISPLAY/C60M	None	1	9600	8	1	None	None	0	0
7	SP7	None	1	9600	8	1	None	None	0	0
8	SP8/Com B	None	1	9600	8	1	None	None	0	0

Unit Parameters

Startup Flash	0	Auto Ped Clr	Enable	Red Revert	4.0	Backup Time	600	Ext Mode	Disable
All Red Exit	6	Grn Flash Freq.	60	Yel Flash Freq.	60	MCE Enable	Enable	Free Seq.	1
MCE Seq.	1	Start Yellow	0.0	Start Red	0.0	Start Clear Hold	6		

Phase Parameters

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Walk Time	0	7	0	7	0	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0
Clear Time	0	15	0	32	0	28	0	33	0	0	0	0	0	0	0	0	0	0	0	0
Don't Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	5	20	5	5	5	20	5	5	1	1	1	1	1	1	1	1	1	1	1	1
Min Green 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passage	3.0	5.0	2.0	2.0	3.0	5.0	2.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max-1	15	80	20	10	20	80	20	20	0	0	0	0	0	0	0	0	0	0	0	0
Max-2	15	30	15	10	15	30	15	15	0	0	0	0	0	0	0	0	0	0	0	0
Max-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yel Change	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Add Red Clear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red Revert	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time B4 Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars B4 Reduce	0	0	0	0	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	0	0	0	0
Reduce By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dyn Max Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dyn Max Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advance Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Ped	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Ped Clr																				
Pre Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pre Clearance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phases	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Walk Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Clear Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Don't Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Min Green 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yel Change	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Add Red Clear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red Revert	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time B4 Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars B4 Reduce	0	0	0	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	0	0	0
Reduce By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dyn Max Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dyn Max Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advance Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Ped	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Ped Clr																			
Pre Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pre Clearance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Options

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Enable	X	X	X	X	X	X	X	X												
Auto Flash Ent.		X				X														
Auto Flash Exit		X				X														
Non Actuated I																				
Non Actuated II																				
Non Lock Mem	X	X	X	X	X	X	X	X												
Min Veh Recall		X				X														
Max Veh Recall																				
Ped Recall																				
Soft Veh Recall																				
Dual Entry																				
Sim Gap Dis																				
Guaranteed Pass																				
Act Rest Walk																				
Cond Service																				
Add Initial																				

Phases	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Enable																				
Auto Flash Ent.																				
Auto Flash Exit																				
Non Actuated I																				
Non Actuated II																				
Non Lock Mem																				
Min Veh Recall																				
Max Veh Recall																				
Ped Recall																				
Soft Veh Recall																				
Dual Entry																				
Sim Gap Dis																				
Guaranteed Pass																				
Act Rest Walk																				
Cond Service																				
Add Initial																				

Additional Phase Options

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Ped Clr During Yel																				
Ped Clr During Red																				
Cond Reservice																				
Yel Min Override																				
No Startup Call																				
Adv. Warn Flasher																				
No Ped Str Up Call																				
Ped Clr OVTG																				
Flash Exit Call																				
Flash Exit Ped Call																				
MinGreen2																				
MaxGreen2																				
MaxGreen3																				
Ped2																				
Ped Clear Pre Clear																				
Ped NA+ Mode																				
Red Rest																				
Serve Evy Oth Even																				
Serve Evy Oth Odd																				

Phases	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Ped Clr During Yel																				
Ped Clr During Red																				
Cond Reservice																				
Yel Min Override																				
No Startup Call																				
Adv. Warn Flasher																				
No Ped Str Up Call																				
Ped Clr OVTG																				
Flash Exit Call																				
Flash Exit Ped Call																				
MinGreen2																				
MaxGreen2																				
MaxGreen3																				
Ped2																				
Ped Clear Pre Clear																				
Ped NA+ Mode																				
Red Rest																				
Serve Evy Oth Even																				
Serve Evy Oth Odd																				

Phase Configuration

Ph.	Startup	Ring	Concurrent	No Served Phases	Startup Min	Description
1	Phase Not On	1	5,6		0	
2	Green No Walk	1	5,6		0	
3	Phase Not On	1	7,8		0	
4	Phase Not On	1	7,8		0	
5	Phase Not On	2	1,2		0	
6	Green No Walk	2	1,2		0	
7	Phase Not On	2	3,4		0	
8	Phase Not On	2	3,4		0	
9	None	0			0	
10	None	0			0	
11	None	0			0	
12	None	0			0	
13	None	0			0	
14	None	0			0	
15	None	0			0	
16	None	0			0	
17	None	0			0	
18	None	0			0	
19	None	0			0	
20	None	0			0	

21	None	0			0	
22	None	0			0	
23	None	0			0	
24	None	0			0	
25	None	0			0	
26	None	0			0	
27	None	0			0	
28	None	0			0	
29	None	0			0	
30	None	0			0	
31	None	0			0	
32	None	0			0	
33	None	0			0	
34	None	0			0	
35	None	0			0	
36	None	0			0	
37	None	0			0	
38	None	0			0	
39	None	0			0	
40	None	0			0	

Sequence Configuration

Sequence 1

Ring	Phases
1	1,2,a,3,4,b
2	5,6,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 2

Ring	Phases
1	1,2,a,3,4,b
2	5,6,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 3

Ring	Phases
1	1,2,a,3,4,b
2	5,6,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 4

Ring	Phases
1	1,2,a,3,4,b
2	5,6,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 5

Ring	Phases
1	1,2,a,3,4,b
2	6,5,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 6

Ring	Phases
1	2,1,a,3,4,b
2	6,5,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 7

Ring	Phases
1	1,2,a,4,3,b
2	6,5,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 8

Ring	Phases
1	2,1,a,4,3,b
2	6,5,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 9

Ring	Phases
1	1,2,a,3,4,b

Sequence 10

Ring	Phases
1	2,1,a,3,4,b

Sequence 11

Ring	Phases
1	1,2,a,4,3,b

Sequence 12

Ring	Phases
1	2,1,a,4,3,b

2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 13

Ring	Phases
1	1,2,a,3,4,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	

Sequence 14

Ring	Phases
1	2,1,a,3,4,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	

Sequence 15

Ring	Phases
1	1,2,a,4,3,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	

Sequence 16

Ring	Phases
1	2,1,a,4,3,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	

Sequence 13

11	
12	
13	
14	
15	
16	

Sequence 14

11	
12	
13	
14	
15	
16	

Sequence 15

11	
12	
13	
14	
15	
16	

Sequence 16

11	
12	
13	
14	
15	
16	

Sequence 17

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

Sequence 18

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

Sequence 19

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

Sequence 20

Ring	Phases
1	1,2,a,3,4,b
2	5,6,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Vehicle Detection Parameters

Det.	Call Phs	Call Ovl	Additional Call Phase	Switch Phase	Delay	Extend	Queue Limit	No Activity	Max Presence	Erratic Counts	Failed Time	Description
1	1	0		0	0.0	0.0	0	0	0	0	0	
2	2	0		0	0.0	0.0	0	0	0	0	0	
3	2	0		0	0.0	0.0	0	0	0	0	0	
4	2	0		0	0.0	0.0	0	0	0	0	0	
5	2	0		0	0.0	0.0	0	0	0	0	0	

6	2	0		0	0.0	0.0	0	0	0	0	0	
7	3	0		0	0.0	0.0	0	0	0	0	0	
8	4	0		0	0.0	0.0	0	0	0	0	0	
9	4	0		0	0.0	0.0	0	0	0	0	0	
10	4	0		0	0.0	0.0	0	0	0	0	0	
11	4	0		0	0.0	0.0	0	0	0	0	0	
12	4	0		0	0.0	0.0	0	0	0	0	0	
13	1	0		0	0.0	0.0	0	0	0	0	0	
14	3	0		0	0.0	0.0	0	0	0	0	0	
15	5	0		0	0.0	0.0	0	0	0	0	0	
16	6	0		0	0.0	0.0	0	0	0	0	0	
17	6	0		0	0.0	0.0	0	0	0	0	0	
18	6	0		0	0.0	0.0	0	0	0	0	0	
19	6	0		0	0.0	0.0	0	0	0	0	0	
20	6	0		0	0.0	0.0	0	0	0	0	0	
21	7	0		0	0.0	0.0	0	0	0	0	0	
22	8	0		0	0.0	0.0	0	0	0	0	0	
23	8	0		0	0.0	0.0	0	0	0	0	0	
24	8	0		0	0.0	0.0	0	0	0	0	0	
25	8	0		0	0.0	0.0	0	0	0	0	0	
26	8	0		0	0.0	0.0	0	0	0	0	0	
27	5	0		0	0.0	0.0	0	0	0	0	0	
28	7	0		0	0.0	0.0	0	0	0	0	0	
29	0	0		0	0.0	0.0	0	0	0	0	0	
30	0	0		0	0.0	0.0	0	0	0	0	0	
31	0	0		0	0.0	0.0	0	0	0	0	0	
32	0	0		0	0.0	0.0	0	0	0	0	0	
33	0	0		0	0.0	0.0	0	0	0	0	0	
34	0	0		0	0.0	0.0	0	0	0	0	0	
35	0	0		0	0.0	0.0	0	0	0	0	0	
36	0	0		0	0.0	0.0	0	0	0	0	0	
37	0	0		0	0.0	0.0	0	0	0	0	0	
38	0	0		0	0.0	0.0	0	0	0	0	0	
39	0	0		0	0.0	0.0	0	0	0	0	0	
40	0	0		0	0.0	0.0	0	0	0	0	0	
41	0	0		0	0.0	0.0	0	0	0	0	0	
42	0	0		0	0.0	0.0	0	0	0	0	0	
43	0	0		0	0.0	0.0	0	0	0	0	0	
44	0	0		0	0.0	0.0	0	0	0	0	0	
45	0	0		0	0.0	0.0	0	0	0	0	0	
46	0	0		0	0.0	0.0	0	0	0	0	0	
47	0	0		0	0.0	0.0	0	0	0	0	0	
48	0	0		0	0.0	0.0	0	0	0	0	0	
49	0	0		0	0.0	0.0	0	0	0	0	0	
50	0	0		0	0.0	0.0	0	0	0	0	0	
51	0	0		0	0.0	0.0	0	0	0	0	0	
52	0	0		0	0.0	0.0	0	0	0	0	0	
53	0	0		0	0.0	0.0	0	0	0	0	0	
54	0	0		0	0.0	0.0	0	0	0	0	0	
55	0	0		0	0.0	0.0	0	0	0	0	0	
56	0	0		0	0.0	0.0	0	0	0	0	0	
57	0	0		0	0.0	0.0	0	0	0	0	0	
58	0	0		0	0.0	0.0	0	0	0	0	0	
59	0	0		0	0.0	0.0	0	0	0	0	0	
60	0	0		0	0.0	0.0	0	0	0	0	0	
61	0	0		0	0.0	0.0	0	0	0	0	0	
62	0	0		0	0.0	0.0	0	0	0	0	0	
63	0	0		0	0.0	0.0	0	0	0	0	0	
64	0	0		0	0.0	0.0	0	0	0	0	0	
65	0	0		0	0.0	0.0	0	0	0	0	0	
66	0	0		0	0.0	0.0	0	0	0	0	0	
67	0	0		0	0.0	0.0	0	0	0	0	0	
68	0	0		0	0.0	0.0	0	0	0	0	0	

69	0	0		0	0.0	0.0	0	0	0	0	0	
70	0	0		0	0.0	0.0	0	0	0	0	0	
71	0	0		0	0.0	0.0	0	0	0	0	0	
72	0	0		0	0.0	0.0	0	0	0	0	0	

Vehicle Detection Options

Detector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Volume Detector	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Occupancy	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Yellow Lock Call																				
Red Lock call																				
Passage	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Queue																				
Call	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Terminate																				

Detector	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Volume Detector	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Occupancy	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Yellow Lock Call																				
Red Lock call			X																	
Passage	X	X	X	X	X	X	X	X												
Queue																				
Call	X	X	X	X	X	X	X	X												
Terminate																				

Detector	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Volume Detector	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Occupancy	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Yellow Lock Call																				
Red Lock call			X																	
Passage																				
Queue																				
Call																				
Terminate																				

Detector	61	62	63	64	65	66	67	68	69	70	71	72
Volume Detector	X	X	X	X	X	X	X	X	X	X	X	X
Occupancy	X	X	X	X	X	X	X	X	X	X	X	X
Yellow Lock Call												
Red Lock call												
Passage												
Queue												
Call												
Terminate												

Data Collection Period	0

Pedestrian Detectors

Det	Call Phase	Call Ovlp	No Act	Max Presence	Erratic Count
1	0	0	0	0	0
2	2	0	0	0	0
3	0	0	0	0	0
4	4	0	0	0	0
5	0	0	0	0	0
6	6	0	0	0	0
7	0	0	0	0	0
8	8	0	0	0	0
9	0	0	0	0	0
10	0	0	0	0	0
11	0	0	0	0	0
12	0	0	0	0	0
13	0	0	0	0	0
14	0	0	0	0	0
15	0	0	0	0	0

Det	Call Phase	Call Ovlp	No Act	Max Presence	Erratic Count
21	0	0	0	0	0
22	0	0	0	0	0
23	0	0	0	0	0
24	0	0	0	0	0
25	0	0	0	0	0
26	0	0	0	0	0
27	0	0	0	0	0
28	0	0	0	0	0
29	0	0	0	0	0
30	0	0	0	0	0
31	0	0	0	0	0
32	0	0	0	0	0
33	0	0	0	0	0
34	0	0	0	0	0
35	0	0	0	0	0

16	0	0	0	0	0
17	0	0	0	0	0
18	0	0	0	0	0
19	0	0	0	0	0
20	0	0	0	0	0

36	0	0	0	0	0
37	0	0	0	0	0
38	0	0	0	0	0
39	0	0	0	0	0
40	0	0	0	0	0

Overlaps

OLP	Type	Included Phases	Modifier Phases	Trail GRN	Trail YEL	Trail RED	Walk 1	Ped Clr 1	Walk 2	Ped Clr 2	Delay	Flash	Descriptions
1	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
2	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
3	FYA - 4 Sec	4	3	0	0.0	0.0	0	0	0	0	0.0	Off	
4	Thur FYA Ped	4		0	0.0	0.0	0	0	0	0	0.0	Off	
5	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
6	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
7	FYA - 4 Sec	8	7	0	0.0	0.0	0	0	0	0	0.0	Off	
8	Thur FYA Ped	8		0	0.0	0.0	0	0	0	0	0.0	Off	
9	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
10	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
11	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
12	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
13	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
14	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
15	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
16	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
17	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
18	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
19	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
20	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
21	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
22	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
23	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
24	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
25	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
26	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
27	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
28	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
29	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
30	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
31	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
32	Off			0	0.0	0.0	0	0	0	0	0.0	Off	

Coordination Parameters

Operational Mode	Correction Mode	Maximum Mode	Force Mode
Automatic	Shortway (Auto)	Max Inhibit	Floating

Patterns

Patt.	Cycle	Offset 1	Offset 2	Offset 2	Split	Sequence	Ref. Color	Max Mode	Phs Pln	Det Pln	Ped Pln
1	120	36	0	0	1	1	Yel	Inh	1	1	1
2	90	60	0	0	2	2	Yel	Inh	1	1	1
3	120	107	0	0	3	3	Yel	Inh	1	1	1
4	100	70	0	0	4	4	Yel	Inh	1	1	1
5	0	0	0	0	0	0	Yel	Inh	1	1	1
6	0	0	0	0	0	0	Yel	Inh	1	1	1
7	0	0	0	0	0	0	Yel	Inh	1	1	1
8	0	0	0	0	0	0	Yel	Inh	1	1	1
9	0	0	0	0	0	0	Yel	Inh	1	1	1
10	0	0	0	0	0	0	Yel	Inh	1	1	1
11	0	0	0	0	0	0	Yel	Inh	1	1	1
12	0	0	0	0	0	0	Yel	Inh	1	1	1
13	0	0	0	0	0	0	Yel	Inh	1	1	1
14	0	0	0	0	0	0	Yel	Inh	1	1	1
15	0	0	0	0	0	0	Yel	Inh	1	1	1
16	0	0	0	0	0	0	Yel	Inh	1	1	1
17	0	0	0	0	0	0	Yel	Inh	1	1	1

18	0	0	0	0	0	0	Yel	Inh	1	1	1
19	0	0	0	0	0	0	Yel	Inh	1	1	1
20	0	0	0	0	20	20	Yel	Max2	1	1	1
21	0	0	0	0	0	0	Yel	Inh	1	1	1
22	0	0	0	0	0	0	Yel	Inh	1	1	1
23	0	0	0	0	0	0	Yel	Inh	1	1	1
24	0	0	0	0	0	0	Yel	Inh	1	1	1
25	0	0	0	0	0	0	Yel	Inh	1	1	1
26	0	0	0	0	0	0	Yel	Inh	1	1	1
27	0	0	0	0	0	0	Yel	Inh	1	1	1
28	0	0	0	0	0	0	Yel	Inh	1	1	1
29	0	0	0	0	0	0	Yel	Inh	1	1	1
30	0	0	0	0	0	0	Yel	Inh	1	1	1
31	0	0	0	0	0	0	Yel	Inh	1	1	1
32	0	0	0	0	0	0	Yel	Inh	1	1	1
33	0	0	0	0	0	0	Yel	Inh	1	1	1
34	0	0	0	0	0	0	Yel	Inh	1	1	1
35	0	0	0	0	0	0	Yel	Inh	1	1	1
36	0	0	0	0	0	0	Yel	Inh	1	1	1
37	0	0	0	0	0	0	Yel	Inh	1	1	1
38	0	0	0	0	0	0	Yel	Inh	1	1	1
39	0	0	0	0	0	0	Yel	Inh	1	1	1
40	0	0	0	0	0	0	Yel	Inh	1	1	1
41	0	0	0	0	0	0	Yel	Inh	1	1	1
42	0	0	0	0	0	0	Yel	Inh	1	1	1
43	0	0	0	0	0	0	Yel	Inh	1	1	1
44	0	0	0	0	0	0	Yel	Inh	1	1	1
45	0	0	0	0	0	0	Yel	Inh	1	1	1
46	0	0	0	0	0	0	Yel	Inh	1	1	1
47	0	0	0	0	0	0	Yel	Inh	1	1	1
48	0	0	0	0	0	0	Yel	Inh	1	1	1
49	0	0	0	0	0	0	Yel	Inh	1	1	1
50	0	0	0	0	0	0	Yel	Inh	1	1	1
51	0	0	0	0	0	0	Yel	Inh	1	1	1
52	0	0	0	0	0	0	Yel	Inh	1	1	1
53	0	0	0	0	0	0	Yel	Inh	1	1	1
54	0	0	0	0	0	0	Yel	Inh	1	1	1
55	0	0	0	0	0	0	Yel	Inh	1	1	1
56	0	0	0	0	0	0	Yel	Inh	1	1	1
57	0	0	0	0	0	0	Yel	Inh	1	1	1
58	0	0	0	0	0	0	Yel	Inh	1	1	1
59	0	0	0	0	0	0	Yel	Inh	1	1	1
60	0	0	0	0	0	0	Yel	Inh	1	1	1
61	0	0	0	0	0	0	Yel	Inh	1	1	1
62	0	0	0	0	0	0	Yel	Inh	1	1	1
63	0	0	0	0	0	0	Yel	Inh	1	1	1
64	0	0	0	0	0	0	Yel	Inh	1	1	1
65	0	0	0	0	0	0	Yel	Inh	1	1	1
66	0	0	0	0	0	0	Yel	Inh	1	1	1
67	0	0	0	0	0	0	Yel	Inh	1	1	1
68	0	0	0	0	0	0	Yel	Inh	1	1	1
69	0	0	0	0	0	0	Yel	Inh	1	1	1
70	0	0	0	0	0	0	Yel	Inh	1	1	1
71	0	0	0	0	0	0	Yel	Inh	1	1	1
72	0	0	0	0	0	0	Yel	Inh	1	1	1
73	0	0	0	0	0	0	Yel	Inh	1	1	1
74	0	0	0	0	0	0	Yel	Inh	1	1	1
75	0	0	0	0	0	0	Yel	Inh	1	1	1
76	0	0	0	0	0	0	Yel	Inh	1	1	1
77	0	0	0	0	0	0	Yel	Inh	1	1	1
78	0	0	0	0	0	0	Yel	Inh	1	1	1
79	0	0	0	0	0	0	Yel	Inh	1	1	1
80	0	0	0	0	0	0	Yel	Inh	1	1	1

81	0	0	0	0	0	0	Yel	Inh	1	1	1
82	0	0	0	0	0	0	Yel	Inh	1	1	1
83	0	0	0	0	0	0	Yel	Inh	1	1	1
84	0	0	0	0	0	0	Yel	Inh	1	1	1
85	0	0	0	0	0	0	Yel	Inh	1	1	1
86	0	0	0	0	0	0	Yel	Inh	1	1	1
87	0	0	0	0	0	0	Yel	Inh	1	1	1
88	0	0	0	0	0	0	Yel	Inh	1	1	1
89	0	0	0	0	0	0	Yel	Inh	1	1	1
90	0	0	0	0	0	0	Yel	Inh	1	1	1
91	0	0	0	0	0	0	Yel	Inh	1	1	1
92	0	0	0	0	0	0	Yel	Inh	1	1	1
93	0	0	0	0	0	0	Yel	Inh	1	1	1
94	0	0	0	0	0	0	Yel	Inh	1	1	1
95	0	0	0	0	0	0	Yel	Inh	1	1	1
96	0	0	0	0	0	0	Yel	Inh	1	1	1
97	0	0	0	0	0	0	Yel	Inh	1	1	1
98	0	0	0	0	0	0	Yel	Inh	1	1	1
99	0	0	0	0	0	0	Yel	Inh	1	1	1
100	0	0	0	0	0	0	Yel	Inh	1	1	1
101	0	0	0	0	0	0	Yel	Inh	1	1	1
102	0	0	0	0	0	0	Yel	Inh	1	1	1
103	0	0	0	0	0	0	Yel	Inh	1	1	1
104	0	0	0	0	0	0	Yel	Inh	1	1	1
105	0	0	0	0	0	0	Yel	Inh	1	1	1
106	0	0	0	0	0	0	Yel	Inh	1	1	1
107	0	0	0	0	0	0	Yel	Inh	1	1	1
108	0	0	0	0	0	0	Yel	Inh	1	1	1
109	0	0	0	0	0	0	Yel	Inh	1	1	1
110	0	0	0	0	0	0	Yel	Inh	1	1	1
111	0	0	0	0	0	0	Yel	Inh	1	1	1
112	0	0	0	0	0	0	Yel	Inh	1	1	1
113	0	0	0	0	0	0	Yel	Inh	1	1	1
114	0	0	0	0	0	0	Yel	Inh	1	1	1
115	0	0	0	0	0	0	Yel	Inh	1	1	1
116	0	0	0	0	0	0	Yel	Inh	1	1	1
117	0	0	0	0	0	0	Yel	Inh	1	1	1
118	0	0	0	0	0	0	Yel	Inh	1	1	1
119	0	0	0	0	0	0	Yel	Inh	1	1	1
120	0	0	0	0	0	0	Yel	Inh	1	1	1
121	0	0	0	0	0	0	Yel	Inh	1	1	1
122	0	0	0	0	0	0	Yel	Inh	1	1	1
123	0	0	0	0	0	0	Yel	Inh	1	1	1
124	0	0	0	0	0	0	Yel	Inh	1	1	1
125	0	0	0	0	0	0	Yel	Inh	1	1	1
126	0	0	0	0	0	0	Yel	Inh	1	1	1
127	0	0	0	0	0	0	Yel	Inh	1	1	1
128	0	0	0	0	0	0	Yel	Inh	1	1	1

Split Parameters

Split 1		Coord	Ref	
PH.	Time	PH	PH	Mode
1	11			None
2	83	X	X	None
3	14			None
4	12			None
5	15			None
6	79	X	X	None
7	13			None
8	13			None
9	0			None
10	0			None
11	0			None
12	0			None

Split 2		Coord	Ref	
PH.	Time	PH	PH	Mode
1	10			None
2	50	X	X	None
3	17			None
4	13			None
5	17			None
6	43	X	X	None
7	17			None
8	13			None
9	0			None
10	0			None
11	0			None
12	0			None

13	0			None
14	0			None
15	0			None
16	0			None

13	0			None
14	0			None
15	0			None
16	0			None

Split 3

PH.	Time	Coord PH	Ref PH	Mode
1	11			None
2	83	X	X	None
3	13			None
4	13			None
5	20			None
6	74	X	X	None
7	13			None
8	13			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 4

PH.	Time	Coord PH	Ref PH	Mode
1	11			None
2	58	X	X	None
3	18			None
4	13			None
5	20			None
6	49	X	X	None
7	18			None
8	13			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 5

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 6

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 7

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 8

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 9 Coord Ref

Split 10 Coord Ref

PH.	Time	PH	PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None

PH.	Time	PH	PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None

Split 9

PH.	Time	Coord PH	Ref PH	Mode
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 10

PH.	Time	Coord PH	Ref PH	Mode
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 11

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 12

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 13

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 14

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 15

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None

Split 16

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None

4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 17		Coord	Ref	
PH.	Time	PH	PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 18		Coord	Ref	
PH.	Time	PH	PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 19		Coord	Ref	
PH.	Time	PH	PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None

Split 20		Coord	Ref	
PH.	Time	PH	PH	Mode
1	0			None
2	0	X	X	None
3	0			None
4	0			None
5	0			None
6	0	X	X	None

Split 19		Coord	Ref	
PH.	Time	PH	PH	Mode
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 20		Coord	Ref	
PH.	Time	PH	PH	Mode
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

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

Day Plan 1

Month of Year						Days of Week							Days of Month														
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

J	A	S	O	N	D
X	X	X	X	X	X

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Day Plan 2

Month of Year						Days of Week						
J	F	M	A	M	J	S	M	T	W	T	F	S
X	X	X	X	X	X	X						X
J	A	S	O	N	D							
X	X	X	X	X	X							

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

Day Plan 3

Month of Year						Days of Week						
J	F	M	A	M	J	S	M	T	W	T	F	S
X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D							
X	X	X	X	X	X							

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

Day Plan 4

Month of Year						Days of Week						
J	F	M	A	M	J	S	M	T	W	T	F	S
X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D							
X	X	X	X	X	X							

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

Day Plan 5

Month of Year						Days of Week						
J	F	M	A	M	J	S	M	T	W	T	F	S
X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D							
X	X	X	X	X	X							

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

Day Plan 6

Month of Year						Days of Week						
J	F	M	A	M	J	S	M	T	W	T	F	S
X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D							
X	X	X	X	X	X							

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

Day Plan 7

Month of Year						Days of Week						
J	F	M	A	M	J	S	M	T	W	T	F	S
X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D							
X	X	X	X	X	X							

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

Day Plan 8

Month of Year						Days of Week						
J	F	M	A	M	J	S	M	T	W	T	F	S
X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D							
X	X	X	X	X	X							

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

Day Plan 9

Month of Year						Days of Week						
J	F	M	A	M	J	S	M	T	W	T	F	S
X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D							
X	X	X	X	X	X							

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

Day Plan 10

Month of Year						Days of Week						
J	F	M	A	M	J	S	M	T	W	T	F	S
X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D							

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

X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Day Plan 11

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

J	A	S	O	N	D	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Day Plan 12

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

J	A	S	O	N	D	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Day Plan 13

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

J	A	S	O	N	D	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Day Plan 14

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

J	A	S	O	N	D	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Day Plan 15

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

J	A	S	O	N	D	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Day Plan 1

Event	Hour	Min.	Act
1	6	0	1
2	9	0	2
3	15	0	3
4	19	0	2
5	22	0	20

Day Plan 2

Event	Hour	Min.	Act
1	6	0	1
2	9	0	4
3	22	0	20
4	0	0	
5	0	0	

Day Plan 3

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	

Day Plan 4

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	

Day Plan 1

Event	Hour	Min.	Act
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 2

Event	Hour	Min.	Act
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 3

Event	Hour	Min.	Act
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 4

Event	Hour	Min.	Act
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 5

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	

Day Plan 6

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	

Day Plan 7

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	

Day Plan 8

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	

8	0	0	
9	0	0	
10	0	0	

8	0	0	
9	0	0	
10	0	0	

8	0	0	
9	0	0	
10	0	0	

8	0	0	
9	0	0	
10	0	0	

Day Plan 9

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 10

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 11

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 12

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 13

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 14

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 15

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 16

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 17

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 18

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 19

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 20

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Actions

		Aux.			Special Functions						
Act	Pattern	1	2	3	1	2	3	4	5	6	7	8
1	Pattern 1											
2	Pattern 2											
3	Pattern 3											
4	Pattern 4											
5	Pattern 5											
6	Pattern 6											
7	Pattern 7											
8	Pattern 8											
9	Pattern 9											
10	Pattern 10											
11	None											
12	None											
13	None											
14	None											
15	None											
16	None											
17	None											
18	None											
19	None											
20	None											

Actions

		Aux.			Special Functions						
Act	Pattern	1	2	3	1	2	3	4	5	6	7	8
33	None											
34	None											
35	None											
36	None											
37	None											
38	None											
39	None											
40	None											
41	None											
42	None											
43	None											
44	None											
45	None											
46	None											
47	None											
48	None											
49	None											
50	None											
51	None											
52	None											

21	None									
22	None									
23	None									
24	None									
25	None									
26	None									
27	None									
28	None									
29	None									
30	None									
31	None									
32	None									

53	None									
54	None									
55	None									
56	None									
57	None									
58	None									
59	None									
60	None									
61	None									
62	None									
63	None									
64	None									

Preemption Parameters

Preempt	1	2	3	4	5	6	7	8
Link	0	0	0	0	0	0	0	0
Delay	0	0	0	0	0	0	0	0
Min Duration	0	0	10	10	10	10	0	0
Min Green	0	0	0	0	0	0	0	0
Min Walk	0	0	0	0	0	0	0	0
Ent. Ped Clear	255	255	255	255	255	255	255	255
Track Green	0	0	0	0	0	0	0	0
Dwell Green	0	0	5	5	5	5	0	0
Max Presence	0	0	0	0	0	0	0	0
Enter Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Ent. Red Clear	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5

Preemption Parameters

Preempt	1	2	3	4	5	6	7	8
Track Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Track Red Clear	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Exit Red	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Exit Ped Clear	255	255	255	255	255	255	255	255
Exit Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Exit Red	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5

Preempt	1	2	3	4	5	6	7	8
Non Lock Mem								
Not Overide Flash								
NotOverideNextPre								
Flash Dwell								

Preemption Configuration

Preempt	1	2	3	4	5	6	7	8
Track phase								
Dwell Phase			2,5	3,8	1,6	4,7		
Dwell Ped								
Exit Phase								
Track Overlap								
Dwell overlap								
Cycling phase								
Cycling Ped								
Cycling Overlap								

IO Modules

IO Mod	TYPE
1	Caltrans 332
2	None
3	None
4	None
5	None
6	None
7	None
8	None
9	None
10	None

Channel Configuration

Chan	Ctrl Type	Source
1	Phs Veh	1
2	Phs Veh	2
3	Olp	3
4	Olp	4
5	Phs Veh	5
6	Phs Veh	6
7	Olp	7
8	Olp	8
9	Olp	1
10	Olp	2

Chan	Ctrl Type	Source
11	Olp	3
12	Olp	4
13	Phs Ped	2
14	Phs Ped	4
15	Phs Ped	6
16	Phs Ped	8
17	Olp	5
18	Olp	6
19	None	0
20	None	0

Channel Options

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flash Yellow																
Flash Red	X	X	X	X	X	X	X	X								
Alt Flash	X			X	X			X								
Channel	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Flash Yellow																
Flash Red																
Alt Flash																

Startup Clearance Hold Type 1=off, 2=On, 3=Flash and 4= Alt Flash

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Red																
Yellow																
Green																
Channel	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Red																
Yellow																
Green																

Phase Intervals

Interval	Description	Red	Yel	Grn	Type
1	notActive	On	Off	Off	Red
2	dltGrn	On	Off	Off	Red
3	PreGrn	Off	Off	On	Green
4	minGrn	Off	Off	On	Green
5	grnExt	Off	Off	On	Green
6	grnDwell	Off	Off	On	Green
7	preClear	Off	Off	On	Green
8	yelChange	Off	On	Off	Yellow
9	redClear	On	Off	Off	Red
10	redDwell	On	Off	Off	Red
11	Barrier	On	Off	Off	Red
12					

Pedestrian Intervals

Interval	Description	DWK	CLR	Wlk	Type
1	notActive	On	Off	Off	Dont Walk
2	dltPed	On	Off	Off	Dont Walk
3	walk	Off	Off	On	Walk
4	walkDwell	Off	Off	On	Walk
5	flashDtWlk	Flash	Off	Off	Ped Clear
6	dWalk	On	Off	Off	Dont Walk
7					
8					

Countdown Display

Display	Addr	Phase	Time
1			
2			
3			
4			
5			
6			
7			
8			

Display	Addr	Phase	Time
9			
10			
11			
12			
13			
14			
15			
16			

Display	Addr	Phase	Time
17			
18			
19			
20			
21			
22			
23			
24			

Display	Addr	Phase	Time
25			
26			
27			
28			
29			
30			
31			
32			

Manual Control Phase Groups

Grp 1		Grp 2		Grp 3		Grp 4		Grp 5		Grp 6		Grp 7		Grp 8	
Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph
1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
3	0	3	0	3	0	3	0	3	0	3	0	3	0	3	0
4	0	4	0	4	0	4	0	4	0	4	0	4	0	4	0
5	0	5	0	5	0	5	0	5	0	5	0	5	0	5	0
6	0	6	0	6	0	6	0	6	0	6	0	6	0	6	0
7	0	7	0	7	0	7	0	7	0	7	0	7	0	7	0
8	0	8	0	8	0	8	0	8	0	8	0	8	0	8	0
9	0	9	0	9	0	9	0	9	0	9	0	9	0	9	0
10	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0
11	0	11	0	11	0	11	0	11	0	11	0	11	0	11	0
12	0	12	0	12	0	12	0	12	0	12	0	12	0	12	0
13	0	13	0	13	0	13	0	13	0	13	0	13	0	13	0
14	0	14	0	14	0	14	0	14	0	14	0	14	0	14	0
15	0	15	0	15	0	15	0	15	0	15	0	15	0	15	0
16	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0

Prioritor Settings

Prioritor	Priority Ph	Output Dly
1		0
2		0
3		0
4		0
5		0
6		0

Enabled	Lock Out Time
No	0

7		0
8		0

Loopback Functions

Func	Result Function Type	Index	Source Function Type	Index
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
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41				
42				
43				
44				
45				
46				
47				
48				
49				
50				

Func	Result Function Type	Index	Source Function Type	Index
51				
52				
53				
54				
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97				
98				
99				
100				

Peer Configuration

Ctrl	Peer ID	IP address	SNMP Port	Hot Port	Serial Port	Serial Addr.	Master Sect.	P2P TO	Description
1	0		161	80	0	0	0	15	
2	0		161	80	0	0	0	15	
3	0		161	80	0	0	0	15	
4	0		161	80	0	0	0	15	
5	0		161	80	0	0	0	15	

6	0		161	80	0	0	0	15	
7	0		161	80	0	0	0	15	
8	0		161	80	0	0	0	15	
9	0		161	80	0	0	0	15	
10	0		161	80	0	0	0	15	
11	0		161	80	0	0	0	15	
12	0		161	80	0	0	0	15	
13	0		161	80	0	0	0	15	
14	0		161	80	0	0	0	15	
15	0		161	80	0	0	0	15	
16	0		161	80	0	0	0	15	
17	0		161	80	0	0	0	15	
18	0		161	80	0	0	0	15	
19	0		161	80	0	0	0	15	
20	0		161	80	0	0	0	15	
21	0		161	80	0	0	0	15	
22	0		161	80	0	0	0	15	
23	0		161	80	0	0	0	15	
24	0		161	80	0	0	0	15	
25	0		161	80	0	0	0	15	
26	0		161	80	0	0	0	15	
27	0		161	80	0	0	0	15	
28	0		161	80	0	0	0	15	
29	0		161	80	0	0	0	15	
30	0		161	80	0	0	0	15	
31	0		161	80	0	0	0	15	
32	0		161	80	0	0	0	15	
33	0		161	80	0	0	0	15	
34	0		161	80	0	0	0	15	
35	0		161	80	0	0	0	15	
36	0		161	80	0	0	0	15	
37	0		161	80	0	0	0	15	
38	0		161	80	0	0	0	15	
39	0		161	80	0	0	0	15	
40	0		161	80	0	0	0	15	
41	0		161	80	0	0	0	15	
42	0		161	80	0	0	0	15	
43	0		161	80	0	0	0	15	
44	0		161	80	0	0	0	15	
45	0		161	80	0	0	0	15	
46	0		161	80	0	0	0	15	
47	0		161	80	0	0	0	15	
48	0		161	80	0	0	0	15	
49	0		161	80	0	0	0	15	
50	0		161	80	0	0	0	15	
51	0		161	80	0	0	0	15	
52	0		161	80	0	0	0	15	
53	0		161	80	0	0	0	15	
54	0		161	80	0	0	0	15	
55	0		161	80	0	0	0	15	
56	0		161	80	0	0	0	15	
57	0		161	80	0	0	0	15	
58	0		161	80	0	0	0	15	
59	0		161	80	0	0	0	15	
60	0		161	80	0	0	0	15	
61	0		161	80	0	0	0	15	
62	0		161	80	0	0	0	15	
63	0		161	80	0	0	0	15	
64	0		161	80	0	0	0	15	
65	0		161	80	0	0	0	15	
66	0		161	80	0	0	0	15	
67	0		161	80	0	0	0	15	
68	0		161	80	0	0	0	15	

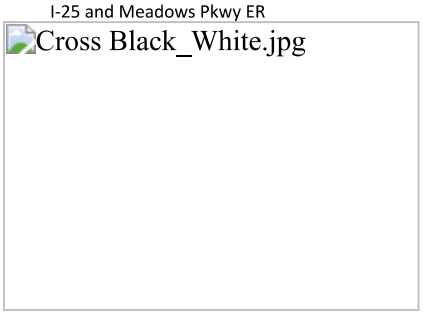
69	0		161	80	0	0	0	15	
70	0		161	80	0	0	0	15	
71	0		161	80	0	0	0	15	
72	0		161	80	0	0	0	15	
73	0		161	80	0	0	0	15	
74	0		161	80	0	0	0	15	
75	0		161	80	0	0	0	15	
76	0		161	80	0	0	0	15	
77	0		161	80	0	0	0	15	
78	0		161	80	0	0	0	15	
79	0		161	80	0	0	0	15	
80	0		161	80	0	0	0	15	
81	0		161	80	0	0	0	15	
82	0		161	80	0	0	0	15	
83	0		161	80	0	0	0	15	
84	0		161	80	0	0	0	15	
85	0		161	80	0	0	0	15	
86	0		161	80	0	0	0	15	
87	0		161	80	0	0	0	15	
88	0		161	80	0	0	0	15	
89	0		161	80	0	0	0	15	
90	0		161	80	0	0	0	15	
91	0		161	80	0	0	0	15	
92	0		161	80	0	0	0	15	
93	0		161	80	0	0	0	15	
94	0		161	80	0	0	0	15	
95	0		161	80	0	0	0	15	
96	0		161	80	0	0	0	15	
97	0		161	80	0	0	0	15	
98	0		161	80	0	0	0	15	
99	0		161	80	0	0	0	15	
100	0		161	80	0	0	0	15	
101	0		161	80	0	0	0	15	
102	0		161	80	0	0	0	15	
103	0		161	80	0	0	0	15	
104	0		161	80	0	0	0	15	
105	0		161	80	0	0	0	15	
106	0		161	80	0	0	0	15	
107	0		161	80	0	0	0	15	
108	0		161	80	0	0	0	15	
109	0		161	80	0	0	0	15	
110	0		161	80	0	0	0	15	
111	0		161	80	0	0	0	15	
112	0		161	80	0	0	0	15	
113	0		161	80	0	0	0	15	
114	0		161	80	0	0	0	15	

CDOT

MaxTime Timing Shee

I-25 and Meadows Pkwy ER

Administration



Unit Information

Controller ID	0
Main St.	I-25
Side St.	Meadows Pkwy ER

Adapter	IP Address	Subnet Mask	Default Gateway	ARP	DHCP
1	10.11.79.125	255.255.255.0	10.11.79.1	Disable	
2	10.20.70.51	255.255.255.0	0.0.0.0	Disable	

Serial Ports:

Port	Description	Function	Address	Baud	Bits	Stop	Parity	Flow	CTS	RTS
1	Port 2/C21S	None	1	9600	8	1	None	None	0	0
2	Aux_P3/C22S	None	1	9600	8	1	None	None	0	0
3	SDLC Port 1	None	1	9600	8	1	None	None	0	0
4	Com A/C50S	None	1	9600	8	1	None	None	0	0
5	FIO	None	1	9600	8	1	None	None	0	0
6	DISPLAY/C60M	None	1	9600	8	1	None	None	0	0
7	SP7	None	1	9600	8	1	None	None	0	0
8	SP8/Com B	None	1	9600	8	1	None	None	0	0

Unit Parameters

Startup Flash	0	Auto Ped Clr	Enable	Red Revert	4.0	Backup Time	600	Ext Mode	Enable
All Red Exit	6	Grn Flash Freq.	60	Yel Flash Freq.	60	MCE Enable	Enable	Free Seq.	1
MCE Seq.	1	Start Yellow	0.0	Start Red	0.0	Start Clear Hold	6		

Phase Parameters

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Walk Time	0	7	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Clear Time	0	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Don't Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	0	20	0	5	0	20	0	0	1	1	1	1	1	1	1	1	1	1	1	1
Min Green 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passage	0.0	6.0	0.0	5.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max-1	0	95	0	40	0	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yel Change	0.0	4.0	0.0	3.0	0.0	4.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Add Red Clear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red Revert	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time B4 Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars B4 Reduce	0	0	0	0	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	0	0	0	0
Reduce By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	6.0	0.0	5.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dyn Max Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dyn Max Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advance Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Ped	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Ped Clr																				
Pre Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pre Clearance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phases	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Walk Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Clear Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Don't Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Min Green 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yel Change	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Add Red Clear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red Revert	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time B4 Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars B4 Reduce	0	0	0	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	0	0	0
Reduce By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dyn Max Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dyn Max Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advance Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Ped	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Ped Clr																			
Pre Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pre Clearance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Options

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Enable	X	X	X	X	X	X	X	X												
Auto Flash Ent.		X				X														
Auto Flash Exit				X				X												
Non Actuated I																				
Non Actuated II																				
Non Lock Mem	X	X	X	X	X	X	X	X												
Min Veh Recall		X				X														
Max Veh Recall																				
Ped Recall																				
Soft Veh Recall																				
Dual Entry																				
Sim Gap Dis																				
Guaranteed Pass																				
Act Rest Walk																				
Cond Service																				
Add Initial																				

Phases	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Enable																				
Auto Flash Ent.																				
Auto Flash Exit																				
Non Actuated I																				
Non Actuated II																				
Non Lock Mem																				
Min Veh Recall																				
Max Veh Recall																				
Ped Recall																				
Soft Veh Recall																				
Dual Entry																				
Sim Gap Dis																				
Guaranteed Pass																				
Act Rest Walk																				
Cond Service																				
Add Initial																				

Additional Phase Options

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Ped Clr During Yel																				
Ped Clr During Red																				
Cond Reservice																				
Yel Min Override	X	X	X	X	X	X	X	X												
No Startup Call																				
Adv. Warn Flasher																				
No Ped Str Up Call																				
Ped Clr OVTG																				
Flash Exit Call																				
Flash Exit Ped Call																				
MinGreen2																				
MaxGreen2																				
MaxGreen3																				
Ped2																				
Ped Clear Pre Clear																				
Ped NA+ Mode																				
Red Rest																				
Serve Evy Oth Even																				
Serve Evy Oth Odd																				

Phases	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Ped Clr During Yel																				
Ped Clr During Red																				
Cond Reservice																				
Yel Min Override																				
No Startup Call																				
Adv. Warn Flasher																				
No Ped Str Up Call																				
Ped Clr OVTG																				
Flash Exit Call																				
Flash Exit Ped Call																				
MinGreen2																				
MaxGreen2																				
MaxGreen3																				
Ped2																				
Ped Clear Pre Clear																				
Ped NA+ Mode																				
Red Rest																				
Serve Evy Oth Even																				
Serve Evy Oth Odd																				

Phase Configuration

Ph.	Startup	Ring	Concurrent	No Served Phases	Startup Min	Description
1	Phase Not On	0			0	SBLT
2	Green No Walk	1	6		0	NBT
3	Phase Not On	0			0	WBLT
4	Phase Not On	1			0	EBT
5	Phase Not On	0			0	NBLT
6	Green No Walk	2	2		0	SBT
7	Phase Not On	0			0	EBLT
8	Phase Not On	0			0	WBT
9	None	0			0	
10	None	0			0	
11	None	0			0	
12	None	0			0	
13	None	0			0	
14	None	0			0	
15	None	0			0	
16	None	0			0	
17	None	0			0	
18	None	0			0	
19	None	0			0	
20	None	0			0	

21	None	0			0	
22	None	0			0	
23	None	0			0	
24	None	0			0	
25	None	0			0	
26	None	0			0	
27	None	0			0	
28	None	0			0	
29	None	0			0	
30	None	0			0	
31	None	0			0	
32	None	0			0	
33	None	0			0	
34	None	0			0	
35	None	0			0	
36	None	0			0	
37	None	0			0	
38	None	0			0	
39	None	0			0	
40	None	0			0	

Sequence Configuration

Sequence 1

Ring	Phases
1	2,a,4,b
2	6,a,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 2

Ring	Phases
1	2,a,4,b
2	6,a,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 3

Ring	Phases
1	2,a,4,b
2	6,a,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 4

Ring	Phases
1	2,a,4,b
2	6,a,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 5

Ring	Phases
1	1,2,a,3,4,b
2	6,5,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 6

Ring	Phases
1	2,1,a,3,4,b
2	6,5,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 7

Ring	Phases
1	1,2,a,4,3,b
2	6,5,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 8

Ring	Phases
1	2,1,a,4,3,b
2	6,5,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 9

Ring	Phases
1	1,2,a,3,4,b

Sequence 10

Ring	Phases
1	2,1,a,3,4,b

Sequence 11

Ring	Phases
1	1,2,a,4,3,b

Sequence 12

Ring	Phases
1	2,1,a,4,3,b

2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 13

Ring	Phases
1	1,2,a,3,4,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	

Sequence 14

Ring	Phases
1	2,1,a,3,4,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	

Sequence 15

Ring	Phases
1	1,2,a,4,3,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	

Sequence 16

Ring	Phases
1	2,1,a,4,3,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	

Sequence 13

11	
12	
13	
14	
15	
16	

Sequence 14

11	
12	
13	
14	
15	
16	

Sequence 15

11	
12	
13	
14	
15	
16	

Sequence 16

11	
12	
13	
14	
15	
16	

Sequence 17

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

Sequence 18

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

Sequence 19

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

Sequence 20

Ring	Phases
1	2,a,4,b
2	6,a,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Vehicle Detection Parameters

Det.	Call Phs	Call Ovl	Additional Call Phase	Switch Phase	Delay	Extend	Queue Limit	No Activity	Max Presence	Erratic Counts	Failed Time	Description
1	1	0		0	0.0	0.0	0	0	0	0	0	
2	2	0		0	0.0	0.0	0	0	0	0	0	
3	2	0		0	0.0	0.0	0	0	0	0	0	
4	2	0		0	0.0	0.0	0	0	0	0	0	

5	2	0		0	0.0	0.0	0	0	0	0	0	
6	2	0		0	0.0	0.0	0	0	0	0	0	
7	3	0		0	0.0	0.0	0	0	0	0	0	
8	4	0		0	0.0	0.0	0	0	0	0	0	
9	4	0		0	0.0	0.0	0	0	0	0	0	
10	4	0		0	0.0	0.0	0	0	0	0	0	
11	4	0		0	0.0	0.0	0	0	0	0	0	
12	4	0		0	0.0	0.0	0	0	0	0	0	
13	1	0		0	0.0	0.0	0	0	0	0	0	
14	3	0		0	0.0	0.0	0	0	0	0	0	
15	5	0		0	0.0	0.0	0	0	0	0	0	
16	6	0		0	0.0	0.0	0	0	0	0	0	
17	6	0		0	0.0	0.0	0	0	0	0	0	
18	6	0		0	0.0	0.0	0	0	0	0	0	
19	6	0		0	0.0	0.0	0	0	0	0	0	
20	6	0		0	0.0	0.0	0	0	0	0	0	
21	7	0		0	0.0	0.0	0	0	0	0	0	
22	8	0		0	0.0	0.0	0	0	0	0	0	
23	8	0		0	0.0	0.0	0	0	0	0	0	
24	8	0		0	0.0	0.0	0	0	0	0	0	
25	8	0		0	0.0	0.0	0	0	0	0	0	
26	8	0		0	0.0	0.0	0	0	0	0	0	
27	5	0		0	0.0	0.0	0	0	0	0	0	
28	7	0		0	0.0	0.0	0	0	0	0	0	
29	0	0		0	0.0	0.0	0	0	0	0	0	
30	0	0		0	0.0	0.0	0	0	0	0	0	
31	0	0		0	0.0	0.0	0	0	0	0	0	
32	0	0		0	0.0	0.0	0	0	0	0	0	
33	0	0		0	0.0	0.0	0	0	0	0	0	
34	0	0		0	0.0	0.0	0	0	0	0	0	
35	0	0		0	0.0	0.0	0	0	0	0	0	
36	0	0		0	0.0	0.0	0	0	0	0	0	
37	0	0		0	0.0	0.0	0	0	0	0	0	
38	0	0		0	0.0	0.0	0	0	0	0	0	
39	0	0		0	0.0	0.0	0	0	0	0	0	
40	0	0		0	0.0	0.0	0	0	0	0	0	
41	0	0		0	0.0	0.0	0	0	0	0	0	
42	0	0		0	0.0	0.0	0	0	0	0	0	
43	0	0		0	0.0	0.0	0	0	0	0	0	
44	0	0		0	0.0	0.0	0	0	0	0	0	
45	0	0		0	0.0	0.0	0	0	0	0	0	
46	0	0		0	0.0	0.0	0	0	0	0	0	
47	0	0		0	0.0	0.0	0	0	0	0	0	
48	0	0		0	0.0	0.0	0	0	0	0	0	
49	0	0		0	0.0	0.0	0	0	0	0	0	
50	0	0		0	0.0	0.0	0	0	0	0	0	
51	0	0		0	0.0	0.0	0	0	0	0	0	
52	0	0		0	0.0	0.0	0	0	0	0	0	
53	0	0		0	0.0	0.0	0	0	0	0	0	
54	0	0		0	0.0	0.0	0	0	0	0	0	
55	0	0		0	0.0	0.0	0	0	0	0	0	
56	0	0		0	0.0	0.0	0	0	0	0	0	
57	0	0		0	0.0	0.0	0	0	0	0	0	
58	0	0		0	0.0	0.0	0	0	0	0	0	
59	0	0		0	0.0	0.0	0	0	0	0	0	
60	0	0		0	0.0	0.0	0	0	0	0	0	
61	0	0		0	0.0	0.0	0	0	0	0	0	
62	0	0		0	0.0	0.0	0	0	0	0	0	
63	0	0		0	0.0	0.0	0	0	0	0	0	
64	0	0		0	0.0	0.0	0	0	0	0	0	
65	0	0		0	0.0	0.0	0	0	0	0	0	
66	0	0		0	0.0	0.0	0	0	0	0	0	
67	0	0		0	0.0	0.0	0	0	0	0	0	
68	0	0		0	0.0	0.0	0	0	0	0	0	

69	0	0		0	0.0	0.0	0	0	0	0	0	
70	0	0		0	0.0	0.0	0	0	0	0	0	
71	0	0		0	0.0	0.0	0	0	0	0	0	
72	0	0		0	0.0	0.0	0	0	0	0	0	

Vehicle Detection Options

Detector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Volume Detector	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Occupancy	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Yellow Lock Call																				
Red Lock call																				
Passage	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	
Queue																				
Call	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X		X
Terminate																				

Detector	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Volume Detector	X	X	X	X	X	X	X	X												
Occupancy	X	X	X	X	X	X	X	X												
Yellow Lock Call																				
Red Lock call			X																	
Passage	X	X	X	X	X	X	X	X												
Queue																				
Call	X	X	X	X	X	X	X	X												
Terminate																				

Detector	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Volume Detector																				
Occupancy																				
Yellow Lock Call																				
Red Lock call																				
Passage																				
Queue																				
Call																				
Terminate																				

Detector	61	62	63	64	65	66	67	68	69	70	71	72
Volume Detector												
Occupancy												
Yellow Lock Call												
Red Lock call												
Passage												
Queue												
Call												
Terminate												

Data Collection Period	60

Pedestrian Detectors

Det	Call Phase	Call Ovlp	No Act	Max Presence	Erratic Count
1	0	0	0	0	0
2	2	0	0	0	0
3	0	0	0	0	0
4	4	0	0	0	0
5	0	0	0	0	0
6	6	0	0	0	0
7	0	0	0	0	0
8	8	0	0	0	0
9	0	0	0	0	0
10	0	0	0	0	0
11	0	0	0	0	0
12	0	0	0	0	0
13	0	0	0	0	0
14	0	0	0	0	0

Det	Call Phase	Call Ovlp	No Act	Max Presence	Erratic Count
21	0	0	0	0	0
22	0	0	0	0	0
23	0	0	0	0	0
24	0	0	0	0	0
25	0	0	0	0	0
26	0	0	0	0	0
27	0	0	0	0	0
28	0	0	0	0	0
29	0	0	0	0	0
30	0	0	0	0	0
31	0	0	0	0	0
32	0	0	0	0	0
33	0	0	0	0	0
34	0	0	0	0	0

15	0	0	0	0	0
16	0	0	0	0	0
17	0	0	0	0	0
18	0	0	0	0	0
19	0	0	0	0	0
20	0	0	0	0	0

35	0	0	0	0	0
36	0	0	0	0	0
37	0	0	0	0	0
38	0	0	0	0	0
39	0	0	0	0	0
40	0	0	0	0	0

Overlaps

OLP	Type	Included Phases	Modifier Phases	Trail GRN	Trail YEL	Trail RED	Walk 1	Ped Clr 1	Walk 2	Ped Clr 2	Delay	Flash	Descriptions
1	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
2	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
3	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
4	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
5	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
6	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
7	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
8	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
9	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
10	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
11	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
12	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
13	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
14	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
15	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
16	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
17	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
18	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
19	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
20	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
21	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
22	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
23	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
24	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
25	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
26	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
27	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
28	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
29	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
30	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
31	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
32	Off			0	0.0	0.0	0	0	0	0	0.0	Off	

Coordination Parameters

Operational Mode	Correction Mode	Maximum Mode	Force Mode
Automatic	Shortway (Auto)	Per Pattern	Per Pattern

Patterns

Patt.	Cycle	Offset 1	Offset 2	Offset 2	Split	Sequence	Ref. Color	Max Mode	Phs Pln	Det Pln	Ped Pln
1	120	35	0	0	1	1	Yel	Inh	1	1	1
2	90	75	0	0	2	2	Yel	Inh	1	1	1
3	120	106	0	0	3	3	Yel	Inh	1	1	1
4	100	80	0	0	4	4	Yel	Inh	1	1	1
5	0	0	0	0	0	0	Yel	Inh	1	1	1
6	0	0	0	0	0	0	Yel	Inh	1	1	1
7	0	0	0	0	0	0	Yel	Inh	1	1	1
8	0	0	0	0	0	0	Yel	Inh	1	1	1
9	0	0	0	0	0	0	Yel	Inh	1	1	1
10	0	0	0	0	0	0	Yel	Inh	1	1	1
11	0	0	0	0	0	0	Yel	Inh	1	1	1
12	0	0	0	0	0	0	Yel	Inh	1	1	1
13	0	0	0	0	0	0	Yel	Inh	1	1	1
14	0	0	0	0	0	0	Yel	Inh	1	1	1
15	0	0	0	0	0	0	Yel	Inh	1	1	1
16	0	0	0	0	0	0	Yel	Inh	1	1	1

17	0	0	0	0	0	0	Yel	Inh	1	1	1
18	0	0	0	0	0	0	Yel	Inh	1	1	1
19	0	0	0	0	0	0	Yel	Inh	1	1	1
20	0	0	0	0	20	20	Yel	Max1	1	1	1
21	0	0	0	0	0	0	Yel	Inh	1	1	1
22	0	0	0	0	0	0	Yel	Inh	1	1	1
23	0	0	0	0	0	0	Yel	Inh	1	1	1
24	0	0	0	0	0	0	Yel	Inh	1	1	1
25	0	0	0	0	0	0	Yel	Inh	1	1	1
26	0	0	0	0	0	0	Yel	Inh	1	1	1
27	0	0	0	0	0	0	Yel	Inh	1	1	1
28	0	0	0	0	0	0	Yel	Inh	1	1	1
29	0	0	0	0	0	0	Yel	Inh	1	1	1
30	0	0	0	0	0	0	Yel	Inh	1	1	1
31	0	0	0	0	0	0	Yel	Inh	1	1	1
32	0	0	0	0	0	0	Yel	Inh	1	1	1
33	0	0	0	0	0	0	Yel	Inh	1	1	1
34	0	0	0	0	0	0	Yel	Inh	1	1	1
35	0	0	0	0	0	0	Yel	Inh	1	1	1
36	0	0	0	0	0	0	Yel	Inh	1	1	1
37	0	0	0	0	0	0	Yel	Inh	1	1	1
38	0	0	0	0	0	0	Yel	Inh	1	1	1
39	0	0	0	0	0	0	Yel	Inh	1	1	1
40	0	0	0	0	0	0	Yel	Inh	1	1	1
41	0	0	0	0	0	0	Yel	Inh	1	1	1
42	0	0	0	0	0	0	Yel	Inh	1	1	1
43	0	0	0	0	0	0	Yel	Inh	1	1	1
44	0	0	0	0	0	0	Yel	Inh	1	1	1
45	0	0	0	0	0	0	Yel	Inh	1	1	1
46	0	0	0	0	0	0	Yel	Inh	1	1	1
47	0	0	0	0	0	0	Yel	Inh	1	1	1
48	0	0	0	0	0	0	Yel	Inh	1	1	1
49	0	0	0	0	0	0	Yel	Inh	1	1	1
50	0	0	0	0	0	0	Yel	Inh	1	1	1
51	0	0	0	0	0	0	Yel	Inh	1	1	1
52	0	0	0	0	0	0	Yel	Inh	1	1	1
53	0	0	0	0	0	0	Yel	Inh	1	1	1
54	0	0	0	0	0	0	Yel	Inh	1	1	1
55	0	0	0	0	0	0	Yel	Inh	1	1	1
56	0	0	0	0	0	0	Yel	Inh	1	1	1
57	0	0	0	0	0	0	Yel	Inh	1	1	1
58	0	0	0	0	0	0	Yel	Inh	1	1	1
59	0	0	0	0	0	0	Yel	Inh	1	1	1
60	0	0	0	0	0	0	Yel	Inh	1	1	1
61	0	0	0	0	0	0	Yel	Inh	1	1	1
62	0	0	0	0	0	0	Yel	Inh	1	1	1
63	0	0	0	0	0	0	Yel	Inh	1	1	1
64	0	0	0	0	0	0	Yel	Inh	1	1	1
65	0	0	0	0	0	0	Yel	Inh	1	1	1
66	0	0	0	0	0	0	Yel	Inh	1	1	1
67	0	0	0	0	0	0	Yel	Inh	1	1	1
68	0	0	0	0	0	0	Yel	Inh	1	1	1
69	0	0	0	0	0	0	Yel	Inh	1	1	1
70	0	0	0	0	0	0	Yel	Inh	1	1	1
71	0	0	0	0	0	0	Yel	Inh	1	1	1
72	0	0	0	0	0	0	Yel	Inh	1	1	1
73	0	0	0	0	0	0	Yel	Inh	1	1	1
74	0	0	0	0	0	0	Yel	Inh	1	1	1
75	0	0	0	0	0	0	Yel	Inh	1	1	1
76	0	0	0	0	0	0	Yel	Inh	1	1	1
77	0	0	0	0	0	0	Yel	Inh	1	1	1
78	0	0	0	0	0	0	Yel	Inh	1	1	1
79	0	0	0	0	0	0	Yel	Inh	1	1	1

80	0	0	0	0	0	0	Yel	Inh	1	1	1
81	0	0	0	0	0	0	Yel	Inh	1	1	1
82	0	0	0	0	0	0	Yel	Inh	1	1	1
83	0	0	0	0	0	0	Yel	Inh	1	1	1
84	0	0	0	0	0	0	Yel	Inh	1	1	1
85	0	0	0	0	0	0	Yel	Inh	1	1	1
86	0	0	0	0	0	0	Yel	Inh	1	1	1
87	0	0	0	0	0	0	Yel	Inh	1	1	1
88	0	0	0	0	0	0	Yel	Inh	1	1	1
89	0	0	0	0	0	0	Yel	Inh	1	1	1
90	0	0	0	0	0	0	Yel	Inh	1	1	1
91	0	0	0	0	0	0	Yel	Inh	1	1	1
92	0	0	0	0	0	0	Yel	Inh	1	1	1
93	0	0	0	0	0	0	Yel	Inh	1	1	1
94	0	0	0	0	0	0	Yel	Inh	1	1	1
95	0	0	0	0	0	0	Yel	Inh	1	1	1
96	0	0	0	0	0	0	Yel	Inh	1	1	1
97	0	0	0	0	0	0	Yel	Inh	1	1	1
98	0	0	0	0	0	0	Yel	Inh	1	1	1
99	0	0	0	0	0	0	Yel	Inh	1	1	1
100	0	0	0	0	0	0	Yel	Inh	1	1	1
101	0	0	0	0	0	0	Yel	Inh	1	1	1
102	0	0	0	0	0	0	Yel	Inh	1	1	1
103	0	0	0	0	0	0	Yel	Inh	1	1	1
104	0	0	0	0	0	0	Yel	Inh	1	1	1
105	0	0	0	0	0	0	Yel	Inh	1	1	1
106	0	0	0	0	0	0	Yel	Inh	1	1	1
107	0	0	0	0	0	0	Yel	Inh	1	1	1
108	0	0	0	0	0	0	Yel	Inh	1	1	1
109	0	0	0	0	0	0	Yel	Inh	1	1	1
110	0	0	0	0	0	0	Yel	Inh	1	1	1
111	0	0	0	0	0	0	Yel	Inh	1	1	1
112	0	0	0	0	0	0	Yel	Inh	1	1	1
113	0	0	0	0	0	0	Yel	Inh	1	1	1
114	0	0	0	0	0	0	Yel	Inh	1	1	1
115	0	0	0	0	0	0	Yel	Inh	1	1	1
116	0	0	0	0	0	0	Yel	Inh	1	1	1
117	0	0	0	0	0	0	Yel	Inh	1	1	1
118	0	0	0	0	0	0	Yel	Inh	1	1	1
119	0	0	0	0	0	0	Yel	Inh	1	1	1
120	0	0	0	0	0	0	Yel	Inh	1	1	1
121	0	0	0	0	0	0	Yel	Inh	1	1	1
122	0	0	0	0	0	0	Yel	Inh	1	1	1
123	0	0	0	0	0	0	Yel	Inh	1	1	1
124	0	0	0	0	0	0	Yel	Inh	1	1	1
125	0	0	0	0	0	0	Yel	Inh	1	1	1
126	0	0	0	0	0	0	Yel	Inh	1	1	1
127	0	0	0	0	0	0	Yel	Inh	1	1	1
128	0	0	0	0	0	0	Yel	Inh	1	1	1

Split Parameters

Split 1		Coord	Ref	
PH.	Time	PH	PH	Mode
1	0			None
2	89	X	X	None
3	0			None
4	31			None
5	0			None
6	89	X	X	None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None

Split 2		Coord	Ref	
PH.	Time	PH	PH	Mode
1	0			None
2	61	X	X	None
3	0			None
4	29			None
5	0			None
6	61	X	X	None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None

12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 3

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	85	X	X	None
3	0			None
4	35			None
5	0			None
6	85	X	X	None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 4

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	68	X	X	None
3	0			None
4	32			None
5	0			None
6	68	X	X	None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 5

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 6

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 7

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 8

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 9

Split 10

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None

Split 9

PH.	Time	Coord PH	Ref PH	Mode
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 10

PH.	Time	Coord PH	Ref PH	Mode
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 11

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 12

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 13

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 14

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 15

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None

Split 16

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None

3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 17

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 18

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 19

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None

Split 20

PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None

Split 19

PH.	Time	Coord PH	Ref PH	Mode
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

Split 20

PH.	Time	Coord PH	Ref PH	Mode
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None
15	0			None
16	0			None

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

Day Plan 1

Month of Year						Days of Week							Days of Month														
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 2

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 3

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 4

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
						X						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
					X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 5

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
										X																		
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
				X																		X						

Day Plan 6

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
											X																	
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
				X																			X					

Day Plan 7

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 8

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 9

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 10

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

J	A	S	O	N	D
X	X	X	X	X	X

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Day Plan 11

Month of Year						Days of Week							Days of Month														
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

J	A	S	O	N	D

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Day Plan 12

Month of Year						Days of Week							Days of Month														
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

J	A	S	O	N	D

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Day Plan 13

Month of Year						Days of Week							Days of Month														
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

J	A	S	O	N	D

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Day Plan 14

Month of Year						Days of Week							Days of Month														
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

J	A	S	O	N	D

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Day Plan 15

Month of Year						Days of Week							Days of Month														
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

J	A	S	O	N	D

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Day Plan 1

Event	Hour	Min.	Act
1	6	0	1
2	9	0	2
3	15	0	3
4	19	0	2
5	22	0	20

Day Plan 2

Event	Hour	Min.	Act
1	9	0	4
2	22	0	20
3	0	0	
4	0	0	
5	0	0	

Day Plan 3

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	

Day Plan 4

Event	Hour	Min.	Act
1	9	0	4
2	21	0	20
3	0	0	
4	0	0	
5	0	0	

Day Plan 1

Event	Hour	Min.	Act
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 2

Event	Hour	Min.	Act
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 3

Event	Hour	Min.	Act
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 4

Event	Hour	Min.	Act
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 5

Event	Hour	Min.	Act
1	6	0	1
2	8	0	2
3	15	0	3
4	19	0	4
5	0	0	
6	0	0	

Day Plan 6

Event	Hour	Min.	Act
1	0	1	4
2	22	0	20
3	0	0	
4	0	0	
5	0	0	
6	0	0	

Day Plan 7

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	

Day Plan 8

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	

7	0	0	
8	0	0	
9	0	0	
10	0	0	

7	0	0	
8	0	0	
9	0	0	
10	0	0	

7	0	0	
8	0	0	
9	0	0	
10	0	0	

7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 9

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 10

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 11

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 12

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 13

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 14

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 15

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 16

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 17

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 18

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 19

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 20

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Actions

		Aux.			Special Functions							
Act	Pattern	1	2	3	1	2	3	4	5	6	7	8
1	Pattern 1											
2	Pattern 2											
3	Pattern 3											
4	Pattern 4											
5	Pattern 5											
6	Pattern 6											
7	Pattern 7											
8	Pattern 8											
9	Pattern 9											
10	Pattern 10											
11	None											
12	None											
13	None											
14	None											
15	None											
16	None											
17	None											
18	None											
19	None											

Actions

		Aux.			Special Functions							
Act	Pattern	1	2	3	1	2	3	4	5	6	7	8
33	None											
34	None											
35	None											
36	None											
37	None											
38	None											
39	None											
40	None											
41	None											
42	None											
43	None											
44	None											
45	None											
46	None											
47	None											
48	None											
49	None											
50	None											
51	None											

20	Pattern 20									
21	None									
22	None									
23	None									
24	None									
25	None									
26	None									
27	None									
28	None									
29	None									
30	None									
31	None									
32	None									

52	None									
53	None									
54	None									
55	None									
56	None									
57	None									
58	None									
59	None									
60	None									
61	None									
62	None									
63	None									
64	None									

Preemption Parameters

Preempt	1	2	3	4	5	6	7	8
Link	0	0	0	0	0	0	0	0
Delay	0	0	0	0	0	0	0	0
Min Duration	0	0	0	0	0	0	0	0
Min Green	0	0	0	0	0	0	0	0
Min Walk	0	0	0	0	0	0	0	0
Ent. Ped Clear	255	255	255	255	255	255	255	255
Track Green	0	0	0	0	0	0	0	0
Dwell Green	0	0	0	0	0	0	0	0
Max Presence	0	0	0	0	0	0	0	0
Enter Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Ent. Red Clear	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5

Preemption Parameters

Preempt	1	2	3	4	5	6	7	8
Track Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Track Red Clear	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Exit Red	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Exit Ped Clear	255	255	255	255	255	255	255	255
Exit Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Exit Red	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5

Preempt	1	2	3	4	5	6	7	8
Non Lock Mem								
Not Overide Flash								
NotOverideNextPre								
Flash Dwell								

Preemption Configuration

Preempt	1	2	3	4	5	6	7	8
Track phase								
Dwell Phase			2,5	4,7	1,6	3,8		
Dwell Ped								
Exit Phase								
Track Overlap								
Dwell overlap								
Cycling phase								
Cycling Ped								
Cycling Overlap								

IO Modules

IO Mod	TYPE
1	Caltrans 332
2	None
3	None
4	None
5	None
6	None
7	None
8	None
9	None
10	None

Channel Configuration

Chan	Ctrl Type	Source
1	Phs Veh	1
2	Phs Veh	2
3	Phs Veh	3
4	Phs Veh	4
5	Phs Veh	5
6	Phs Veh	6
7	Phs Veh	7
8	Phs Veh	8
9	Olp	1
10	Olp	2

Chan	Ctrl Type	Source
11	Olp	3
12	Olp	4
13	Phs Ped	2
14	Phs Ped	4
15	Phs Ped	6
16	Phs Ped	8
17	Olp	5
18	Olp	6
19	None	0
20	None	0

Channel Options

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flash Yellow																
Flash Red	X	X	X	X	X	X	X	X								
Alt Flash	X			X	X			X								
Channel	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Flash Yellow																
Flash Red																
Alt Flash																

Startup Clearance Hold Type

1=off, 2=On, 3=Flash and 4= Alt Flash

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Red																
Yellow																
Green																
Channel	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Red																
Yellow																
Green																

Phase Intervals

Interval	Description	Red	Yel	Grn	Type
1	notActive	On	Off	Off	Red
2	dltGrn	On	Off	Off	Red
3	PreGrn	Off	Off	On	Green
4	minGrn	Off	Off	On	Green
5	grnExt	Off	Off	On	Green
6	grnDwell	Off	Off	On	Green
7	preClear	Off	Off	On	Green
8	yelChange	Off	On	Off	Yellow
9	redClear	On	Off	Off	Red
10	redDwell	On	Off	Off	Red
11	Barrier	On	Off	Off	Red
12					

Pedestrian Intervals

Interval	Description	DWK	CLR	Wlk	Type
1	notActive	On	Off	Off	Dont Walk
2	dltPed	On	Off	Off	Dont Walk
3	walk	Off	Off	On	Walk
4	walkDwell	Off	Off	On	Walk
5	flashDtWlk	Flash	Off	Off	Ped Clear
6	dWalk	On	Off	Off	Dont Walk
7					
8					

Countdown Display

Display	Addr	Phase	Time
1			
2			
3			
4			
5			
6			
7			
8			

Display	Addr	Phase	Time
9			
10			
11			
12			
13			
14			
15			
16			

Display	Addr	Phase	Time
17			
18			
19			
20			
21			
22			
23			
24			

Display	Addr	Phase	Time
25			
26			
27			
28			
29			
30			
31			
32			

Manual Control Phase Groups

Grp 1		Grp 2		Grp 3		Grp 4		Grp 5		Grp 6		Grp 7		Grp 8	
Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph
1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
3	0	3	0	3	0	3	0	3	0	3	0	3	0	3	0
4	0	4	0	4	0	4	0	4	0	4	0	4	0	4	0
5	0	5	0	5	0	5	0	5	0	5	0	5	0	5	0
6	0	6	0	6	0	6	0	6	0	6	0	6	0	6	0
7	0	7	0	7	0	7	0	7	0	7	0	7	0	7	0
8	0	8	0	8	0	8	0	8	0	8	0	8	0	8	0
9	0	9	0	9	0	9	0	9	0	9	0	9	0	9	0
10	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0
11	0	11	0	11	0	11	0	11	0	11	0	11	0	11	0
12	0	12	0	12	0	12	0	12	0	12	0	12	0	12	0
13	0	13	0	13	0	13	0	13	0	13	0	13	0	13	0
14	0	14	0	14	0	14	0	14	0	14	0	14	0	14	0
15	0	15	0	15	0	15	0	15	0	15	0	15	0	15	0
16	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0

Prioritor Settings

Prioritor	Priority Ph	Output Dly
1		0
2		0
3		0
4		0
5		0

Enabled	Lock Out Time
No	0

6		0
7		0
8		0

Loopback Functions

Func	Result Function Type	Index	Source Function Type	Index
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
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32				
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37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				

Func	Result Function Type	Index	Source Function Type	Index
51				
52				
53				
54				
55				
56				
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59				
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63				
64				
65				
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92				
93				
94				
95				
96				
97				
98				
99				
100				

Peer Configuration

Ctrl	Peer ID	IP address	SNMP Port	Hot Port	Serial Port	Serial Addr.	Master Sect.	P2P TO	Description
1	0		161	80	0	0	0	15	
2	0		161	80	0	0	0	15	
3	0		161	80	0	0	0	15	

4	0		161	80	0	0	0	15	
5	0		161	80	0	0	0	15	
6	0		161	80	0	0	0	15	
7	0		161	80	0	0	0	15	
8	0		161	80	0	0	0	15	
9	0		161	80	0	0	0	15	
10	0		161	80	0	0	0	15	
11	0		161	80	0	0	0	15	
12	0		161	80	0	0	0	15	
13	0		161	80	0	0	0	15	
14	0		161	80	0	0	0	15	
15	0		161	80	0	0	0	15	
16	0		161	80	0	0	0	15	
17	0		161	80	0	0	0	15	
18	0		161	80	0	0	0	15	
19	0		161	80	0	0	0	15	
20	0		161	80	0	0	0	15	
21	0		161	80	0	0	0	15	
22	0		161	80	0	0	0	15	
23	0		161	80	0	0	0	15	
24	0		161	80	0	0	0	15	
25	0		161	80	0	0	0	15	
26	0		161	80	0	0	0	15	
27	0		161	80	0	0	0	15	
28	0		161	80	0	0	0	15	
29	0		161	80	0	0	0	15	
30	0		161	80	0	0	0	15	
31	0		161	80	0	0	0	15	
32	0		161	80	0	0	0	15	
33	0		161	80	0	0	0	15	
34	0		161	80	0	0	0	15	
35	0		161	80	0	0	0	15	
36	0		161	80	0	0	0	15	
37	0		161	80	0	0	0	15	
38	0		161	80	0	0	0	15	
39	0		161	80	0	0	0	15	
40	0		161	80	0	0	0	15	
41	0		161	80	0	0	0	15	
42	0		161	80	0	0	0	15	
43	0		161	80	0	0	0	15	
44	0		161	80	0	0	0	15	
45	0		161	80	0	0	0	15	
46	0		161	80	0	0	0	15	
47	0		161	80	0	0	0	15	
48	0		161	80	0	0	0	15	
49	0		161	80	0	0	0	15	
50	0		161	80	0	0	0	15	
51	0		161	80	0	0	0	15	
52	0		161	80	0	0	0	15	
53	0		161	80	0	0	0	15	
54	0		161	80	0	0	0	15	
55	0		161	80	0	0	0	15	
56	0		161	80	0	0	0	15	
57	0		161	80	0	0	0	15	
58	0		161	80	0	0	0	15	
59	0		161	80	0	0	0	15	
60	0		161	80	0	0	0	15	
61	0		161	80	0	0	0	15	
62	0		161	80	0	0	0	15	
63	0		161	80	0	0	0	15	
64	0		161	80	0	0	0	15	
65	0		161	80	0	0	0	15	
66	0		161	80	0	0	0	15	
67	0		161	80	0	0	0	15	

68	0		161	80	0	0	0	15	
69	0		161	80	0	0	0	15	
70	0		161	80	0	0	0	15	
71	0		161	80	0	0	0	15	
72	0		161	80	0	0	0	15	
73	0		161	80	0	0	0	15	
74	0		161	80	0	0	0	15	
75	0		161	80	0	0	0	15	
76	0		161	80	0	0	0	15	
77	0		161	80	0	0	0	15	
78	0		161	80	0	0	0	15	
79	0		161	80	0	0	0	15	
80	0		161	80	0	0	0	15	
81	0		161	80	0	0	0	15	
82	0		161	80	0	0	0	15	
83	0		161	80	0	0	0	15	
84	0		161	80	0	0	0	15	
85	0		161	80	0	0	0	15	
86	0		161	80	0	0	0	15	
87	0		161	80	0	0	0	15	
88	0		161	80	0	0	0	15	
89	0		161	80	0	0	0	15	
90	0		161	80	0	0	0	15	
91	0		161	80	0	0	0	15	
92	0		161	80	0	0	0	15	
93	0		161	80	0	0	0	15	
94	0		161	80	0	0	0	15	
95	0		161	80	0	0	0	15	
96	0		161	80	0	0	0	15	
97	0		161	80	0	0	0	15	
98	0		161	80	0	0	0	15	
99	0		161	80	0	0	0	15	
100	0		161	80	0	0	0	15	
101	0		161	80	0	0	0	15	
102	0		161	80	0	0	0	15	
103	0		161	80	0	0	0	15	
104	0		161	80	0	0	0	15	
105	0		161	80	0	0	0	15	
106	0		161	80	0	0	0	15	
107	0		161	80	0	0	0	15	
108	0		161	80	0	0	0	15	
109	0		161	80	0	0	0	15	
110	0		161	80	0	0	0	15	
111	0		161	80	0	0	0	15	
112	0		161	80	0	0	0	15	
113	0		161	80	0	0	0	15	
114	0		161	80	0	0	0	15	
115	0		161	80	0	0	0	15	
116	0		161	80	0	0	0	15	
117	0		161	80	0	0	0	15	
118	0		161	80	0	0	0	15	
119	0		161	80	0	0	0	15	
120	0		161	80	0	0	0	15	
121	0		161	80	0	0	0	15	
122	0		161	80	0	0	0	15	
123	0		161	80	0	0	0	15	
124	0		161	80	0	0	0	15	
125	0		161	80	0	0	0	15	
126	0		161	80	0	0	0	15	
127	0		161	80	0	0	0	15	
128	0		161	80	0	0	0	15	
129	0		161	80	0	0	0	15	
130	0		161	80	0	0	0	15	

131	0		161	80	0	0	0	15	
132	0		161	80	0	0	0	15	
133	0		161	80	0	0	0	15	
134	0		161	80	0	0	0	15	
135	0		161	80	0	0	0	15	
136	0		161	80	0	0	0	15	
137	0		161	80	0	0	0	15	
138	0		161	80	0	0	0	15	
139	0		161	80	0	0	0	15	
140	0		161	80	0	0	0	15	
141	0		161	80	0	0	0	15	
142	0		161	80	0	0	0	15	
143	0		161	80	0	0	0	15	
144	0		161	80	0	0	0	15	
145	0		161	80	0	0	0	15	
146	0		161	80	0	0	0	15	
147	0		161	80	0	0	0	15	
148	0		161	80	0	0	0	15	
149	0		161	80	0	0	0	15	
150	0		161	80	0	0	0	15	
151	0		161	80	0	0	0	15	
152	0		161	80	0	0	0	15	
153	0		161	80	0	0	0	15	
154	0		161	80	0	0	0	15	
155	0		161	80	0	0	0	15	
156	0		161	80	0	0	0	15	
157	0		161	80	0	0	0	15	
158	0		161	80	0	0	0	15	
159	0		161	80	0	0	0	15	
160	0		161	80	0	0	0	15	
161	0		161	80	0	0	0	15	
162	0		161	80	0	0	0	15	
163	0		161	80	0	0	0	15	
164	0		161	80	0	0	0	15	
165	0		161	80	0	0	0	15	
166	0		161	80	0	0	0	15	
167	0		161	80	0	0	0	15	
168	0		161	80	0	0	0	15	
169	0		161	80	0	0	0	15	
170	0		161	80	0	0	0	15	
171	0		161	80	0	0	0	15	
172	0		161	80	0	0	0	15	
173	0		161	80	0	0	0	15	
174	0		161	80	0	0	0	15	
175	0		161	80	0	0	0	15	
176	0		161	80	0	0	0	15	
177	0		161	80	0	0	0	15	
178	0		161	80	0	0	0	15	
179	0		161	80	0	0	0	15	
180	0		161	80	0	0	0	15	
181	0		161	80	0	0	0	15	
182	0		161	80	0	0	0	15	
183	0		161	80	0	0	0	15	
184	0		161	80	0	0	0	15	
185	0		161	80	0	0	0	15	
186	0		161	80	0	0	0	15	
187	0		161	80	0	0	0	15	
188	0		161	80	0	0	0	15	
189	0		161	80	0	0	0	15	
190	0		161	80	0	0	0	15	
191	0		161	80	0	0	0	15	
192	0		161	80	0	0	0	15	
193	0		161	80	0	0	0	15	
194	0		161	80	0	0	0	15	

195	0		161	80	0	0	0	15	
196	0		161	80	0	0	0	15	
197	0		161	80	0	0	0	15	
198	0		161	80	0	0	0	15	
199	0		161	80	0	0	0	15	
200	0		161	80	0	0	0	15	
201	0		161	80	0	0	0	15	
202	0		161	80	0	0	0	15	
203	0		161	80	0	0	0	15	
204	0		161	80	0	0	0	15	
205	0		161	80	0	0	0	15	
206	0		161	80	0	0	0	15	
207	0		161	80	0	0	0	15	
208	0		161	80	0	0	0	15	
209	0		161	80	0	0	0	15	
210	0		161	80	0	0	0	15	
211	0		161	80	0	0	0	15	
212	0		161	80	0	0	0	15	
213	0		161	80	0	0	0	15	
214	0		161	80	0	0	0	15	
215	0		161	80	0	0	0	15	
216	0		161	80	0	0	0	15	
217	0		161	80	0	0	0	15	
218	0		161	80	0	0	0	15	
219	0		161	80	0	0	0	15	
220	0		161	80	0	0	0	15	
221	0		161	80	0	0	0	15	
222	0		161	80	0	0	0	15	
223	0		161	80	0	0	0	15	
224	0		161	80	0	0	0	15	
225	0		161	80	0	0	0	15	
226	0		161	80	0	0	0	15	
227	0		161	80	0	0	0	15	
228	0		161	80	0	0	0	15	
229	0		161	80	0	0	0	15	
230	0		161	80	0	0	0	15	
231	0		161	80	0	0	0	15	
232	0		161	80	0	0	0	15	
233	0		161	80	0	0	0	15	
234	0		161	80	0	0	0	15	
235	0		161	80	0	0	0	15	
236	0		161	80	0	0	0	15	
237	0		161	80	0	0	0	15	
238	0		161	80	0	0	0	15	
239	0		161	80	0	0	0	15	
240	0		161	80	0	0	0	15	
241	0		161	80	0	0	0	15	
242	0		161	80	0	0	0	15	
243	0		161	80	0	0	0	15	
244	0		161	80	0	0	0	15	
245	0		161	80	0	0	0	15	
246	0		161	80	0	0	0	15	
247	0		161	80	0	0	0	15	
248	0		161	80	0	0	0	15	
249	0		161	80	0	0	0	15	
250	0		161	80	0	0	0	15	
251	0		161	80	0	0	0	15	
252	0		161	80	0	0	0	15	
253	0		161	80	0	0	0	15	
254	0		161	80	0	0	0	15	
255	0		161	80	0	0	0	15	

Section Configuration

Section	Control	Poll	Req #	Fail Time	Algorithm Period	Description
1	None	60	1	300	240	
2	None	60	1	300	240	
3	None	60	1	300	240	
4	None	60	1	300	240	
5	None	60	1	300	240	
6	None	60	1	300	240	
7	None	60	1	300	240	
8	None	60	1	300	240	
9	None	60	1	300	240	
10	None	60	1	300	240	
11	None	60	1	300	240	
12	None	60	1	300	240	
13	None	60	1	300	240	
14	None	60	1	300	240	
15	None	60	1	300	240	
16	None	60	1	300	240	

User Program Info

Pgrm	Description
1	
2	
3	
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9	
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Solutions that Move the World™

250 - Allen Way @ Allen St - Cobalt @ 10.50.60.64 - Econolite Type - Cobalt

Configuration Controller Sequence

Phase Ring Sequence and Assignment (MM) 1-1-1

Hardware Alternate Sequence Enable: No

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

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

Phases In Use/Exclusive Ped (MM) 1-2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phases In Use		X	X	X	X	X		X								
Exclusive Ped																

Phase Compatibility (MM) 1-1-2

Phase	
n/a	Barrier Mode

Phase and Overlap Descriptions

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Approach	N	S	E	W	S	N	W	E	N	N	N	N	N	N	N	N
Movement	L	T	L	T	L	T	L	T								
Associated PED																
Overlap	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**

Approach	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Movement																

Administration (MM) 1-7-1

Enable Controller/Cabinet Interlock CRC	No
CRC (16 bit)	34DB
Enable Automatic Backup to Datakey	No

Backup Prevent (MM) 1-1-3

	Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Timing	1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Phases	2	.		.	.	.	.	.	.	.	.	.	.	.	.	.	.
	3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
	4	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
	5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
	6	.	.	.	.	X		.	.	.	.	.	.	.	.	.	.
	7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
	8	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.
	9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
	10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
	12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
	13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
	14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
	15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
	16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	

Simultaneous Gap (MM) 1-1-4

	Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	2	.		.	.	.	.	.	.	.	.	.	.	.	.	.	.
	3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
	4	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
	5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
Phase	6	.	.	.	.	.		.	.	.	.	.	.	.	.	.	.
Must	7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
Gap	8	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.
With	9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
Phase	10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
	12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
	13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
	14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
	15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
	16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
	Disable	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Load Switch Assignments (MM) 1-3

	Phase / Overlap	Type	Dimming				Power Up	Auto		Flash Together
			Red	Yellow	Green	Dark		Red	Yellow	
1	1	V				-	Auto	X		
2	2	V				-	Auto	X		X
3	3	V				-	Auto	X		
4	4	V				-	Auto	X		X
5	5	V				+	Auto	X		
6	6	V				+	Auto	X		X
7	7	V				+	Auto	X		
8	8	V				+	Auto	X		X
9	2	P				-	Auto			
10	4	P				-	Auto			
11	6	P				+	Auto			
12	8	P				+	Auto			
13	1	O				-	Auto	X		
14	2	O				+	Auto	X		X
15	3	O				-	Auto	X		
16	4	O				+	Auto	X		X

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Solutions that Move the World™

250 - Allen Way @ Allen St - Cobalt @ 10.50.60.64 - Econolite Type - Cobalt

Configuration Port 1 (SDLC)

Port 1 SDLC (MM) 1-4-1

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

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

MMU Program (MM) 1-4-2

Channel Can Serve With Channel	
Channel 1	**Channel 2**

Color Check Enable (MM) 1-4-3

Enable Color Check: Yes

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

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

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

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

Enable SDLC Diagnostic Test: No

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Configuration Communications 1 (SDLC)

Ethernet Port Configuration (MM) 1-5-1

Controller IP:	10.50.60.64
Subnet Mask:	255.255.255.0
Default Gateway IP:	10.50.60.1
Server IP:	10.1.5.39

NTCIP (MM) 1-5-5

NTCIP Backup Time (Sec):	0
NTCIP UDP Port:	501
Ethernet Priority:	1
Port 2 Priority (Port C50S for 2070):	4
Port 3A Priority (Port C21S for 2070):	3
Port 3B Priority (Port C22S for 2070):	2

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

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

ECPIP (MM) 1-5-6

Controller Address:	0
Expanded System Detector Address:	0

System Detector Assignment

System Detector	Local Detector

Wireless Configuration (MM) 1-5-7

Wireless Channel Number:	1
Wireless Access Code:	327423274

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Configuration Logging / Display

Event Logging (MM) 1-6-1

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

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

Display Options (MM) 1-7-2

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

Sign On (MM) 8-5

Sign On Message Line 1: Allen Way & Allen Street
Sign On Message Line 2:

Software Modules (MM) 8-7

Application Version: 32.64.00
OS (Boot) Version: 06.04.00

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Solutions that Move the World™

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Logic Processor Page 1
Logic Statement Control (MM)
1-8-1

Logic #	Statement Control

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Logic Processor Page 2

Logic Statements (MM) 1-8-2

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Solutions that Move the World™

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Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Min Green	0	15	4	4	7	15	4	5	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	5	0	6	0	5	0	7	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	17	0	25	0	13	0	27	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	5.0	3.0	3.0	3.0	5.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	0	40	20	20	20	40	0	20	0	0	0	0	0	0	0	0
Max2	0	16	12	12	16	12	0	12	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	3.0	3.0	4.0	3.0	3.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 2 - ""

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

Plan 3 - ""

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

Plan 4 - ""

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

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Solutions that Move the World™

250 - Allen Way @ Allen St - Cobalt @ 10.50.60.64 - Econolite Type - Cobalt

Controller Overlaps

Vehicle Overlaps (MM) 2-2

Overlap	Type	Lag Green	Yellow	Red	Adv. Green

Phases

Overlap	Phase	Included	Protect	Ped Protect	Not Overlap	Modifier	Lag X Phases	Lag 2 Phases	Flash Green
D	4	Yes	No	No	No		No	No	1-F1
D	8	Yes	No	No	No		No	No	1-F1

PPLT FYA

Overlap	Protected Phase (Left Turn)	Permissive Phase (Opposing Thru)	Flashing Arrow Output	Flashing Arrow Output CH	Delay Start of FYA	Delay Start of Clearance	Action Plan SF Bit Disable	Ped Protected Enable
B	3	4	Green Overlap	14	0.0	0.0	2	n/a
C	5	6	Green Overlap	15	0.0	0.0	3	n/a

Guaranteed Minimum Time Data (MM) 2-4

Phase	Min Green	Walk	Ped Clear	Yellow	Red Clear	Overlap Green
A01	3	0	7	3.0	0.0	5
B02	3	0	7	3.0	0.0	5
C03	3	0	7	3.0	0.0	5
D04	3	0	7	3.0	0.0	5
E05	3	0	7	3.0	0.0	5
F06	3	0	7	3.0	0.0	5
G07	3	0	7	3.0	0.0	5
H08	3	0	7	3.0	0.0	5
I09	5	0	7	3.0	0.0	5
J10	5	0	7	3.0	0.0	5
K11	5	0	7	3.0	0.0	5
L12	5	0	7	3.0	0.0	5
M13	5	0	7	3.0	0.0	5
N14	5	0	7	3.0	0.0	5
O15	5	0	7	3.0	0.0	5
P16	5	0	7	3.0	0.0	5

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

Included	Pedestrian Overlaps

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Controller Start / Flash Data (MM) 2-5

Start Up

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

Overlap
A
B
C
D

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

Automatic Flash

Entry
2
6

Exit
2
6

Overlap Exit
A
B
C
D

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

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Controller Options

Controller Options (MM) 2-6-1

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

Ped Clear Protect: Off Unit Red Revert: 2.0 MUTCD 3 Seconds Don't Walk: No

Pre-Timed Mode (MM) 2-7

Enable Pre-Timed Mode: No Free Input Disables Pre-Timed: No

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

Phase Recall Options (MM) 2-8
Plan # 1

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

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Coordination Options

Options (MM) 3-1

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

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

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

Split Demand (MM) 3-5

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

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

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

Coordinator Pattern # 1

Split Pattern	1	TS2 (Pat-Off)	0-1	Splits In	Seconds
Cycle	60	Std (COS)	9	Offsets In	Seconds
Offset Value	31s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	1		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 1)	0	33	12	15	12	21	0	27	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

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

Coordinator Pattern # 2

Split Pattern	2	TS2 (Pat-Off)	0-2	Splits In	Seconds
Cycle	100	Std (COS)	17	Offsets In	Seconds
Offset Value	78s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	1		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 2)	0	52	13	32	16	39	0	45	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	97s	100s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

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

Coordinator Pattern # 3

Split Pattern	3	TS2 (Pat-Off)	0-3	Splits In	Seconds
Cycle	110	Std (COS)	25	Offsets In	Seconds
Offset Value	88s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	1		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 3)	0	55	17	38	25	30	0	55	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	110s	110s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

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

Coordinator Pattern # 4

Split Pattern	4	TS2 (Pat-Off)	1-1	Splits In	Seconds
Cycle	100	Std (COS)	33	Offsets In	Seconds
Offset Value	72s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	1		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Splits (Split Pat 4)	0	61	14	25	15	46	0	39	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

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

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

Split Pattern # 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	0	33	12	15	12	21	0	27	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

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

Split Pattern # 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	0	52	13	32	16	39	0	45	0	0	0	0	0	0	0	0
Coord Phase																
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	97s	100s	0s	0s

Split Pattern # 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	0	55	17	38	25	30	0	55	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	110s	110s	0s	0s

Split Pattern # 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split (seconds)	0	61	14	25	15	46	0	39	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

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

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Solutions that Move the World™

250 - Allen Way @ Allen St - Cobalt @ 10.50.60.64 - Econolite Type - Cobalt

Preempt Plan

Preempt Plan (MM) 4-1

Preempt Plan 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing																
Dwell Veh	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	.	.	1-F1	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Ped																
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Exit Phases																
Exit Calls																
Special Function																

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

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

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	255	5	4.0	1.0
	Min Grn	Ext Grn	Max Grn	Yellow	Red
Track Clear	0	0	0	4.0	1.0
	Min Dwell	Pmt Ext	Max Time	Yellow	Red
Dwell / Cycle-Exit	0	0.0	120	4.0	1.0

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

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

Preempt Plan 5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing																
Dwell Veh	.	.	.	X	.	.	.	X	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	.	1-F1	.	1-F1	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Ped																
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Exit Phases																
Exit Calls																
Special Function																

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

Ring	1	2	3	4

Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	255	5	4.0	1.0
	Min Grn	**Ext Grn**	**Max Grn**	**Yellow**	**Red**
Track Clear	0	0	0	4.0	1.0
	Min Dwell	**Pmt Ext**	**Max Time**	**Yellow**	**Red**
Dwell / Cycle-Exit	0	0.0	120	4.0	1.0

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

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

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Solutions that Move the World™

250 - Allen Way @ Allen St - Cobalt @ 10.50.60.64 - Econolite Type - Cobalt

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

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

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Solutions that Move the World™

250 - Allen Way @ Allen St - Cobalt @ 10.50.60.64 - Econolite Type - Cobalt

Preempt TSP/SCP Plan and Split

TSP / SCP Plan (MM) 4-3

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

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

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

TSP / SCP Split Pattern (MM) 4-4

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

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Time Base Clock/Calendar
Clock/Calendar Data (MM) 5-1

Manual Action Plan:	0
SYNC Reference Time:	00:00
SYNC Reference:	Reference Time
Day Light Savings:	No
Time Reset Input Set Time:	3:30:00
Standard Time From GMT:	0

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

Action Plan - 1 - "1"

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

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

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

Action Plan - 2 - "2"

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

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

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

Action Plan - 3 - "3"

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

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

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

Action Plan - 19 - "19"

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

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

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

Action Plan - 20 - "20"

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

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

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

Action Plan - 21 - "21"

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

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

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

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250 - Allen Way @ Allen St - Cobalt @ 10.50.60.64 - Econolite Type - Cobalt

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

Day Plan #1 - "1"

Event	Action Plan	Start Time
1	21	23:00
2	20	05:30
3	19	15:00
4	20	18:00

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

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

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

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

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

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

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Detectors

Detectors - Pg 1

Veh Det Phase Assignment (MM) 6-1

Vehicle Detector Plan Number - 1

Veh Detector	Assigned Phase	Called Phase	Type
1	1		S
2	2		S
3	2		S
4	2		C
5	3	4	S
6	4		S
7	4		S
8	4		C
9	1		S
10	2		S
11	2		G
14	4		S
15	4		G
17	5	6	S
18	6		S
19	6		S
20	6		C
21	7		S
22	8		S
23	8		S
24	8		C
25	5	6	S
26	6		S
27	6		G
29	7		S
30	8		S
31	8		G

Vehicle Detector Plan Number - 2

Veh Detector	Assigned Phase	Called Phase	Type
1	1		S
2	2		S
3	3		S
4	4		C
5	5		S
6	6		S
7	7		S
8	8		C
9	2		S
10	2		S
11	4		G
12	4		S
13	6		S
14	6		S
15	8		G
16	8		S
17	1		S
18	2		S
19	3		S
20	4		C
21	5		S
22	6		S
23	7		S
24	8		C
25	2		S
26	4		S
27	6		G
28	8		S

Vehicle Detector Plan Number - 3

Veh Detector	Assigned Phase	Called Phase	Type
1	1		S
2	2		S
3	3		S

4	4		C
5	5		S
6	6		S
7	7		S
8	8		C
9	2		S
10	2		S
11	4		G
12	4		S
13	6		S
14	6		S
15	8		G
16	8		S
17	1		S
18	2		S
19	3		S
20	4		C
21	5		S
22	6		S
23	7		S
24	8		C
25	2		S
26	4		S
27	6		G
28	8		S

Vehicle Detector Plan Number - 4

Veh Detector	Assigned Phase	Called Phase	Type
1	1		S
2	2		S
3	3		S
4	4		C
5	5		S
6	6		S
7	7		S
8	8		C
9	2		S
10	2		S
11	4		G
12	4		S
13	6		S
14	6		S
15	8		G
16	8		S
17	1		S
18	2		S
19	3		S
20	4		C
21	5		S
22	6		S
23	7		S
24	8		C
25	2		S
26	4		S
27	6		G
28	8		S

Vehicle Detector Setup (MM) 6-2

Veh Detector	Type	TS2 Detector	Description
1	S-STANDARD	Yes	
2	S-STANDARD	Yes	
3	S-STANDARD	Yes	
4	C-CALLING	Yes	
5	S-STANDARD	Yes	
6	S-STANDARD	Yes	
7	S-STANDARD	Yes	
8	C-CALLING	Yes	
9	S-STANDARD	Yes	
10	S-STANDARD	Yes	
11	G-GREEN EXT	Yes	
12	S-STANDARD	Yes	
13	S-STANDARD	Yes	
14	S-STANDARD	Yes	
15	G-GREEN EXT	Yes	
16	S-STANDARD	Yes	
17	S-STANDARD	Yes	
18	S-STANDARD	Yes	
19	S-STANDARD	Yes	
20	C-CALLING	Yes	
21	S-STANDARD	Yes	
22	S-STANDARD	Yes	

23	S-STANDARD	Yes	
24	C-CALLING	Yes	
25	S-STANDARD	Yes	
26	S-STANDARD	Yes	
27	G-GREEN EXT	Yes	
28	S-STANDARD	Yes	
29	S-STANDARD	Yes	
30	S-STANDARD	Yes	
31	G-GREEN EXT	Yes	
32	S-STANDARD	Yes	
33	S-STANDARD	Yes	
34	S-STANDARD	Yes	
35	S-STANDARD	Yes	
36	S-STANDARD	Yes	
37	S-STANDARD	Yes	
38	S-STANDARD	Yes	
39	S-STANDARD	Yes	
40	S-STANDARD	Yes	
41	S-STANDARD	Yes	
42	S-STANDARD	Yes	
43	S-STANDARD	Yes	
44	S-STANDARD	Yes	
45	S-STANDARD	Yes	
46	S-STANDARD	Yes	
47	S-STANDARD	Yes	
48	S-STANDARD	Yes	
49	S-STANDARD	Yes	
50	S-STANDARD	Yes	
51	S-STANDARD	Yes	
52	S-STANDARD	Yes	
53	S-STANDARD	Yes	
54	S-STANDARD	Yes	
55	S-STANDARD	Yes	
56	S-STANDARD	Yes	
57	S-STANDARD	Yes	
58	S-STANDARD	Yes	
59	S-STANDARD	Yes	
60	S-STANDARD	Yes	
61	S-STANDARD	Yes	
62	S-STANDARD	Yes	
63	S-STANDARD	Yes	
64	S-STANDARD	Yes	

Vehicle Detector Plan Number - 1

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

34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 2

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

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

Vehicle Detector Plan Number - 3

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

57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 4

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

Ped Detector Phase Assignment (MM) 6-3

Mode: Econolite

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

Castle Rock, CO

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

250 - Allen Way @ Allen St - Cobalt @ 10.50.60.64 - Econolite Type - Cobalt

Detectors

Detectors - Pg 2

Log - Speed Detector Setup (MM) 6-4

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

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

Vehicle Detector Diagnostics (MM) 6-5

Veh Diagnostic Plan Number - 1

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay
1	0	0	60	1	255	0
2	0	7	1	60	255	0
5	0	0	60	1	255	0
6	0	7	1	60	255	0
17	0	0	1	60	255	0
18	0	7	1	60	255	0
22	0	0	1	60	255	0

Veh Diagnostic Plan Number - 2

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 3

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 4

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Pedestrian Detector Diagnostics (MM) 6-6

Ped Diagnostic Plan Number - 1

Det	Counts	Act	Pres	Multiplier
2	0	168	1	60
4	0	168	1	60
6	0	168	1	60
8	0	168	1	60

Ped Diagnostic Plan Number - 2

Det	Counts	Act	Pres	Multiplier

Ped Diagnostic Plan Number - 3

Det	Counts	Act	Pres	Multiplier

Ped Diagnostic Plan Number - 4

Det	Counts	Act	Pres	Multiplier

APPENDIX B

Level of Service Definitions

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

Automobile Level of Service (LOS) for Signalized Intersections

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

LOS A

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

LOS B

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

LOS C

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

LOS D

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

LOS E

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

LOS F

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

Level of Service (LOS) for Unsignalized TWSC Intersections

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

APPENDIX C

Capacity Worksheets

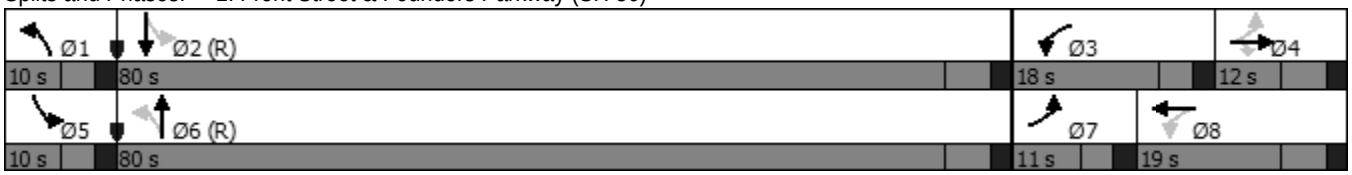
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	171	37	35	15	23	57	56	1466	8	50	866	159
Future Volume (vph)	171	37	35	15	23	57	56	1466	8	50	866	159
Satd. Flow (prot)	3433	1863	1583	1770	3161	0	1770	5080	0	1770	4968	0
Flt Permitted	0.548			0.731			0.221			0.116		
Satd. Flow (perm)	1980	1863	1583	1362	3161	0	412	5080	0	216	4968	0
Satd. Flow (RTOR)			164		62			1			58	
Lane Group Flow (vph)	186	40	38	16	87	0	61	1602	0	54	1114	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		4	8			6			2		
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0		3.0	20.0		3.0	20.0	
Minimum Split (s)	10.0	11.0	11.0	10.0	11.0		10.0	26.0		10.0	26.0	
Total Split (s)	11.0	12.0	12.0	18.0	19.0		10.0	80.0		10.0	80.0	
Total Split (%)	9.2%	10.0%	10.0%	15.0%	15.8%		8.3%	66.7%		8.3%	66.7%	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	17.4	14.0	14.0	15.5	8.0		86.1	80.1		85.9	80.0	
Actuated g/C Ratio	0.14	0.12	0.12	0.13	0.07		0.72	0.67		0.72	0.67	
v/c Ratio	0.52	0.18	0.12	0.08	0.32		0.17	0.47		0.23	0.33	
Control Delay	49.7	52.0	0.7	41.3	22.6		5.5	11.0		6.9	9.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	49.7	52.0	0.7	41.3	22.6		5.5	11.0		6.9	9.0	
LOS	D	D	A	D	C		A	B		A	A	
Approach Delay		43.0			25.5			10.8			8.9	
Approach LOS		D			C			B			A	
Queue Length 50th (ft)	67	27	0	11	10		10	206		9	119	
Queue Length 95th (ft)	96	65	0	30	35		25	276		23	165	
Internal Link Dist (ft)		695			413			423			624	
Turn Bay Length (ft)	285		285	195			175			455		
Base Capacity (vph)	360	218	330	271	397		364	3389		232	3330	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.52	0.18	0.12	0.06	0.22		0.17	0.47		0.23	0.33	

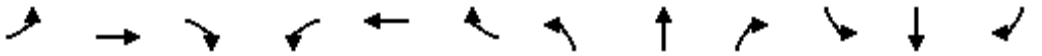
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 42 (35%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.52

Intersection Signal Delay: 13.2	Intersection LOS: B
Intersection Capacity Utilization 57.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Front Street & Founders Parkway (SH 86)





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	245	954	132	37	1539	131	94	18	52	63	12	287
Future Volume (vph)	245	954	132	37	1539	131	94	18	52	63	12	287
Satd. Flow (prot)	3433	4994	0	1770	5085	1583	1770	1656	0	1770	1863	2787
Flt Permitted	0.950			0.227			0.544			0.707		
Satd. Flow (perm)	3433	4994	0	423	5085	1583	1013	1656	0	1317	1863	2787
Satd. Flow (RTOR)		41				142		57				310
Lane Group Flow (vph)	266	1180	0	40	1673	142	102	77	0	68	13	312
Turn Type	Prot	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases				6		6	4			8		8
Detector Phase	5	2		1	6	6	7	4		3	8	8
Switch Phase												
Minimum Initial (s)	5.0	20.0		5.0	20.0	20.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	26.0		10.0	26.0	26.0	10.0	11.0		11.0	11.0	11.0
Total Split (s)	15.0	83.0		11.0	79.0	79.0	13.0	12.0		14.0	13.0	13.0
Total Split (%)	12.5%	69.2%		9.2%	65.8%	65.8%	10.8%	10.0%		11.7%	10.8%	10.8%
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	6.0	6.0	5.0	6.0		5.0	6.0	6.0
Lead/Lag	Lead	Lead		Lag	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	None
Act Effct Green (s)	14.0	65.4		66.4	65.4	65.4	22.2	11.3		17.8	7.3	7.3
Actuated g/C Ratio	0.12	0.54		0.55	0.54	0.54	0.18	0.09		0.15	0.06	0.06
v/c Ratio	0.67	0.43		0.09	0.60	0.15	0.40	0.37		0.29	0.12	0.68
Control Delay	62.4	18.9		16.1	20.3	2.9	43.5	24.6		44.5	60.3	18.6
Queue Delay	0.0	0.1		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.1
Total Delay	62.4	19.0		16.1	20.3	2.9	43.5	24.6		44.5	60.3	18.7
LOS	E	B		B	C	A	D	C		D	E	B
Approach Delay		26.9			18.9			35.4			24.5	
Approach LOS		C			B			D			C	
Queue Length 50th (ft)	102	214		14	314	0	68	15		46	10	0
Queue Length 95th (ft)	#195	244		33	382	31	110	61		87	32	59
Internal Link Dist (ft)		347			406			277			368	
Turn Bay Length (ft)	300			330			80			120		100
Base Capacity (vph)	399	3414		439	3093	1018	259	207		243	124	475
Starvation Cap Reductn	0	571		0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0		0	120	0	0	0		0	0	7
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.67	0.42		0.09	0.56	0.14	0.39	0.37		0.28	0.10	0.67

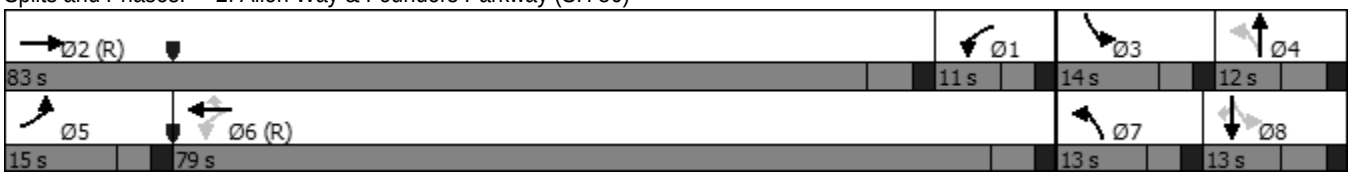
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 36 (30%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 23.2	Intersection LOS: C
Intersection Capacity Utilization 62.8%	ICU Level of Service B
Analysis Period (min) 15	

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

Splits and Phases: 2: Allen Way & Founders Parkway (SH 86)

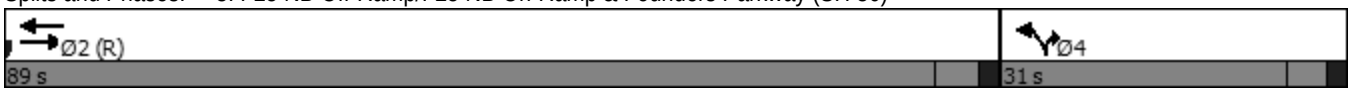


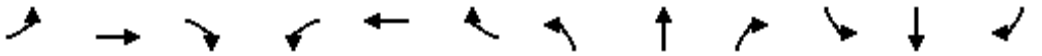
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	972	528	0	740	1273	215	0	215	0	0	0
Future Volume (vph)	0	972	528	0	740	1273	215	0	215	0	0	0
Satd. Flow (prot)	0	4686	1362	0	3156	1441	3433	0	2787	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	4686	1362	0	3156	1441	3433	0	2787	0	0	0
Satd. Flow (RTOR)		71	367		421	692			234			
Lane Group Flow (vph)	0	1264	367	0	1496	692	234	0	234	0	0	0
Turn Type		NA	Free		NA	Free	Prot		Prot			
Protected Phases		2			2		4		4			
Permitted Phases			Free			Free						
Detector Phase		2			2		4		4			
Switch Phase												
Minimum Initial (s)		20.0			20.0		5.0		5.0			
Minimum Split (s)		26.0			26.0		10.5		10.5			
Total Split (s)		89.0			89.0		31.0		31.0			
Total Split (%)		74.2%			74.2%		25.8%		25.8%			
Yellow Time (s)		4.0			4.0		3.5		3.5			
All-Red Time (s)		2.0			2.0		2.0		2.0			
Lost Time Adjust (s)		0.0			0.0		0.0		0.0			
Total Lost Time (s)		6.0			6.0		5.5		5.5			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		C-Max			C-Max		None		None			
Act Effct Green (s)		95.0	120.0		95.0	120.0	13.5		13.5			
Actuated g/C Ratio		0.79	1.00		0.79	1.00	0.11		0.11			
v/c Ratio		0.34	0.27		0.58	0.48	0.61		0.45			
Control Delay		3.8	0.5		5.5	3.4	57.2		8.7			
Queue Delay		0.0	0.0		0.3	0.0	0.0		0.0			
Total Delay		3.8	0.5		5.9	3.4	57.2		8.7			
LOS		A	A		A	A	E		A			
Approach Delay		3.0			5.1			33.0				
Approach LOS		A			A			C				
Queue Length 50th (ft)		82	0		396	61	90		0			
Queue Length 95th (ft)		117	0		51	128	128		39			
Internal Link Dist (ft)		649			347			213			215	
Turn Bay Length (ft)			500						100			
Base Capacity (vph)		3724	1362		2586	1441	729		776			
Starvation Cap Reductn		0	0		474	0	0		0			
Spillback Cap Reductn		42	0		0	0	0		2			
Storage Cap Reductn		0	0		0	0	0		0			
Reduced v/c Ratio		0.34	0.27		0.71	0.48	0.32		0.30			

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 35 (29%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 40
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 7.3	Intersection LOS: A
Intersection Capacity Utilization 48.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: I-25 NB Off-Ramp/I-25 NB On-Ramp & Founders Parkway (SH 86)





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	10	88	48	15	49	114	247	33	19	216	3
Future Volume (vph)	6	10	88	48	15	49	114	247	33	19	216	3
Satd. Flow (prot)	1770	1611	0	1770	1863	1583	1770	3539	1583	0	3518	0
Flt Permitted	0.433			0.688			0.592				0.925	
Satd. Flow (perm)	807	1611	0	1282	1863	1583	1103	3539	1583	0	3267	0
Satd. Flow (RTOR)		96				218			218		3	
Lane Group Flow (vph)	7	107	0	52	16	53	124	268	36	0	259	0
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm	D.P+P	NA	
Protected Phases	3	8			4			6		5	2	
Permitted Phases	8			4		4	6		6	6		
Detector Phase	3	8		4	4	4	6	6	6	5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0	8.0	10.0	
Total Split (s)	12.0	27.0		15.0	15.0	15.0	21.0	21.0	21.0	12.0	33.0	
Total Split (%)	20.0%	45.0%		25.0%	25.0%	25.0%	35.0%	35.0%	35.0%	20.0%	55.0%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0		5.0	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None	None	C-Min	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	10.2	10.2		8.0	8.0	8.0	42.9	42.9	42.9		42.9	
Actuated g/C Ratio	0.17	0.17		0.13	0.13	0.13	0.72	0.72	0.72		0.72	
v/c Ratio	0.03	0.30		0.31	0.06	0.13	0.16	0.11	0.03		0.11	
Control Delay	16.7	7.6		27.5	21.9	0.7	3.8	1.9	0.0		5.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	16.7	7.6		27.5	21.9	0.7	3.8	1.9	0.0		5.0	
LOS	B	A		C	C	A	A	A	A		A	
Approach Delay		8.2			15.0			2.3			5.0	
Approach LOS		A			B			A			A	
Queue Length 50th (ft)	2	4		17	5	0	5	5	0		12	
Queue Length 95th (ft)	8	29		43	19	0	m30	22	m0		45	
Internal Link Dist (ft)		422			420			368			300	
Turn Bay Length (ft)	60			95		65	70		95			
Base Capacity (vph)	254	652		217	316	450	788	2530	1194		2337	
Starvation Cap Reductn	0	0		0	0	0	0	0	0		0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0		0	
Storage Cap Reductn	0	0		0	0	0	0	0	0		0	
Reduced v/c Ratio	0.03	0.16		0.24	0.05	0.12	0.16	0.11	0.03		0.11	

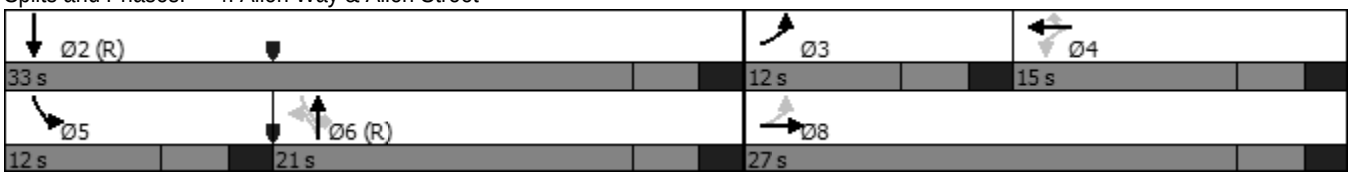
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 31 (52%), Referenced to phase 2:SBT and 6:NBSB, Start of Green
Natural Cycle: 40
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.31

Intersection Signal Delay: 5.5	Intersection LOS: A
Intersection Capacity Utilization 35.3%	ICU Level of Service A
Analysis Period (min) 15	

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

Splits and Phases: 4: Allen Way & Allen Street



Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	1	17	22	1	66	22	69	38	25	31	14
Future Vol, veh/h	26	1	17	22	1	66	22	69	38	25	31	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	60	-	-	75	-	75	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	1	18	24	1	72	24	75	41	27	34	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	276	260	42	228	226	75	49	0	0	116	0	0
Stage 1	96	96	-	123	123	-	-	-	-	-	-	-
Stage 2	180	164	-	105	103	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	676	645	1029	727	673	986	1558	-	-	1473	-	-
Stage 1	911	815	-	881	794	-	-	-	-	-	-	-
Stage 2	822	762	-	901	810	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	610	624	1029	695	651	986	1558	-	-	1473	-	-
Mov Cap-2 Maneuver	610	624	-	695	651	-	-	-	-	-	-	-
Stage 1	897	800	-	868	782	-	-	-	-	-	-	-
Stage 2	749	751	-	867	795	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.3	9.3	1.3	2.7
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1558	-	-	724	695	978	1473	-	-
HCM Lane V/C Ratio	0.015	-	-	0.066	0.034	0.074	0.018	-	-
HCM Control Delay (s)	7.3	-	-	10.3	10.4	9	7.5	-	-
HCM Lane LOS	A	-	-	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.1	0.2	0.1	-	-

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	56	38	52	87	57	40
Future Vol, veh/h	56	38	52	87	57	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	61	41	57	95	62	43
Number of Lanes	1	1	1	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay	8.4	8.4	7.7
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	52	87	56	38	57	40
LT Vol	52	0	56	0	0	0
Through Vol	0	87	0	0	57	0
RT Vol	0	0	0	38	0	40
Lane Flow Rate	57	95	61	41	62	43
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.085	0.128	0.096	0.051	0.085	0.051
Departure Headway (Hd)	5.392	4.89	5.649	4.446	4.941	4.238
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	666	736	636	807	727	847
Service Time	3.107	2.605	3.367	2.163	2.657	1.954
HCM Lane V/C Ratio	0.086	0.129	0.096	0.051	0.085	0.051
HCM Control Delay	8.6	8.3	9	7.4	8.1	7.2
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.3	0.4	0.3	0.2	0.3	0.2

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	36	3	27	0	0	0	11	1	0	0	1	25
Future Vol, veh/h	36	3	27	0	0	0	11	1	0	0	1	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	39	3	29	0	0	0	12	1	0	0	1	27

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	32	0	0	111	97	18	97	111	1
Stage 1	-	-	-	-	-	-	96	96	-	1	1	-
Stage 2	-	-	-	-	-	-	15	1	-	96	110	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1622	-	-	1580	-	-	867	793	1061	885	779	1084
Stage 1	-	-	-	-	-	-	911	815	-	1022	895	-
Stage 2	-	-	-	-	-	-	1005	895	-	911	804	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1622	-	-	1580	-	-	828	773	1061	867	760	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-	828	773	-	867	760	-
Stage 1	-	-	-	-	-	-	888	795	-	996	895	-
Stage 2	-	-	-	-	-	-	979	895	-	887	784	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4	0	9.4	8.5
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	823	1622	-	-	1580	-	-	1067
HCM Lane V/C Ratio	0.016	0.024	-	-	-	-	-	0.026
HCM Control Delay (s)	9.4	7.3	0	-	0	-	-	8.5
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	308	109	170	28	73	86	99	1332	11	158	1677	340
Future Volume (vph)	308	109	170	28	73	86	99	1332	11	158	1677	340
Satd. Flow (prot)	3433	1863	1583	1770	3253	0	1770	5080	0	1770	4958	0
Flt Permitted	0.462			0.681			0.055			0.130		
Satd. Flow (perm)	1670	1863	1583	1269	3253	0	102	5080	0	242	4958	0
Satd. Flow (RTOR)			168		93			2			72	
Lane Group Flow (vph)	335	118	185	30	172	0	108	1460	0	172	2193	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		4	8			6			2		
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0		3.0	20.0		3.0	20.0	
Minimum Split (s)	10.0	11.0	11.0	10.0	11.0		10.0	26.0		10.0	26.0	
Total Split (s)	13.0	13.0	13.0	13.0	13.0		11.0	74.0		20.0	83.0	
Total Split (%)	10.8%	10.8%	10.8%	10.8%	10.8%		9.2%	61.7%		16.7%	69.2%	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	17.9	12.1	12.1	14.7	6.7		81.1	74.1		87.1	77.3	
Actuated g/C Ratio	0.15	0.10	0.10	0.12	0.06		0.68	0.62		0.73	0.64	
v/c Ratio	0.92	0.63	0.60	0.16	0.64		0.71	0.47		0.59	0.68	
Control Delay	77.7	69.5	19.6	44.0	37.4		46.1	13.2		14.1	14.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	77.7	69.5	19.6	44.0	37.4		46.1	13.2		14.1	14.4	
LOS	E	E	B	D	D		D	B		B	B	
Approach Delay		59.3			38.4			15.5			14.4	
Approach LOS		E			D			B			B	
Queue Length 50th (ft)	123	93	13	20	31		30	207		33	356	
Queue Length 95th (ft)	#185	#225	#113	48	69		#124	266		65	406	
Internal Link Dist (ft)		695			413			423			624	
Turn Bay Length (ft)	285		285	195			175			455		
Base Capacity (vph)	366	187	310	199	277		152	3136		371	3219	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.92	0.63	0.60	0.15	0.62		0.71	0.47		0.46	0.68	

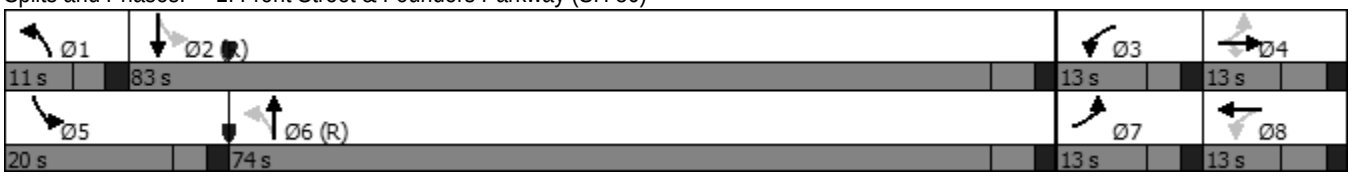
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 112 (93%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay: 21.8	Intersection LOS: C
Intersection Capacity Utilization 77.4%	ICU Level of Service D
Analysis Period (min) 15	

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

Splits and Phases: 1: Front Street & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	358	2091	238	46	1557	124	156	25	49	65	54	409
Future Volume (vph)	358	2091	238	46	1557	124	156	25	49	65	54	409
Satd. Flow (prot)	3433	5009	0	1770	5085	1583	1770	1678	0	1770	1863	2787
Flt Permitted	0.950			0.066			0.493			0.705		
Satd. Flow (perm)	3433	5009	0	123	5085	1583	918	1678	0	1313	1863	2787
Satd. Flow (RTOR)		32				135		53				382
Lane Group Flow (vph)	389	2532	0	50	1692	135	170	80	0	71	59	445
Turn Type	Prot	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases				6		6	4			8		8
Detector Phase	5	2		1	6	6	7	4		3	8	8
Switch Phase												
Minimum Initial (s)	5.0	20.0		5.0	20.0	20.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	26.0		10.0	26.0	26.0	10.0	11.0		11.0	11.0	11.0
Total Split (s)	20.0	83.0		11.0	74.0	74.0	13.0	13.0		13.0	13.0	13.0
Total Split (%)	16.7%	69.2%		9.2%	61.7%	61.7%	10.8%	10.8%		10.8%	10.8%	10.8%
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	6.0	6.0	5.0	6.0		5.0	6.0	6.0
Lead/Lag	Lead	Lead		Lag	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	None
Act Effct Green (s)	15.4	77.1		66.8	65.2	65.2	20.4	11.8		15.8	7.0	7.0
Actuated g/C Ratio	0.13	0.64		0.56	0.54	0.54	0.17	0.10		0.13	0.06	0.06
v/c Ratio	0.88	0.78		0.34	0.61	0.15	0.74	0.38		0.35	0.55	0.85
Control Delay	75.3	12.0		33.2	19.8	2.4	65.9	28.8		48.7	75.0	29.7
Queue Delay	0.0	0.7		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.1
Total Delay	75.3	12.7		33.2	19.8	2.4	65.9	28.8		48.7	75.0	29.8
LOS	E	B		C	B	A	E	C		D	E	C
Approach Delay		21.0			18.9			54.0			36.8	
Approach LOS		C			B			D			D	
Queue Length 50th (ft)	166	175		16	300	0	121	20		41	43	27
Queue Length 95th (ft)	#251	250		34	342	27	#221	72		m92	m#86	#110
Internal Link Dist (ft)		347			406			277			368	
Turn Bay Length (ft)	300			330			80			120		100
Base Capacity (vph)	441	3290		151	2881	955	229	212		207	111	526
Starvation Cap Reductn	0	384		0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0		0	27	0	0	0		0	0	2
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.88	0.87		0.33	0.59	0.14	0.74	0.38		0.34	0.53	0.85

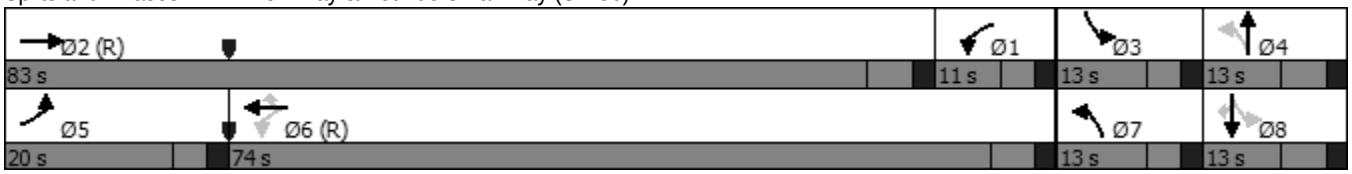
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 107 (89%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 23.4	Intersection LOS: C
Intersection Capacity Utilization 79.3%	ICU Level of Service D
Analysis Period (min) 15	

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

Splits and Phases: 2: Allen Way & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2344	561	0	1174	958	398	0	350	0	0	0
Future Volume (vph)	0	2344	561	0	1174	958	398	0	350	0	0	0
Satd. Flow (prot)	0	4787	1362	0	3285	1441	3433	0	2787	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	4787	1362	0	3285	1441	3433	0	2787	0	0	0
Satd. Flow (RTOR)		6	364		53	424			27			
Lane Group Flow (vph)	0	2609	549	0	1609	708	433	0	380	0	0	0
Turn Type		NA	Free		NA	Free	Prot		Prot			
Protected Phases		2			2		4		4			
Permitted Phases			Free			Free						
Detector Phase		2			2		4		4			
Switch Phase												
Minimum Initial (s)		20.0			20.0		5.0		5.0			
Minimum Split (s)		26.0			26.0		10.5		10.5			
Total Split (s)		85.0			85.0		35.0		35.0			
Total Split (%)		70.8%			70.8%		29.2%		29.2%			
Yellow Time (s)		4.0			4.0		3.5		3.5			
All-Red Time (s)		2.0			2.0		2.0		2.0			
Lost Time Adjust (s)		0.0			0.0		0.0		0.0			
Total Lost Time (s)		6.0			6.0		5.5		5.5			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		C-Max			C-Max		None		None			
Act Effct Green (s)		87.4	120.0		87.4	120.0	21.1		21.1			
Actuated g/C Ratio		0.73	1.00		0.73	1.00	0.18		0.18			
v/c Ratio		0.75	0.40		0.67	0.49	0.72		0.74			
Control Delay		12.1	0.9		6.5	2.4	53.4		52.4			
Queue Delay		0.0	0.0		0.0	0.0	0.0		0.0			
Total Delay		12.1	0.9		6.6	2.4	53.4		52.4			
LOS		B	A		A	A	D		D			
Approach Delay		10.1			5.3			52.9				
Approach LOS		B			A			D				
Queue Length 50th (ft)		402	0		113	0	165		150			
Queue Length 95th (ft)		573	0		136	m416	207		196			
Internal Link Dist (ft)		649			347			213			215	
Turn Bay Length (ft)			500						100			
Base Capacity (vph)		3489	1362		2408	1441	843		705			
Starvation Cap Reductn		0	0		51	0	0		0			
Spillback Cap Reductn		0	0		0	0	0		0			
Storage Cap Reductn		0	0		0	0	0		0			
Reduced v/c Ratio		0.75	0.40		0.68	0.49	0.51		0.54			

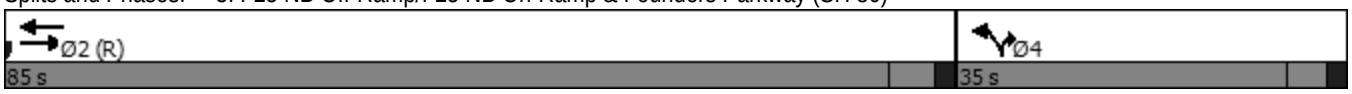
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 106 (88%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 13.9	Intersection LOS: B
Intersection Capacity Utilization 71.3%	ICU Level of Service C
Analysis Period (min) 15	

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

Splits and Phases: 3: I-25 NB Off-Ramp/I-25 NB On-Ramp & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	57	84	144	22	41	144	311	73	13	341	9
Future Volume (vph)	1	57	84	144	22	41	144	311	73	13	341	9
Satd. Flow (prot)	1770	1697	0	1770	1863	1583	1770	3539	1583	0	3518	0
Flt Permitted	0.526			0.660			0.519				0.941	
Satd. Flow (perm)	980	1697	0	1229	1863	1583	967	3539	1583	0	3317	0
Satd. Flow (RTOR)		91				218			218		6	
Lane Group Flow (vph)	1	153	0	157	24	45	157	338	79	0	395	0
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm	D.P+P	NA	
Protected Phases	3	8			4			6		5	2	
Permitted Phases	8			4		4	6		6	6		
Detector Phase	3	8		4	4	4	6	6	6	5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0	8.0	10.0	
Total Split (s)	12.0	27.0		15.0	15.0	15.0	21.0	21.0	21.0	12.0	33.0	
Total Split (%)	20.0%	45.0%		25.0%	25.0%	25.0%	35.0%	35.0%	35.0%	20.0%	55.0%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0		5.0	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None	None	C-Min	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	14.4	14.4		12.2	12.2	12.2	35.6	35.6	35.6		35.6	
Actuated g/C Ratio	0.24	0.24		0.20	0.20	0.20	0.59	0.59	0.59		0.59	
v/c Ratio	0.00	0.32		0.63	0.06	0.09	0.27	0.16	0.08		0.20	
Control Delay	14.0	9.4		35.5	19.2	0.4	16.4	11.7	3.8		6.9	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	14.0	9.4		35.5	19.2	0.4	16.4	11.7	3.8		6.9	
LOS	B	A		D	B	A	B	B	A		A	
Approach Delay		9.5			26.7			11.9			6.9	
Approach LOS		A			C			B			A	
Queue Length 50th (ft)	0	18		50	7	0	81	89	11		28	
Queue Length 95th (ft)	3	47		#132	24	0	m83	m76	m4		66	
Internal Link Dist (ft)		422			420			368			300	
Turn Bay Length (ft)	60			95		65	70		95			
Base Capacity (vph)	326	679		257	389	503	574	2102	1029		1972	
Starvation Cap Reductn	0	0		0	0	0	0	0	0		0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0		0	
Storage Cap Reductn	0	0		0	0	0	0	0	0		0	
Reduced v/c Ratio	0.00	0.23		0.61	0.06	0.09	0.27	0.16	0.08		0.20	

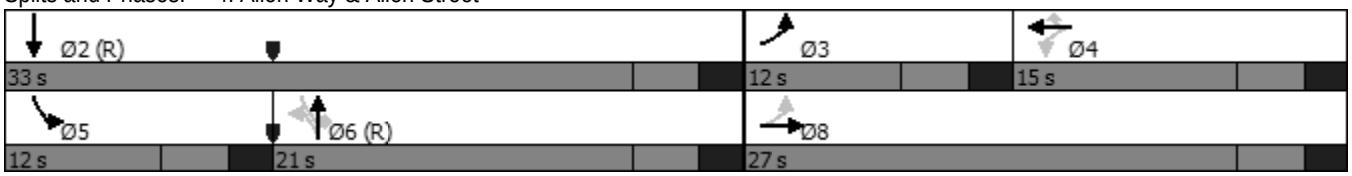
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 31 (52%), Referenced to phase 2:SBT and 6:NBSB, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 12.6	Intersection LOS: B
Intersection Capacity Utilization 51.5%	ICU Level of Service A
Analysis Period (min) 15	

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

Splits and Phases: 4: Allen Way & Allen Street



Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	56	10	50	82	6	51	55	101	85	30	97	16
Future Vol, veh/h	56	10	50	82	6	51	55	101	85	30	97	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	60	-	-	75	-	75	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	61	11	54	89	7	55	60	110	92	33	105	17

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	487	502	114	442	418	110	122	0	0	202	0	0
Stage 1	180	180	-	230	230	-	-	-	-	-	-	-
Stage 2	307	322	-	212	188	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	491	471	939	526	526	943	1465	-	-	1370	-	-
Stage 1	822	750	-	773	714	-	-	-	-	-	-	-
Stage 2	703	651	-	790	745	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	435	441	939	462	492	943	1465	-	-	1370	-	-
Mov Cap-2 Maneuver	435	441	-	462	492	-	-	-	-	-	-	-
Stage 1	788	732	-	741	685	-	-	-	-	-	-	-
Stage 2	629	624	-	716	727	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.2	12.5	1.7	1.6
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1465	-	-	567	462	860	1370	-	-
HCM Lane V/C Ratio	0.041	-	-	0.222	0.193	0.072	0.024	-	-
HCM Control Delay (s)	7.6	-	-	13.2	14.6	9.5	7.7	-	-
HCM Lane LOS	A	-	-	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.8	0.7	0.2	0.1	-	-

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	160	124	77	143	143	107
Future Vol, veh/h	160	124	77	143	143	107
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	174	135	84	155	155	116
Number of Lanes	1	1	1	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay	10.6	10.2	9.6
HCM LOS	B	B	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	77	143	160	124	143	107
LT Vol	77	0	160	0	0	0
Through Vol	0	143	0	0	143	0
RT Vol	0	0	0	124	0	107
Lane Flow Rate	84	155	174	135	155	116
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.144	0.245	0.303	0.19	0.245	0.16
Departure Headway (Hd)	6.181	5.675	6.281	5.073	5.666	4.959
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	575	626	567	698	628	714
Service Time	3.978	3.472	4.079	2.87	3.459	2.751
HCM Lane V/C Ratio	0.146	0.248	0.307	0.193	0.247	0.162
HCM Control Delay	10	10.3	11.8	9.1	10.3	8.7
HCM Lane LOS	A	B	B	A	B	A
HCM 95th-tile Q	0.5	1	1.3	0.7	1	0.6

Intersection	
Int Delay, s/veh	8.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	108	2	6	0	6	0	19	1	0	0	1	123
Future Vol, veh/h	108	2	6	0	6	0	19	1	0	0	1	123
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	117	2	7	0	7	0	21	1	0	0	1	134

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	7	0	0	9	0	0	315	247	6	247	250	7
Stage 1	-	-	-	-	-	-	240	240	-	7	7	-
Stage 2	-	-	-	-	-	-	75	7	-	240	243	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1614	-	-	1611	-	-	638	655	1077	707	653	1075
Stage 1	-	-	-	-	-	-	763	707	-	1015	890	-
Stage 2	-	-	-	-	-	-	934	890	-	763	705	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1614	-	-	1611	-	-	527	607	1077	667	605	1075
Mov Cap-2 Maneuver	-	-	-	-	-	-	527	607	-	667	605	-
Stage 1	-	-	-	-	-	-	707	655	-	941	890	-
Stage 2	-	-	-	-	-	-	817	890	-	706	654	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	6.9	0	12.1	8.9
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	530	1614	-	-	1611	-	-	1068
HCM Lane V/C Ratio	0.041	0.073	-	-	-	-	-	0.126
HCM Control Delay (s)	12.1	7.4	0	-	0	-	-	8.9
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0.2	-	-	0	-	-	0.4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	334	101	139	43	112	89	109	1493	36	153	1363	378
Future Volume (vph)	334	101	139	43	112	89	109	1493	36	153	1363	378
Satd. Flow (prot)	3433	1863	1583	1770	3306	0	1770	5065	0	1770	4917	0
Flt Permitted	0.463			0.686			0.083			0.080		
Satd. Flow (perm)	1673	1863	1583	1278	3306	0	155	5065	0	149	4917	0
Satd. Flow (RTOR)			196		97			5			98	
Lane Group Flow (vph)	363	110	151	47	219	0	118	1662	0	166	1893	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		4	8			6			2		
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0		3.0	20.0		3.0	20.0	
Minimum Split (s)	10.0	11.0	11.0	10.0	11.0		10.0	26.0		10.0	26.0	
Total Split (s)	14.0	13.0	13.0	20.0	19.0		12.0	52.0		15.0	55.0	
Total Split (%)	14.0%	13.0%	13.0%	20.0%	19.0%		12.0%	52.0%		15.0%	55.0%	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	22.3	15.9	15.9	18.6	10.1		57.9	49.9		61.9	51.9	
Actuated g/C Ratio	0.22	0.16	0.16	0.19	0.10		0.58	0.50		0.62	0.52	
v/c Ratio	0.68	0.37	0.36	0.17	0.52		0.58	0.66		0.70	0.73	
Control Delay	38.8	43.3	5.1	29.3	27.4		26.2	20.9		32.9	20.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	38.8	43.3	5.1	29.3	27.4		26.2	20.9		32.9	20.1	
LOS	D	D	A	C	C		C	C		C	C	
Approach Delay		31.4			27.8			21.2			21.1	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	98	66	0	23	38		26	290		48	324	
Queue Length 95th (ft)	137	122	29	51	74		#89	357		#133	394	
Internal Link Dist (ft)		695			413			423			624	
Turn Bay Length (ft)	285		285	195			175			455		
Base Capacity (vph)	532	297	417	394	514		206	2528		256	2598	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.68	0.37	0.36	0.12	0.43		0.57	0.66		0.65	0.73	

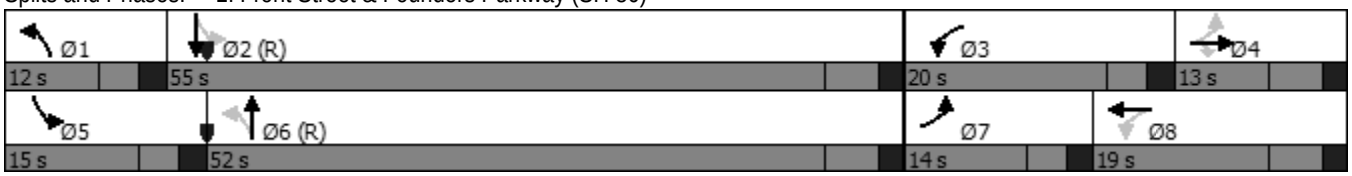
Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 62 (62%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

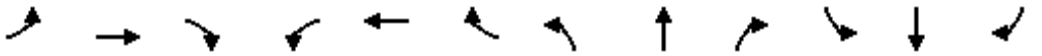
Maximum v/c Ratio: 0.73

Intersection Signal Delay: 22.9	Intersection LOS: C
Intersection Capacity Utilization 74.6%	ICU Level of Service D
Analysis Period (min) 15	

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

Splits and Phases: 1: Front Street & Founders Parkway (SH 86)





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	448	1676	217	43	1670	194	181	34	86	134	36	492
Future Volume (vph)	448	1676	217	43	1670	194	181	34	86	134	36	492
Satd. Flow (prot)	3433	4999	0	1770	5085	1583	1770	1663	0	1770	1863	2787
Flt Permitted	0.950			0.098			0.637			0.655		
Satd. Flow (perm)	3433	4999	0	183	5085	1583	1187	1663	0	1220	1863	2787
Satd. Flow (RTOR)		34				211		93				535
Lane Group Flow (vph)	487	2058	0	47	1815	211	197	130	0	146	39	535
Turn Type	Prot	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases				6		6	4			8		8
Detector Phase	5	2		1	6	6	7	4		3	8	8
Switch Phase												
Minimum Initial (s)	5.0	20.0		5.0	20.0	20.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	26.0		10.0	26.0	26.0	10.0	11.0		11.0	11.0	11.0
Total Split (s)	20.0	58.0		11.0	49.0	49.0	18.0	13.0		18.0	13.0	13.0
Total Split (%)	20.0%	58.0%		11.0%	49.0%	49.0%	18.0%	13.0%		18.0%	13.0%	13.0%
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	6.0	6.0	5.0	6.0		5.0	6.0	6.0
Lead/Lag	Lead	Lead		Lag	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	None
Act Effct Green (s)	15.5	57.4		44.6	43.6	43.6	21.0	7.7		18.9	6.6	6.6
Actuated g/C Ratio	0.16	0.57		0.45	0.44	0.44	0.21	0.08		0.19	0.07	0.07
v/c Ratio	0.92	0.71		0.27	0.82	0.26	0.62	0.61		0.50	0.32	0.78
Control Delay	62.6	19.8		29.9	28.8	3.4	40.8	29.3		36.9	51.4	13.1
Queue Delay	0.0	1.0		0.0	2.0	0.0	0.0	0.0		0.0	0.0	0.6
Total Delay	62.6	20.8		29.9	30.8	3.4	40.8	29.3		36.9	51.4	13.7
LOS	E	C		C	C	A	D	C		D	D	B
Approach Delay		28.8			28.0			36.2			20.5	
Approach LOS		C			C			D			C	
Queue Length 50th (ft)	158	339		17	366	0	105	23		75	24	0
Queue Length 95th (ft)	#263	440		38	432	41	172	#97		131	58	55
Internal Link Dist (ft)		347			406			277			368	
Turn Bay Length (ft)	300			330			80			120		100
Base Capacity (vph)	532	2887		177	2216	808	332	213		322	130	692
Starvation Cap Reductn	0	525		0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0		0	253	0	0	0		0	0	26
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.92	0.87		0.27	0.92	0.26	0.59	0.61		0.45	0.30	0.80

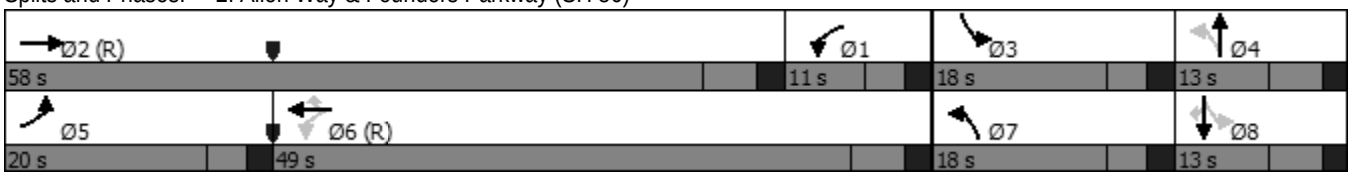
Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 70 (70%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

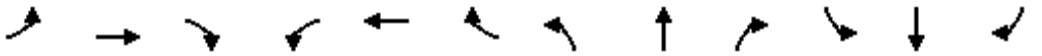
Maximum v/c Ratio: 0.92

Intersection Signal Delay: 27.9	Intersection LOS: C
Intersection Capacity Utilization 75.9%	ICU Level of Service D
Analysis Period (min) 15	

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

Splits and Phases: 2: Allen Way & Founders Parkway (SH 86)



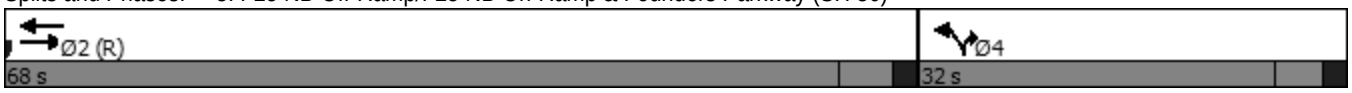


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1963	496	0	1331	1015	511	0	381	0	0	0
Future Volume (vph)	0	1963	496	0	1331	1015	511	0	381	0	0	0
Satd. Flow (prot)	0	4787	1362	0	3299	1441	3433	0	2787	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	4787	1362	0	3299	1441	3433	0	2787	0	0	0
Satd. Flow (RTOR)		6	462		47	476			33			
Lane Group Flow (vph)	0	2188	485	0	1767	783	555	0	414	0	0	0
Turn Type		NA	Free		NA	Free	Prot		Prot			
Protected Phases		2			2		4		4			
Permitted Phases			Free			Free						
Detector Phase		2			2		4		4			
Switch Phase												
Minimum Initial (s)		20.0			20.0		5.0		5.0			
Minimum Split (s)		26.0			26.0		10.5		10.5			
Total Split (s)		68.0			68.0		32.0		32.0			
Total Split (%)		68.0%			68.0%		32.0%		32.0%			
Yellow Time (s)		4.0			4.0		3.5		3.5			
All-Red Time (s)		2.0			2.0		2.0		2.0			
Lost Time Adjust (s)		0.0			0.0		0.0		0.0			
Total Lost Time (s)		6.0			6.0		5.5		5.5			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		C-Max			C-Max		None		None			
Act Effct Green (s)		66.7	100.0		66.7	100.0	21.8		21.8			
Actuated g/C Ratio		0.67	1.00		0.67	1.00	0.22		0.22			
v/c Ratio		0.69	0.36		0.80	0.54	0.74		0.65			
Control Delay		12.2	0.7		9.5	3.7	42.6		37.4			
Queue Delay		0.0	0.0		12.6	0.0	0.0		1.8			
Total Delay		12.2	0.7		22.2	3.7	42.6		39.2			
LOS		B	A		C	A	D		D			
Approach Delay		10.1			16.5			41.2				
Approach LOS		B			B			D				
Queue Length 50th (ft)		298	0		537	208	170		126			
Queue Length 95th (ft)		408	0		687	361	215		172			
Internal Link Dist (ft)		649			347			213			215	
Turn Bay Length (ft)			500						100			
Base Capacity (vph)		3194	1362		2215	1441	909		762			
Starvation Cap Reductn		0	0		461	0	0		0			
Spillback Cap Reductn		68	0		0	0	0		202			
Storage Cap Reductn		0	0		0	0	0		0			
Reduced v/c Ratio		0.70	0.36		1.01	0.54	0.61		0.74			

Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 80 (80%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 17.6	Intersection LOS: B
Intersection Capacity Utilization 70.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 3: I-25 NB Off-Ramp/I-25 NB On-Ramp & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	51	133	126	52	65	152	376	71	52	348	3
Future Volume (vph)	9	51	133	126	52	65	152	376	71	52	348	3
Satd. Flow (prot)	1770	1660	0	1770	1863	1583	1770	3539	1583	0	3514	0
Flt Permitted	0.498			0.632			0.498				0.861	
Satd. Flow (perm)	928	1660	0	1177	1863	1583	928	3539	1583	0	3044	0
Satd. Flow (RTOR)		145				218			218		1	
Lane Group Flow (vph)	10	200	0	137	57	71	165	409	77	0	438	0
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm	D.P+P	NA	
Protected Phases	3	8			4			6		5	2	
Permitted Phases	8			4		4	6		6	6		
Detector Phase	3	8		4	4	4	6	6	6	5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0	8.0	10.0	
Total Split (s)	12.0	27.0		15.0	15.0	15.0	21.0	21.0	21.0	12.0	33.0	
Total Split (%)	20.0%	45.0%		25.0%	25.0%	25.0%	35.0%	35.0%	35.0%	20.0%	55.0%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0		5.0	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None	None	C-Min	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	13.5	13.5		11.2	11.2	11.2	36.5	36.5	36.5		36.5	
Actuated g/C Ratio	0.22	0.22		0.19	0.19	0.19	0.61	0.61	0.61		0.61	
v/c Ratio	0.03	0.41		0.62	0.16	0.15	0.29	0.19	0.07		0.24	
Control Delay	14.9	8.4		37.2	21.0	0.7	9.2	6.6	0.1		6.9	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	14.9	8.4		37.2	21.0	0.7	9.2	6.6	0.1		6.9	
LOS	B	A		D	C	A	A	A	A		A	
Approach Delay		8.7			24.0			6.5			6.9	
Approach LOS		A			C			A			A	
Queue Length 50th (ft)	3	16		44	17	0	23	28	0		31	
Queue Length 95th (ft)	10	50		#119	45	0	78	68	0		76	
Internal Link Dist (ft)		422			420			368			300	
Turn Bay Length (ft)	60			95		65	70		95			
Base Capacity (vph)	307	700		231	365	486	564	2151	1048		1851	
Starvation Cap Reductn	0	0		0	0	0	0	0	0		0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0		0	
Storage Cap Reductn	0	0		0	0	0	0	0	0		0	
Reduced v/c Ratio	0.03	0.29		0.59	0.16	0.15	0.29	0.19	0.07		0.24	

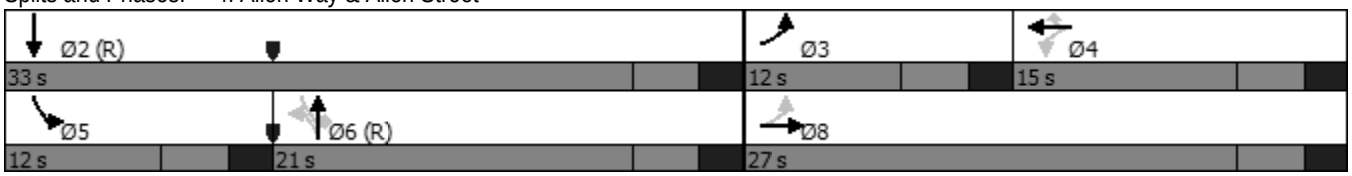
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 31 (52%), Referenced to phase 2:SBT and 6:NBSB, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 9.9	Intersection LOS: A
Intersection Capacity Utilization 56.1%	ICU Level of Service B
Analysis Period (min) 15	

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

Splits and Phases: 4: Allen Way & Allen Street



Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	74	2	47	121	5	33	55	130	95	34	129	25
Future Vol, veh/h	74	2	47	121	5	33	55	130	95	34	129	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	60	-	-	75	-	75	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	80	2	51	132	5	36	60	141	103	37	140	27

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	561	592	154	515	502	141	167	0	0	244	0	0
Stage 1	228	228	-	261	261	-	-	-	-	-	-	-
Stage 2	333	364	-	254	241	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	438	419	892	470	471	907	1411	-	-	1322	-	-
Stage 1	775	715	-	744	692	-	-	-	-	-	-	-
Stage 2	681	624	-	750	706	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	395	390	892	418	438	907	1411	-	-	1322	-	-
Mov Cap-2 Maneuver	395	390	-	418	438	-	-	-	-	-	-	-
Stage 1	742	695	-	712	662	-	-	-	-	-	-	-
Stage 2	621	597	-	685	686	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.8	15.7	1.5	1.4
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1411	-	-	502	418	795	1322	-	-
HCM Lane V/C Ratio	0.042	-	-	0.266	0.315	0.052	0.028	-	-
HCM Control Delay (s)	7.7	-	-	14.8	17.5	9.8	7.8	-	-
HCM Lane LOS	A	-	-	B	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.1	1.3	0.2	0.1	-	-

Intersection	
Intersection Delay, s/veh	11.1
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	191	95	79	167	159	170
Future Vol, veh/h	191	95	79	167	159	170
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	208	103	86	182	173	185
Number of Lanes	1	1	1	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay	12.1	10.9	10.3
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	79	167	191	95	159	170
LT Vol	79	0	191	0	0	0
Through Vol	0	167	0	0	159	0
RT Vol	0	0	0	95	0	170
Lane Flow Rate	86	182	208	103	173	185
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.154	0.301	0.383	0.156	0.282	0.266
Departure Headway (Hd)	6.468	5.961	6.647	5.436	5.884	5.175
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	556	604	542	660	612	695
Service Time	4.198	3.691	4.376	3.165	3.613	2.904
HCM Lane V/C Ratio	0.155	0.301	0.384	0.156	0.283	0.266
HCM Control Delay	10.4	11.2	13.5	9.2	10.9	9.8
HCM Lane LOS	B	B	B	A	B	A
HCM 95th-tile Q	0.5	1.3	1.8	0.6	1.2	1.1

Intersection	
Int Delay, s/veh	8.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	137	0	3	0	1	0	2	0	0	0	0	158
Future Vol, veh/h	137	0	3	0	1	0	2	0	0	0	0	158
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	149	0	3	0	1	0	2	0	0	0	0	172

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	3	0	0	387	301	2	301	302	1
Stage 1	-	-	-	-	-	-	300	300	-	1	1	-
Stage 2	-	-	-	-	-	-	87	1	-	300	301	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1622	-	-	1619	-	-	572	612	1082	651	611	1084
Stage 1	-	-	-	-	-	-	709	666	-	1022	895	-
Stage 2	-	-	-	-	-	-	921	895	-	709	665	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1622	-	-	1619	-	-	447	556	1082	605	555	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-	447	556	-	605	555	-
Stage 1	-	-	-	-	-	-	644	605	-	928	895	-
Stage 2	-	-	-	-	-	-	775	895	-	644	604	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	7.3	0	13.1	8.9
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	447	1622	-	-	1619	-	-	1084
HCM Lane V/C Ratio	0.005	0.092	-	-	-	-	-	0.158
HCM Control Delay (s)	13.1	7.4	0	-	0	-	-	8.9
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0.3	-	-	0	-	-	0.6

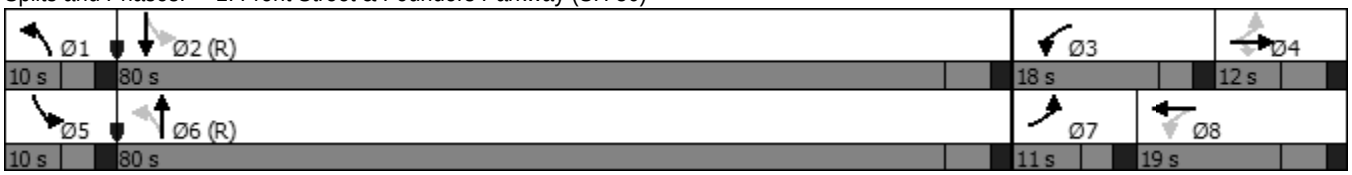
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	178	40	37	17	25	60	59	1526	9	53	901	166
Future Volume (vph)	178	40	37	17	25	60	59	1526	9	53	901	166
Satd. Flow (prot)	3433	1863	1583	1770	3164	0	1770	5080	0	1770	4968	0
Flt Permitted	0.547			0.729			0.209			0.106		
Satd. Flow (perm)	1977	1863	1583	1358	3164	0	389	5080	0	197	4968	0
Satd. Flow (RTOR)			164		65			1			57	
Lane Group Flow (vph)	193	43	40	18	92	0	64	1669	0	58	1159	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		4	8			6			2		
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0		3.0	20.0		3.0	20.0	
Minimum Split (s)	10.0	11.0	11.0	10.0	11.0		10.0	26.0		10.0	26.0	
Total Split (s)	11.0	12.0	12.0	18.0	19.0		10.0	80.0		10.0	80.0	
Total Split (%)	9.2%	10.0%	10.0%	15.0%	15.8%		8.3%	66.7%		8.3%	66.7%	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	17.5	14.1	14.1	15.8	8.2		85.9	79.9		85.8	79.9	
Actuated g/C Ratio	0.15	0.12	0.12	0.13	0.07		0.72	0.67		0.72	0.67	
v/c Ratio	0.53	0.20	0.12	0.09	0.33		0.18	0.49		0.26	0.35	
Control Delay	50.1	52.1	0.8	41.2	22.5		5.8	11.3		7.6	9.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	50.1	52.1	0.8	41.2	22.5		5.8	11.3		7.6	9.2	
LOS	D	D	A	D	C		A	B		A	A	
Approach Delay		43.2			25.6			11.1			9.1	
Approach LOS		D			C			B			A	
Queue Length 50th (ft)	70	30	0	12	10		10	220		9	126	
Queue Length 95th (ft)	99	69	0	32	36		26	291		25	173	
Internal Link Dist (ft)		695			413			423			624	
Turn Bay Length (ft)	285		285	195			175			455		
Base Capacity (vph)	361	219	331	272	400		348	3384		219	3326	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.53	0.20	0.12	0.07	0.23		0.18	0.49		0.26	0.35	

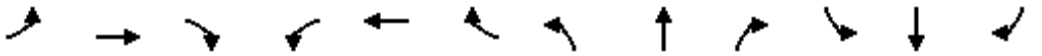
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 42 (35%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.53

Intersection Signal Delay: 13.5	Intersection LOS: B
Intersection Capacity Utilization 58.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Front Street & Founders Parkway (SH 86)





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	256	993	138	39	1602	137	96	20	55	66	14	303
Future Volume (vph)	256	993	138	39	1602	137	96	20	55	66	14	303
Satd. Flow (prot)	3433	4994	0	1770	5085	1583	1770	1658	0	1770	1863	2787
Flt Permitted	0.950			0.216			0.548			0.704		
Satd. Flow (perm)	3433	4994	0	402	5085	1583	1021	1658	0	1311	1863	2787
Satd. Flow (RTOR)		42				149		60				304
Lane Group Flow (vph)	278	1229	0	42	1741	149	104	82	0	72	15	329
Turn Type	Prot	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases				6		6	4			8		8
Detector Phase	5	2		1	6	6	7	4		3	8	8
Switch Phase												
Minimum Initial (s)	5.0	20.0		5.0	20.0	20.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	26.0		10.0	26.0	26.0	10.0	11.0		11.0	11.0	11.0
Total Split (s)	15.0	83.0		11.0	79.0	79.0	13.0	12.0		14.0	13.0	13.0
Total Split (%)	12.5%	69.2%		9.2%	65.8%	65.8%	10.8%	10.0%		11.7%	10.8%	10.8%
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	6.0	6.0	5.0	6.0		5.0	6.0	6.0
Lead/Lag	Lead	Lead		Lag	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	None
Act Effct Green (s)	14.7	65.3		66.2	65.2	65.2	21.4	10.5		17.5	6.7	6.7
Actuated g/C Ratio	0.12	0.54		0.55	0.54	0.54	0.18	0.09		0.15	0.06	0.06
v/c Ratio	0.66	0.45		0.10	0.63	0.16	0.41	0.41		0.32	0.15	0.74
Control Delay	62.6	18.8		15.8	20.7	2.6	44.9	26.5		44.7	60.7	23.2
Queue Delay	0.0	0.1		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	62.6	18.8		15.8	20.7	2.6	44.9	26.5		44.7	60.7	23.2
LOS	E	B		B	C	A	D	C		D	E	C
Approach Delay		26.9			19.2			36.8			28.3	
Approach LOS		C			B			D			C	
Queue Length 50th (ft)	110	229		15	340	0	69	16		50	11	0
Queue Length 95th (ft)	#206	241		31	371	30	117	68		96	36	71
Internal Link Dist (ft)		347			406			277			368	
Turn Bay Length (ft)	300			330			80			120		100
Base Capacity (vph)	421	3411		438	3093	1021	253	199		239	114	456
Starvation Cap Reductn	0	549		0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.66	0.43		0.10	0.56	0.15	0.41	0.41		0.30	0.13	0.72

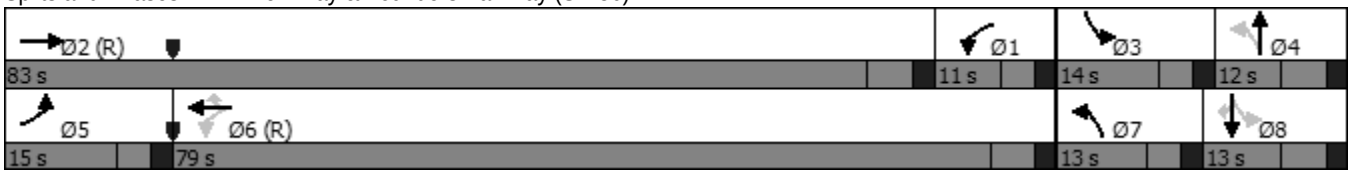
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 36 (30%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 23.8	Intersection LOS: C
Intersection Capacity Utilization 64.4%	ICU Level of Service C
Analysis Period (min) 15	

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

Splits and Phases: 2: Allen Way & Founders Parkway (SH 86)

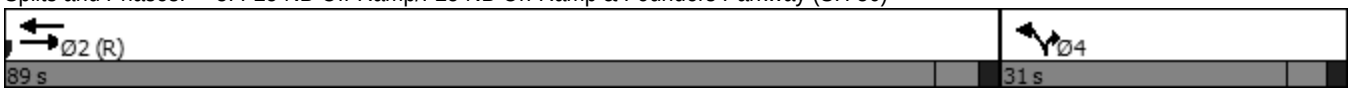


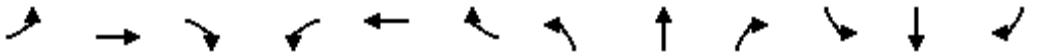
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1014	550	0	772	1327	225	0	224	0	0	0
Future Volume (vph)	0	1014	550	0	772	1327	225	0	224	0	0	0
Satd. Flow (prot)	0	4691	1362	0	3156	1441	3433	0	2787	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	4691	1362	0	3156	1441	3433	0	2787	0	0	0
Satd. Flow (RTOR)		71	383		420	721			235			
Lane Group Flow (vph)	0	1317	383	0	1560	721	245	0	243	0	0	0
Turn Type		NA	Free		NA	Free	Prot		Prot			
Protected Phases		2			2		4		4			
Permitted Phases			Free			Free						
Detector Phase		2			2		4		4			
Switch Phase												
Minimum Initial (s)		20.0			20.0		5.0		5.0			
Minimum Split (s)		26.0			26.0		10.5		10.5			
Total Split (s)		89.0			89.0		31.0		31.0			
Total Split (%)		74.2%			74.2%		25.8%		25.8%			
Yellow Time (s)		4.0			4.0		3.5		3.5			
All-Red Time (s)		2.0			2.0		2.0		2.0			
Lost Time Adjust (s)		0.0			0.0		0.0		0.0			
Total Lost Time (s)		6.0			6.0		5.5		5.5			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		C-Max			C-Max		None		None			
Act Effct Green (s)		94.6	120.0		94.6	120.0	13.9		13.9			
Actuated g/C Ratio		0.79	1.00		0.79	1.00	0.12		0.12			
v/c Ratio		0.35	0.28		0.61	0.50	0.62		0.46			
Control Delay		3.9	0.5		5.2	3.6	57.2		9.6			
Queue Delay		0.0	0.0		0.3	0.0	0.0		0.0			
Total Delay		3.9	0.5		5.4	3.6	57.2		9.6			
LOS		A	A		A	A	E		A			
Approach Delay		3.2			4.9			33.5				
Approach LOS		A			A			C				
Queue Length 50th (ft)		88	0		66	67	94		3			
Queue Length 95th (ft)		127	0		50	128	132		43			
Internal Link Dist (ft)		649			347			213			215	
Turn Bay Length (ft)			500						100			
Base Capacity (vph)		3713	1362		2577	1441	729		777			
Starvation Cap Reductn		0	0		393	0	0		0			
Spillback Cap Reductn		33	0		0	0	0		1			
Storage Cap Reductn		0	0		0	0	0		0			
Reduced v/c Ratio		0.36	0.28		0.71	0.50	0.34		0.31			

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 35 (29%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 7.3	Intersection LOS: A
Intersection Capacity Utilization 50.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: I-25 NB Off-Ramp/I-25 NB On-Ramp & Founders Parkway (SH 86)





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	11	92	55	17	52	119	257	37	21	225	4
Future Volume (vph)	7	11	92	55	17	52	119	257	37	21	225	4
Satd. Flow (prot)	1770	1613	0	1770	1863	1583	1770	3539	1583	0	3518	0
Flt Permitted	0.440			0.685			0.584				0.922	
Satd. Flow (perm)	820	1613	0	1276	1863	1583	1088	3539	1583	0	3257	0
Satd. Flow (RTOR)		100				218			218		3	
Lane Group Flow (vph)	8	112	0	60	18	57	129	279	40	0	272	0
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm	D.P+P	NA	
Protected Phases	3	8			4			6		5	2	
Permitted Phases	8			4		4	6		6	6		
Detector Phase	3	8		4	4	4	6	6	6	5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0	8.0	10.0	
Total Split (s)	12.0	27.0		15.0	15.0	15.0	21.0	21.0	21.0	12.0	33.0	
Total Split (%)	20.0%	45.0%		25.0%	25.0%	25.0%	35.0%	35.0%	35.0%	20.0%	55.0%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0		5.0	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None	None	C-Min	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	10.5	10.5		8.3	8.3	8.3	42.6	42.6	42.6		42.6	
Actuated g/C Ratio	0.18	0.18		0.14	0.14	0.14	0.71	0.71	0.71		0.71	
v/c Ratio	0.03	0.31		0.34	0.07	0.14	0.17	0.11	0.03		0.12	
Control Delay	16.4	7.5		28.0	21.6	0.7	4.1	2.1	0.1		5.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	16.4	7.5		28.0	21.6	0.7	4.1	2.1	0.1		5.2	
LOS	B	A		C	C	A	A	A	A		A	
Approach Delay		8.1			15.6			2.5			5.2	
Approach LOS		A			B			A			A	
Queue Length 50th (ft)	3	4		20	6	0	4	4	0		13	
Queue Length 95th (ft)	9	29		48	20	0	m32	23	m0		48	
Internal Link Dist (ft)		422			420			368			300	
Turn Bay Length (ft)	60			95		65	70		95			
Base Capacity (vph)	259	658		218	319	452	772	2512	1187		2321	
Starvation Cap Reductn	0	0		0	0	0	0	0	0		0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0		0	
Storage Cap Reductn	0	0		0	0	0	0	0	0		0	
Reduced v/c Ratio	0.03	0.17		0.28	0.06	0.13	0.17	0.11	0.03		0.12	

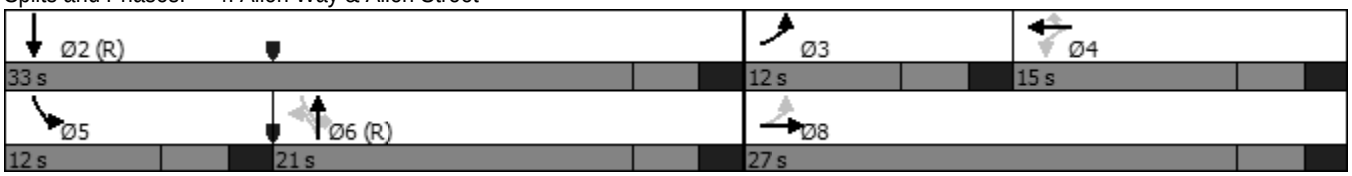
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 31 (52%), Referenced to phase 2:SBT and 6:NBSB, Start of Green
Natural Cycle: 40
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.34

Intersection Signal Delay: 5.8	Intersection LOS: A
Intersection Capacity Utilization 36.3%	ICU Level of Service A
Analysis Period (min) 15	

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

Splits and Phases: 4: Allen Way & Allen Street



Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	3	18	27	3	76	23	72	42	30	33	15
Future Vol, veh/h	28	3	18	27	3	76	23	72	42	30	33	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	60	-	-	75	-	75	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	30	3	20	29	3	83	25	78	46	33	36	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	304	284	44	250	246	78	52	0	0	124	0	0
Stage 1	110	110	-	128	128	-	-	-	-	-	-	-
Stage 2	194	174	-	122	118	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	648	625	1026	703	656	983	1554	-	-	1463	-	-
Stage 1	895	804	-	876	790	-	-	-	-	-	-	-
Stage 2	808	755	-	882	798	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	574	601	1026	666	630	983	1554	-	-	1463	-	-
Mov Cap-2 Maneuver	574	601	-	666	630	-	-	-	-	-	-	-
Stage 1	881	786	-	862	777	-	-	-	-	-	-	-
Stage 2	725	743	-	842	780	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.7	9.5	1.2	2.9
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1554	-	-	687	666	963	1463	-	-
HCM Lane V/C Ratio	0.016	-	-	0.078	0.044	0.089	0.022	-	-
HCM Control Delay (s)	7.4	-	-	10.7	10.7	9.1	7.5	-	-
HCM Lane LOS	A	-	-	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.1	0.3	0.1	-	-

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	60	40	55	92	62	44
Future Vol, veh/h	60	40	55	92	62	44
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	65	43	60	100	67	48
Number of Lanes	1	1	1	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay	8.5	8.5	7.8
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	55	92	60	40	62	44
LT Vol	55	0	60	0	0	0
Through Vol	0	92	0	0	62	0
RT Vol	0	0	0	40	0	44
Lane Flow Rate	60	100	65	43	67	48
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.09	0.137	0.103	0.054	0.093	0.057
Departure Headway (Hd)	5.421	4.919	5.696	4.492	4.97	4.267
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	663	731	631	799	723	841
Service Time	3.136	2.635	3.415	2.211	2.686	1.983
HCM Lane V/C Ratio	0.09	0.137	0.103	0.054	0.093	0.057
HCM Control Delay	8.7	8.4	9.1	7.5	8.2	7.2
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.3	0.5	0.3	0.2	0.3	0.2

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	38	10	29	0	12	0	12	2	0	0	2	27
Future Vol, veh/h	38	10	29	0	12	0	12	2	0	0	2	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	41	11	32	0	13	0	13	2	0	0	2	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	13	0	0	43	0	0	138	122	27	123	138	13
Stage 1	-	-	-	-	-	-	109	109	-	13	13	-
Stage 2	-	-	-	-	-	-	29	13	-	110	125	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1606	-	-	1566	-	-	833	768	1048	852	753	1067
Stage 1	-	-	-	-	-	-	896	805	-	1007	885	-
Stage 2	-	-	-	-	-	-	988	885	-	895	792	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1606	-	-	1566	-	-	792	748	1048	833	733	1067
Mov Cap-2 Maneuver	-	-	-	-	-	-	792	748	-	833	733	-
Stage 1	-	-	-	-	-	-	873	784	-	981	885	-
Stage 2	-	-	-	-	-	-	958	885	-	869	771	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.6	0	9.7	8.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	785	1606	-	-	1566	-	-	1034
HCM Lane V/C Ratio	0.019	0.026	-	-	-	-	-	0.03
HCM Control Delay (s)	9.7	7.3	0	-	0	-	-	8.6
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	321	116	177	31	77	90	103	1386	13	165	1745	354
Future Volume (vph)	321	116	177	31	77	90	103	1386	13	165	1745	354
Satd. Flow (prot)	3433	1863	1583	1770	3253	0	1770	5080	0	1770	4958	0
Flt Permitted	0.448			0.676			0.056			0.117		
Satd. Flow (perm)	1619	1863	1583	1259	3253	0	104	5080	0	218	4958	0
Satd. Flow (RTOR)			164		98			2			71	
Lane Group Flow (vph)	349	126	192	34	182	0	112	1521	0	179	2282	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		4	8			6			2		
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0		3.0	20.0		3.0	20.0	
Minimum Split (s)	10.0	11.0	11.0	10.0	11.0		10.0	26.0		10.0	26.0	
Total Split (s)	13.0	13.0	13.0	13.0	13.0		11.0	74.0		20.0	83.0	
Total Split (%)	10.8%	10.8%	10.8%	10.8%	10.8%		9.2%	61.7%		16.7%	69.2%	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	17.8	12.0	12.0	14.8	6.7		80.6	73.4		87.3	77.2	
Actuated g/C Ratio	0.15	0.10	0.10	0.12	0.06		0.67	0.61		0.73	0.64	
v/c Ratio	0.97	0.68	0.63	0.18	0.66		0.73	0.49		0.63	0.71	
Control Delay	87.9	72.5	22.5	44.5	38.3		47.7	13.9		17.4	15.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	87.9	72.5	22.5	44.5	38.3		47.7	13.9		17.4	15.1	
LOS	F	E	C	D	D		D	B		B	B	
Approach Delay		66.2			39.3			16.2			15.3	
Approach LOS		E			D			B			B	
Queue Length 50th (ft)	~130	~108	21	22	33		32	219		34	384	
Queue Length 95th (ft)	#201	#241	#133	53	72		#131	292		87	436	
Internal Link Dist (ft)		695			413			423			624	
Turn Bay Length (ft)	285		285	195			175			455		
Base Capacity (vph)	361	186	305	198	282		154	3109		356	3213	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.97	0.68	0.63	0.17	0.65		0.73	0.49		0.50	0.71	

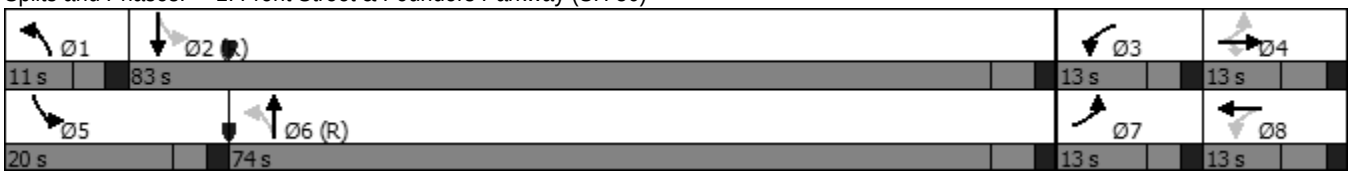
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 112 (93%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay: 23.5	Intersection LOS: C
Intersection Capacity Utilization 79.8%	ICU Level of Service D
Analysis Period (min) 15	

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

Splits and Phases: 1: Front Street & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	378	2176	248	48	1620	130	163	28	51	68	58	429
Future Volume (vph)	378	2176	248	48	1620	130	163	28	51	68	58	429
Satd. Flow (prot)	3433	5009	0	1770	5085	1583	1770	1682	0	1770	1863	2787
Flt Permitted	0.950			0.065			0.514			0.702		
Satd. Flow (perm)	3433	5009	0	121	5085	1583	957	1682	0	1308	1863	2787
Satd. Flow (RTOR)		33				141		55				377
Lane Group Flow (vph)	411	2635	0	52	1761	141	177	85	0	74	63	466
Turn Type	Prot	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases				6		6	4			8		8
Detector Phase	5	2		1	6	6	7	4		3	8	8
Switch Phase												
Minimum Initial (s)	5.0	20.0		5.0	20.0	20.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	26.0		10.0	26.0	26.0	10.0	11.0		11.0	11.0	11.0
Total Split (s)	20.0	83.0		11.0	74.0	74.0	13.0	13.0		13.0	13.0	13.0
Total Split (%)	16.7%	69.2%		9.2%	61.7%	61.7%	10.8%	10.8%		10.8%	10.8%	10.8%
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	6.0	6.0	5.0	6.0		5.0	6.0	6.0
Lead/Lag	Lead	Lead		Lag	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	None
Act Effct Green (s)	15.4	77.8		68.1	66.0	66.0	19.0	11.0		15.8	7.0	7.0
Actuated g/C Ratio	0.13	0.65		0.57	0.55	0.55	0.16	0.09		0.13	0.06	0.06
v/c Ratio	0.93	0.81		0.35	0.63	0.15	0.82	0.42		0.37	0.58	0.90
Control Delay	79.8	12.2		33.9	19.6	2.3	75.3	30.4		50.3	79.0	37.2
Queue Delay	0.0	1.2		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.3
Total Delay	79.8	13.4		33.9	19.7	2.3	75.3	30.4		50.3	79.0	37.5
LOS	E	B		C	B	A	E	C		D	E	D
Approach Delay		22.3			18.8			60.7			43.4	
Approach LOS		C			B			E			D	
Queue Length 50th (ft)	175	187		17	319	0	126	23		46	50	43
Queue Length 95th (ft)	m#262	307		35	362	28	#232	#77		m95	m#100	#140
Internal Link Dist (ft)		347			406			277			368	
Turn Bay Length (ft)	300			330			80			120		100
Base Capacity (vph)	442	3276		151	2881	958	216	204		207	108	517
Starvation Cap Reductn	0	389		0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0		0	40	0	0	0		0	0	2
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.93	0.91		0.34	0.62	0.15	0.82	0.42		0.36	0.58	0.90

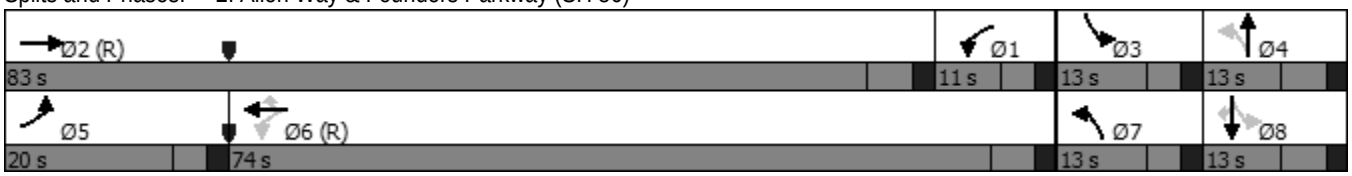
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 107 (89%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 25.0	Intersection LOS: C
Intersection Capacity Utilization 81.6%	ICU Level of Service D
Analysis Period (min) 15	

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

Splits and Phases: 2: Allen Way & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2444	584	0	1224	999	415	0	366	0	0	0
Future Volume (vph)	0	2444	584	0	1224	999	415	0	366	0	0	0
Satd. Flow (prot)	0	4787	1362	0	3285	1441	3433	0	2787	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	4787	1362	0	3285	1441	3433	0	2787	0	0	0
Satd. Flow (RTOR)		6	363		53	424			27			
Lane Group Flow (vph)	0	2721	571	0	1678	738	451	0	398	0	0	0
Turn Type		NA	Free		NA	Free	Prot		Prot			
Protected Phases		2			2		4		4			
Permitted Phases			Free			Free						
Detector Phase		2			2		4		4			
Switch Phase												
Minimum Initial (s)		20.0			20.0		5.0		5.0			
Minimum Split (s)		26.0			26.0		10.5		10.5			
Total Split (s)		85.0			85.0		35.0		35.0			
Total Split (%)		70.8%			70.8%		29.2%		29.2%			
Yellow Time (s)		4.0			4.0		3.5		3.5			
All-Red Time (s)		2.0			2.0		2.0		2.0			
Lost Time Adjust (s)		0.0			0.0		0.0		0.0			
Total Lost Time (s)		6.0			6.0		5.5		5.5			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		C-Max			C-Max		None		None			
Act Effct Green (s)		86.6	120.0		86.6	120.0	21.9		21.9			
Actuated g/C Ratio		0.72	1.00		0.72	1.00	0.18		0.18			
v/c Ratio		0.79	0.42		0.70	0.51	0.72		0.75			
Control Delay		13.7	1.0		6.9	2.6	52.6		52.0			
Queue Delay		0.0	0.0		0.1	0.0	0.0		0.2			
Total Delay		13.7	1.0		7.0	2.6	52.6		52.2			
LOS		B	A		A	A	D		D			
Approach Delay		11.5			5.7			52.4				
Approach LOS		B			A			D				
Queue Length 50th (ft)		469	0		116	0	170		156			
Queue Length 95th (ft)		646	0		144	m437	213		205			
Internal Link Dist (ft)		649			347			213			215	
Turn Bay Length (ft)			500						100			
Base Capacity (vph)		3455	1362		2385	1441	843		705			
Starvation Cap Reductn		0	0		51	0	0		0			
Spillback Cap Reductn		0	0		0	0	0		36			
Storage Cap Reductn		0	0		0	0	0		0			
Reduced v/c Ratio		0.79	0.42		0.72	0.51	0.53		0.59			

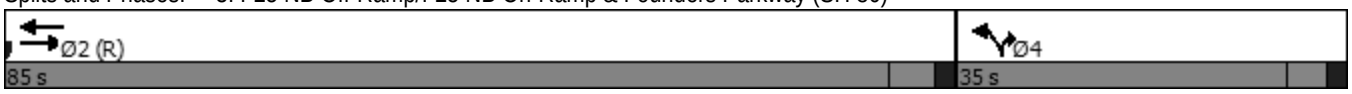
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 106 (88%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

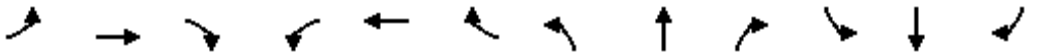
Maximum v/c Ratio: 0.79

Intersection Signal Delay: 14.6	Intersection LOS: B
Intersection Capacity Utilization 73.9%	ICU Level of Service D
Analysis Period (min) 15	

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

Splits and Phases: 3: I-25 NB Off-Ramp/I-25 NB On-Ramp & Founders Parkway (SH 86)





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	61	88	154	24	44	150	324	82	15	355	10
Future Volume (vph)	2	61	88	154	24	44	150	324	82	15	355	10
Satd. Flow (prot)	1770	1697	0	1770	1863	1583	1770	3539	1583	0	3518	0
Flt Permitted	0.534			0.654			0.510				0.938	
Satd. Flow (perm)	995	1697	0	1218	1863	1583	950	3539	1583	0	3307	0
Satd. Flow (RTOR)		96				218			218		6	
Lane Group Flow (vph)	2	162	0	167	26	48	163	352	89	0	413	0
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm	D.P+P	NA	
Protected Phases	3	8			4			6		5	2	
Permitted Phases	8			4		4	6		6	6		
Detector Phase	3	8		4	4	4	6	6	6	5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0	8.0	10.0	
Total Split (s)	12.0	27.0		15.0	15.0	15.0	21.0	21.0	21.0	12.0	33.0	
Total Split (%)	20.0%	45.0%		25.0%	25.0%	25.0%	35.0%	35.0%	35.0%	20.0%	55.0%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0		5.0	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None	None	C-Min	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	15.0	15.0		12.9	12.9	12.9	35.0	35.0	35.0		35.0	
Actuated g/C Ratio	0.25	0.25		0.22	0.22	0.22	0.58	0.58	0.58		0.58	
v/c Ratio	0.01	0.33		0.64	0.07	0.09	0.29	0.17	0.09		0.21	
Control Delay	13.5	9.2		35.8	19.0	0.4	17.0	11.8	4.2		7.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	13.5	9.2		35.8	19.0	0.4	17.0	11.8	4.2		7.2	
LOS	B	A		D	B	A	B	B	A		A	
Approach Delay		9.3			26.9			12.1			7.2	
Approach LOS		A			C			B			A	
Queue Length 50th (ft)	1	19		53	7	0	79	87	12		32	
Queue Length 95th (ft)	4	49		#144	25	0	m83	m76	m5		69	
Internal Link Dist (ft)		422			420			368			300	
Turn Bay Length (ft)	60			95		65	70		95			
Base Capacity (vph)	339	683		265	405	514	553	2062	1013		1929	
Starvation Cap Reductn	0	0		0	0	0	0	0	0		0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0		0	
Storage Cap Reductn	0	0		0	0	0	0	0	0		0	
Reduced v/c Ratio	0.01	0.24		0.63	0.06	0.09	0.29	0.17	0.09		0.21	

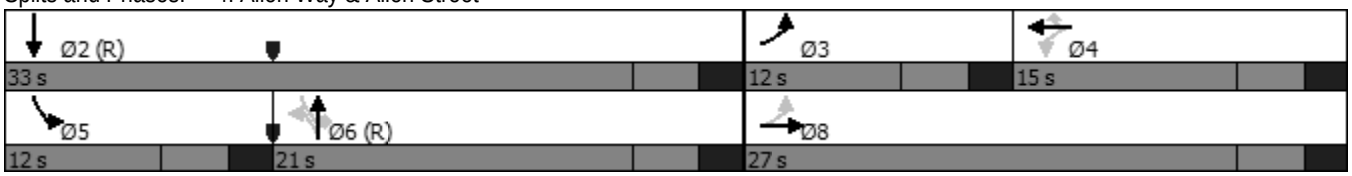
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 31 (52%), Referenced to phase 2:SBT and 6:NBSB, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 12.8	Intersection LOS: B
Intersection Capacity Utilization 53.3%	ICU Level of Service A
Analysis Period (min) 15	

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

Splits and Phases: 4: Allen Way & Allen Street



Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	59	12	53	89	8	60	58	106	94	40	101	17
Future Vol, veh/h	59	12	53	89	8	60	58	106	94	40	101	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	60	-	-	75	-	75	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	64	13	58	97	9	65	63	115	102	43	110	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	534	548	119	482	455	115	128	0	0	217	0	0
Stage 1	205	205	-	241	241	-	-	-	-	-	-	-
Stage 2	329	343	-	241	214	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	457	444	933	495	501	937	1458	-	-	1353	-	-
Stage 1	797	732	-	762	706	-	-	-	-	-	-	-
Stage 2	684	637	-	762	725	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	396	411	933	428	464	937	1458	-	-	1353	-	-
Mov Cap-2 Maneuver	396	411	-	428	464	-	-	-	-	-	-	-
Stage 1	763	709	-	729	676	-	-	-	-	-	-	-
Stage 2	601	610	-	679	702	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.1	13.2	1.7	2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1458	-	-	528	428	837	1353	-	-
HCM Lane V/C Ratio	0.043	-	-	0.255	0.226	0.088	0.032	-	-
HCM Control Delay (s)	7.6	-	-	14.1	15.9	9.7	7.7	-	-
HCM Lane LOS	A	-	-	B	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1	0.9	0.3	0.1	-	-

Intersection	
Intersection Delay, s/veh	10.6
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	170	130	81	151	150	114
Future Vol, veh/h	170	130	81	151	150	114
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	185	141	88	164	163	124
Number of Lanes	1	1	1	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay	11.1	10.6	10
HCM LOS	B	B	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	81	151	170	130	150	114
LT Vol	81	0	170	0	0	0
Through Vol	0	151	0	0	150	0
RT Vol	0	0	0	130	0	114
Lane Flow Rate	88	164	185	141	163	124
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.156	0.267	0.331	0.206	0.265	0.177
Departure Headway (Hd)	6.366	5.86	6.458	5.249	5.845	5.136
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	564	614	558	685	616	700
Service Time	4.09	3.584	4.183	2.973	3.568	2.859
HCM Lane V/C Ratio	0.156	0.267	0.332	0.206	0.265	0.177
HCM Control Delay	10.3	10.7	12.4	9.3	10.7	9
HCM Lane LOS	B	B	B	A	B	A
HCM 95th-tile Q	0.5	1.1	1.4	0.8	1.1	0.6

Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	113	17	7	0	17	0	20	2	0	0	2	128
Future Vol, veh/h	113	17	7	0	17	0	20	2	0	0	2	128
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	123	18	8	0	18	0	22	2	0	0	2	139

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	18	0	0	26	0	0	357	286	22	287	290	18
Stage 1	-	-	-	-	-	-	268	268	-	18	18	-
Stage 2	-	-	-	-	-	-	89	18	-	269	272	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1599	-	-	1588	-	-	598	623	1055	665	620	1061
Stage 1	-	-	-	-	-	-	738	687	-	1001	880	-
Stage 2	-	-	-	-	-	-	918	880	-	737	685	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1599	-	-	1588	-	-	487	574	1055	624	572	1061
Mov Cap-2 Maneuver	-	-	-	-	-	-	487	574	-	624	572	-
Stage 1	-	-	-	-	-	-	680	633	-	923	880	-
Stage 2	-	-	-	-	-	-	796	880	-	677	632	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	6.1	0	12.7	9
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	494	1599	-	-	1588	-	-	1047
HCM Lane V/C Ratio	0.048	0.077	-	-	-	-	-	0.135
HCM Control Delay (s)	12.7	7.4	0	-	0	-	-	9
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0.2	-	-	0	-	-	0.5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	348	108	145	46	118	93	114	1554	39	160	1419	394
Future Volume (vph)	348	108	145	46	118	93	114	1554	39	160	1419	394
Satd. Flow (prot)	3433	1863	1583	1770	3306	0	1770	5065	0	1770	4917	0
Flt Permitted	0.485			0.682			0.083			0.080		
Satd. Flow (perm)	1753	1863	1583	1270	3306	0	155	5065	0	149	4917	0
Satd. Flow (RTOR)			196		101			5			98	
Lane Group Flow (vph)	378	117	158	50	229	0	124	1731	0	174	1970	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		4	8			6			2		
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0		3.0	20.0		3.0	20.0	
Minimum Split (s)	10.0	11.0	11.0	10.0	11.0		10.0	26.0		10.0	26.0	
Total Split (s)	14.0	13.0	13.0	20.0	19.0		12.0	52.0		15.0	55.0	
Total Split (%)	14.0%	13.0%	13.0%	20.0%	19.0%		12.0%	52.0%		15.0%	55.0%	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	22.2	14.0	14.0	19.2	10.5		57.4	49.2		61.6	51.3	
Actuated g/C Ratio	0.22	0.14	0.14	0.19	0.10		0.57	0.49		0.62	0.51	
v/c Ratio	0.70	0.45	0.41	0.18	0.52		0.60	0.69		0.72	0.77	
Control Delay	39.3	46.6	6.2	29.1	27.3		28.1	22.1		35.0	21.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	39.3	46.6	6.2	29.1	27.3		28.1	22.1		35.0	21.5	
LOS	D	D	A	C	C		C	C		D	C	
Approach Delay		32.6			27.6			22.5			22.6	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	111	70	0	24	40		28	318		54	354	
Queue Length 95th (ft)	142	129	34	53	76		#100	379		#147	420	
Internal Link Dist (ft)		695			413			423			624	
Turn Bay Length (ft)	285		285	195			175			455		
Base Capacity (vph)	540	260	389	399	517		207	2492		258	2569	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.70	0.45	0.41	0.13	0.44		0.60	0.69		0.67	0.77	

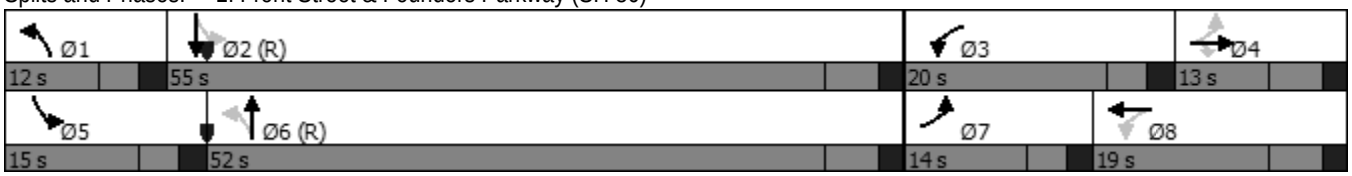
Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 62 (62%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 24.1	Intersection LOS: C
Intersection Capacity Utilization 77.0%	ICU Level of Service D
Analysis Period (min) 15	

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

Splits and Phases: 1: Front Street & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	473	1744	226	45	1738	202	189	37	90	140	39	516
Future Volume (vph)	473	1744	226	45	1738	202	189	37	90	140	39	516
Satd. Flow (prot)	3433	4999	0	1770	5085	1583	1770	1663	0	1770	1863	2787
Flt Permitted	0.950			0.100			0.635			0.603		
Satd. Flow (perm)	3433	4999	0	186	5085	1583	1183	1663	0	1123	1863	2787
Satd. Flow (RTOR)		34				220		95				535
Lane Group Flow (vph)	514	2142	0	49	1889	220	205	138	0	152	42	561
Turn Type	Prot	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases				6		6	4			8		8
Detector Phase	5	2		1	6	6	7	4		3	8	8
Switch Phase												
Minimum Initial (s)	5.0	20.0		5.0	20.0	20.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	26.0		10.0	26.0	26.0	10.0	11.0		11.0	11.0	11.0
Total Split (s)	20.0	58.0		11.0	49.0	49.0	18.0	13.0		18.0	13.0	13.0
Total Split (%)	20.0%	58.0%		11.0%	49.0%	49.0%	18.0%	13.0%		18.0%	13.0%	13.0%
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	6.0	6.0	5.0	6.0		5.0	6.0	6.0
Lead/Lag	Lead	Lead		Lag	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	None
Act Effct Green (s)	16.1	57.3		43.8	42.8	42.8	21.1	7.7		19.1	6.7	6.7
Actuated g/C Ratio	0.16	0.57		0.44	0.43	0.43	0.21	0.08		0.19	0.07	0.07
v/c Ratio	0.93	0.74		0.28	0.87	0.27	0.64	0.64		0.53	0.34	0.82
Control Delay	63.3	20.9		30.3	31.4	3.4	41.7	31.6		37.8	52.1	16.2
Queue Delay	0.0	1.8		0.0	9.4	0.0	0.0	0.0		0.0	0.0	1.0
Total Delay	63.3	22.6		30.3	40.8	3.4	41.7	31.6		37.8	52.1	17.3
LOS	E	C		C	D	A	D	C		D	D	B
Approach Delay		30.5			36.8			37.6			23.3	
Approach LOS		C			D			D			C	
Queue Length 50th (ft)	170	367		17	390	0	109	27		79	26	9
Queue Length 95th (ft)	#284	464		39	459	41	178	#108		136	60	#84
Internal Link Dist (ft)		347			406			277			368	
Turn Bay Length (ft)	300			330			80			120		100
Base Capacity (vph)	552	2878		176	2186	806	332	215		316	130	692
Starvation Cap Reductn	0	535		0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0		0	294	0	0	0		0	0	30
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.93	0.91		0.28	1.00	0.27	0.62	0.64		0.48	0.32	0.85

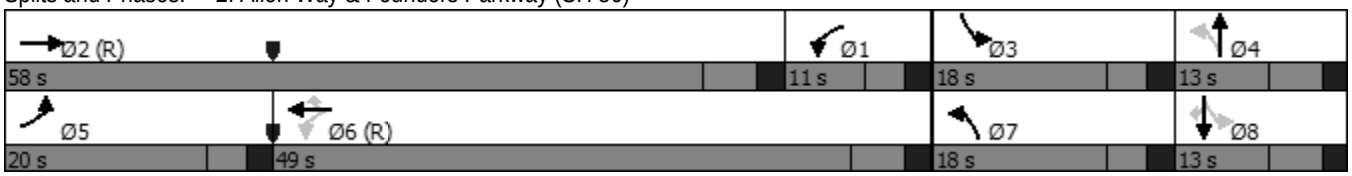
Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 70 (70%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 32.3	Intersection LOS: C
Intersection Capacity Utilization 80.6%	ICU Level of Service D
Analysis Period (min) 15	

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

Splits and Phases: 2: Allen Way & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2049	517	0	1387	1059	532	0	398	0	0	0
Future Volume (vph)	0	2049	517	0	1387	1059	532	0	398	0	0	0
Satd. Flow (prot)	0	4787	1362	0	3295	1441	3433	0	2787	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	4787	1362	0	3295	1441	3433	0	2787	0	0	0
Satd. Flow (RTOR)		6	461		49	474			33			
Lane Group Flow (vph)	0	2283	506	0	1853	806	578	0	433	0	0	0
Turn Type		NA	Free		NA	Free	Prot		Prot			
Protected Phases		2			2		4		4			
Permitted Phases			Free			Free						
Detector Phase		2			2		4		4			
Switch Phase												
Minimum Initial (s)		20.0			20.0		5.0		5.0			
Minimum Split (s)		26.0			26.0		10.5		10.5			
Total Split (s)		68.0			68.0		32.0		32.0			
Total Split (%)		68.0%			68.0%		32.0%		32.0%			
Yellow Time (s)		4.0			4.0		3.5		3.5			
All-Red Time (s)		2.0			2.0		2.0		2.0			
Lost Time Adjust (s)		0.0			0.0		0.0		0.0			
Total Lost Time (s)		6.0			6.0		5.5		5.5			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		C-Max			C-Max		None		None			
Act Effct Green (s)		66.2	100.0		66.2	100.0	22.3		22.3			
Actuated g/C Ratio		0.66	1.00		0.66	1.00	0.22		0.22			
v/c Ratio		0.72	0.37		0.84	0.56	0.75		0.67			
Control Delay		13.1	0.8		10.7	3.8	42.7		37.7			
Queue Delay		0.1	0.0		32.6	0.0	0.0		56.5			
Total Delay		13.2	0.8		43.3	3.8	42.7		94.1			
LOS		B	A		D	A	D		F			
Approach Delay		11.0			31.3			64.8				
Approach LOS		B			C			E				
Queue Length 50th (ft)		331	0		604	229	177		132			
Queue Length 95th (ft)		443	0		737	m354	225		180			
Internal Link Dist (ft)		649			347			213			215	
Turn Bay Length (ft)			500						100			
Base Capacity (vph)		3170	1362		2197	1441	909		762			
Starvation Cap Reductn		0	0		458	0	0		0			
Spillback Cap Reductn		123	0		0	0	0		387			
Storage Cap Reductn		0	0		0	0	0		0			
Reduced v/c Ratio		0.75	0.37		1.07	0.56	0.64		1.15			

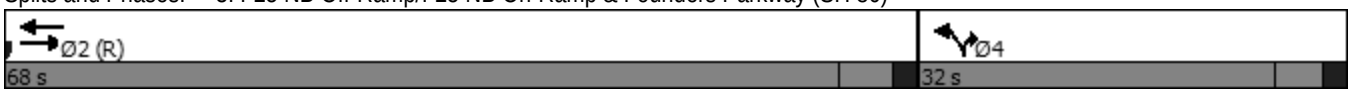
Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 80 (80%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 27.8	Intersection LOS: C
Intersection Capacity Utilization 73.1%	ICU Level of Service D
Analysis Period (min) 15	

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

Splits and Phases: 3: I-25 NB Off-Ramp/I-25 NB On-Ramp & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	55	139	137	56	69	159	392	81	56	363	4
Future Volume (vph)	10	55	139	137	56	69	159	392	81	56	363	4
Satd. Flow (prot)	1770	1663	0	1770	1863	1583	1770	3539	1583	0	3511	0
Flt Permitted	0.508			0.626			0.487				0.853	
Satd. Flow (perm)	946	1663	0	1166	1863	1583	907	3539	1583	0	3016	0
Satd. Flow (RTOR)		151				218			218		2	
Lane Group Flow (vph)	11	211	0	149	61	75	173	426	88	0	460	0
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm	D.P+P	NA	
Protected Phases	3	8			4			6		5	2	
Permitted Phases	8			4		4	6		6	6		
Detector Phase	3	8		4	4	4	6	6	6	5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0	8.0	10.0	
Total Split (s)	12.0	27.0		15.0	15.0	15.0	21.0	21.0	21.0	12.0	33.0	
Total Split (%)	20.0%	45.0%		25.0%	25.0%	25.0%	35.0%	35.0%	35.0%	20.0%	55.0%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0		5.0	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None	None	C-Min	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	14.4	14.4		12.1	12.1	12.1	35.6	35.6	35.6		35.6	
Actuated g/C Ratio	0.24	0.24		0.20	0.20	0.20	0.59	0.59	0.59		0.59	
v/c Ratio	0.04	0.41		0.64	0.16	0.15	0.32	0.20	0.09		0.26	
Control Delay	14.5	8.2		37.4	20.6	0.7	10.0	6.9	0.2		7.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	14.5	8.2		37.4	20.6	0.7	10.0	6.9	0.2		7.3	
LOS	B	A		D	C	A	A	A	A		A	
Approach Delay		8.5			24.1			6.8			7.3	
Approach LOS		A			C			A			A	
Queue Length 50th (ft)	3	17		47	18	0	27	32	0		35	
Queue Length 95th (ft)	11	52		#134	47	0	84	71	0		80	
Internal Link Dist (ft)		422			420			368			300	
Turn Bay Length (ft)	60			95		65	70		95			
Base Capacity (vph)	322	705		241	386	501	538	2102	1028		1792	
Starvation Cap Reductn	0	0		0	0	0	0	0	0		0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0		0	
Storage Cap Reductn	0	0		0	0	0	0	0	0		0	
Reduced v/c Ratio	0.03	0.30		0.62	0.16	0.15	0.32	0.20	0.09		0.26	

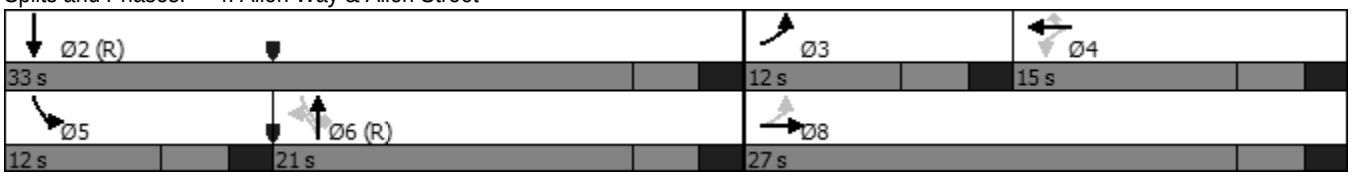
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 31 (52%), Referenced to phase 2:SBT and 6:NBSB, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 10.2	Intersection LOS: B
Intersection Capacity Utilization 58.3%	ICU Level of Service B
Analysis Period (min) 15	

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

Splits and Phases: 4: Allen Way & Allen Street



Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	77	4	49	130	7	42	58	136	105	46	135	27
Future Vol, veh/h	77	4	49	130	7	42	58	136	105	46	135	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	60	-	-	75	-	75	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	84	4	53	141	8	46	63	148	114	50	147	29

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	620	650	162	564	550	148	176	0	0	262	0	0
Stage 1	262	262	-	274	274	-	-	-	-	-	-	-
Stage 2	358	388	-	290	276	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	400	388	883	436	443	899	1400	-	-	1302	-	-
Stage 1	743	691	-	732	683	-	-	-	-	-	-	-
Stage 2	660	609	-	718	682	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	351	357	883	381	407	899	1400	-	-	1302	-	-
Mov Cap-2 Maneuver	351	357	-	381	407	-	-	-	-	-	-	-
Stage 1	710	665	-	699	652	-	-	-	-	-	-	-
Stage 2	591	582	-	645	656	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.5	17.2	1.5	1.7
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1400	-	-	454	381	767	1302	-	-
HCM Lane V/C Ratio	0.045	-	-	0.311	0.371	0.069	0.038	-	-
HCM Control Delay (s)	7.7	-	-	16.5	19.9	10	7.9	-	-
HCM Lane LOS	A	-	-	C	C	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.3	1.7	0.2	0.1	-	-

Intersection	
Intersection Delay, s/veh	11.5
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	202	99	83	176	168	179
Future Vol, veh/h	202	99	83	176	168	179
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	220	108	90	191	183	195
Number of Lanes	1	1	1	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay	12.6	11.3	10.7
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	83	176	202	99	168	179
LT Vol	83	0	202	0	0	0
Through Vol	0	176	0	0	168	0
RT Vol	0	0	0	99	0	179
Lane Flow Rate	90	191	220	108	183	195
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.165	0.322	0.411	0.165	0.303	0.285
Departure Headway (Hd)	6.566	6.058	6.739	5.527	5.976	5.266
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	547	593	536	649	603	683
Service Time	4.302	3.794	4.474	3.261	3.71	3
HCM Lane V/C Ratio	0.165	0.322	0.41	0.166	0.303	0.286
HCM Control Delay	10.6	11.7	14.1	9.4	11.3	10.1
HCM Lane LOS	B	B	B	A	B	B
HCM 95th-tile Q	0.6	1.4	2	0.6	1.3	1.2

Intersection	
Int Delay, s/veh	7.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	143	16	4	0	29	0	3	0	0	0	0	165
Future Vol, veh/h	143	16	4	0	29	0	3	0	0	0	0	165
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	155	17	4	0	32	0	3	0	0	0	0	179

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	32	0	0	21	0	0	451	361	19	361	363	32
Stage 1	-	-	-	-	-	-	329	329	-	32	32	-
Stage 2	-	-	-	-	-	-	122	32	-	329	331	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1580	-	-	1595	-	-	519	566	1059	595	565	1042
Stage 1	-	-	-	-	-	-	684	646	-	984	868	-
Stage 2	-	-	-	-	-	-	882	868	-	684	645	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1580	-	-	1595	-	-	397	510	1059	550	509	1042
Mov Cap-2 Maneuver	-	-	-	-	-	-	397	510	-	550	509	-
Stage 1	-	-	-	-	-	-	616	582	-	887	868	-
Stage 2	-	-	-	-	-	-	730	868	-	616	581	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	6.6	0	14.1	9.2
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	397	1580	-	-	1595	-	-	1042
HCM Lane V/C Ratio	0.008	0.098	-	-	-	-	-	0.172
HCM Control Delay (s)	14.1	7.5	0	-	0	-	-	9.2
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0.3	-	-	0	-	-	0.6

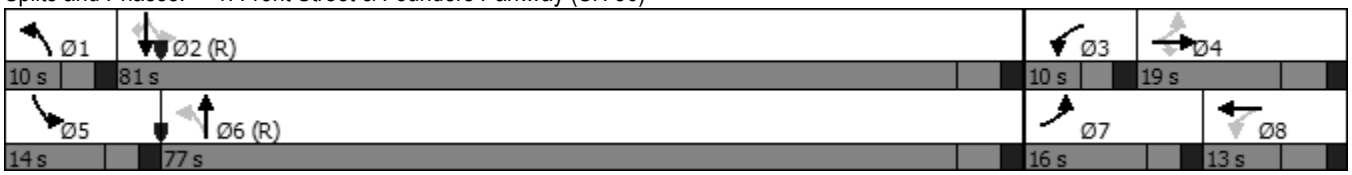
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	255	56	53	24	37	85	84	2179	13	75	1287	237
Future Volume (vph)	255	56	53	24	37	85	84	2179	13	75	1287	237
Satd. Flow (prot)	3433	1863	1583	1770	3168	0	3433	5080	0	1770	5085	1583
Flt Permitted	0.423			0.717			0.151			0.055		
Satd. Flow (perm)	1529	1863	1583	1336	3168	0	546	5080	0	102	5085	1583
Satd. Flow (RTOR)			118		76			1				258
Lane Group Flow (vph)	277	61	58	26	132	0	91	2382	0	82	1399	258
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		4	8			6			2		2
Detector Phase	7	4	4	3	8		1	6		5	2	2
Switch Phase												
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0		3.0	20.0		3.0	20.0	20.0
Minimum Split (s)	10.0	11.0	11.0	10.0	11.0		10.0	26.0		10.0	26.0	26.0
Total Split (s)	16.0	19.0	19.0	10.0	13.0		10.0	77.0		14.0	81.0	81.0
Total Split (%)	13.3%	15.8%	15.8%	8.3%	10.8%		8.3%	64.2%		11.7%	67.5%	67.5%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0		3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	23.6	16.6	16.6	12.6	6.6		80.4	75.3		83.5	75.2	75.2
Actuated g/C Ratio	0.20	0.14	0.14	0.10	0.06		0.67	0.63		0.70	0.63	0.63
v/c Ratio	0.58	0.24	0.18	0.16	0.54		0.18	0.75		0.47	0.44	0.24
Control Delay	47.6	50.9	1.2	42.2	33.7		6.1	18.4		20.9	12.1	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	47.6	50.9	1.2	42.2	33.7		6.1	18.4		20.9	12.1	1.6
LOS	D	D	A	D	C		A	B		C	B	A
Approach Delay		41.3			35.1			18.0			11.0	
Approach LOS		D			D			B			B	
Queue Length 50th (ft)	96	44	0	17	22		9	469		17	191	0
Queue Length 95th (ft)	139	88	0	42	55		16	556		59	223	30
Internal Link Dist (ft)		695			413			423			624	
Turn Bay Length (ft)	285		285	195			175			455		
Base Capacity (vph)	474	256	320	158	256		492	3186		197	3186	1088
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	0.58	0.24	0.18	0.16	0.52		0.18	0.75		0.42	0.44	0.24

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 42 (35%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 17.9	Intersection LOS: B
Intersection Capacity Utilization 76.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Front Street & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	368	1418	197	55	2287	195	140	28	269	95	24	427
Future Volume (vph)	368	1418	197	55	2287	195	140	28	269	95	24	427
Satd. Flow (prot)	3433	5085	1583	1770	5085	1583	3433	1609	0	3433	1863	2787
Flt Permitted	0.950			0.146			0.740			0.222		
Satd. Flow (perm)	3433	5085	1583	272	5085	1583	2674	1609	0	802	1863	2787
Satd. Flow (RTOR)			214			154		102				428
Lane Group Flow (vph)	400	1541	214	60	2486	212	152	322	0	103	26	464
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases			2	6		6	4			8		8
Detector Phase	5	2	2	1	6	6	7	4		3	8	8
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	26.0	26.0	10.0	26.0	26.0	10.0	11.0		11.0	11.0	11.0
Total Split (s)	20.0	76.0	76.0	10.0	66.0	66.0	10.0	23.0		11.0	24.0	24.0
Total Split (%)	16.7%	63.3%	63.3%	8.3%	55.0%	55.0%	8.3%	19.2%		9.2%	20.0%	20.0%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0		5.0	6.0	6.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	None
Act Effct Green (s)	15.0	58.2	58.2	61.0	60.0	60.0	23.0	17.0		25.0	18.0	18.0
Actuated g/C Ratio	0.12	0.48	0.48	0.51	0.50	0.50	0.19	0.14		0.21	0.15	0.15
v/c Ratio	0.93	0.62	0.24	0.16	0.98	0.24	0.28	1.02		0.35	0.09	0.59
Control Delay	83.0	21.3	1.7	22.2	43.0	5.8	38.3	91.5		40.2	47.1	13.0
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0		0.0	0.0	0.3
Total Delay	83.0	21.4	1.7	22.2	43.0	5.8	38.4	91.5		40.2	47.1	13.2
LOS	F	C	A	C	D	A	D	F		D	D	B
Approach Delay		30.9			39.7			74.5			19.4	
Approach LOS		C			D			E			B	
Queue Length 50th (ft)	156	301	0	23	668	23	48	~192		34	18	0
Queue Length 95th (ft)	#257	282	22	46	#809	64	77	#379		60	m49	89
Internal Link Dist (ft)		347			406			277			368	
Turn Bay Length (ft)	300			330			80			120		100
Base Capacity (vph)	429	3051	1035	373	2542	868	544	315		298	279	781
Starvation Cap Reductn	0	432	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	47	0		0	0	49
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.93	0.59	0.21	0.16	0.98	0.24	0.31	1.02		0.35	0.09	0.63

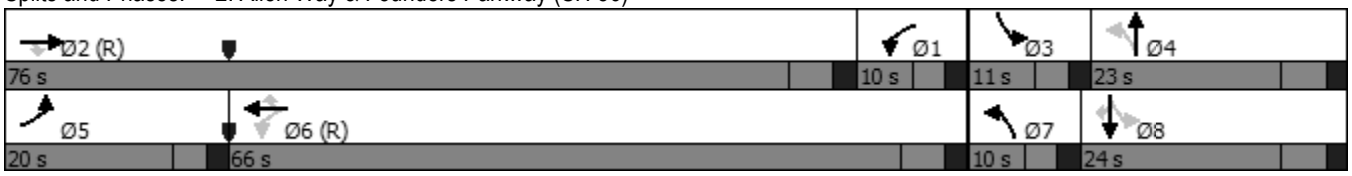
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 36 (30%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.02

Intersection Signal Delay: 37.3	Intersection LOS: D
Intersection Capacity Utilization 95.3%	ICU Level of Service F
Analysis Period (min) 15	

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

Splits and Phases: 2: Allen Way & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1449	785	0	1103	1895	320	0	321	0	0	0
Future Volume (vph)	0	1449	785	0	1103	1895	320	0	321	0	0	0
Satd. Flow (prot)	0	4691	1362	0	3156	1441	3433	0	2787	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	4691	1362	0	3156	1441	3433	0	2787	0	0	0
Satd. Flow (RTOR)		90	546		535	1030			120			
Lane Group Flow (vph)	0	1882	546	0	2229	1030	348	0	349	0	0	0
Turn Type		NA	Free		NA	Free	Prot		Prot			
Protected Phases		2			2		4		4			
Permitted Phases			Free			Free						
Detector Phase		2			2		4		4			
Switch Phase												
Minimum Initial (s)		20.0			20.0		5.0		5.0			
Minimum Split (s)		26.0			26.0		10.5		10.5			
Total Split (s)		97.0			97.0		23.0		23.0			
Total Split (%)		80.8%			80.8%		19.2%		19.2%			
Yellow Time (s)		4.0			4.0		3.5		3.5			
All-Red Time (s)		2.0			2.0		2.0		2.0			
Lost Time Adjust (s)		0.0			0.0		0.0		0.0			
Total Lost Time (s)		6.0			6.0		5.5		5.5			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		C-Max			C-Max		None		None			
Act Effct Green (s)		92.4	120.0		92.4	120.0	16.1		16.1			
Actuated g/C Ratio		0.77	1.00		0.77	1.00	0.13		0.13			
v/c Ratio		0.52	0.40		0.87	0.71	0.75		0.73			
Control Delay		5.7	0.9		10.1	9.4	60.9		41.8			
Queue Delay		0.0	0.0		13.4	0.0	0.0		0.0			
Total Delay		5.7	0.9		23.4	9.4	60.9		41.8			
LOS		A	A		C	A	E		D			
Approach Delay		4.6			19.0			51.3				
Approach LOS		A			B			D				
Queue Length 50th (ft)		181	0		234	226	134		96			
Queue Length 95th (ft)		212	0		m203	m214	185		154			
Internal Link Dist (ft)		649			347			213			215	
Turn Bay Length (ft)			500						100			
Base Capacity (vph)		3631	1362		2552	1441	500		508			
Starvation Cap Reductn		0	0		358	0	0		0			
Spillback Cap Reductn		0	0		0	0	0		0			
Storage Cap Reductn		0	0		0	0	0		0			
Reduced v/c Ratio		0.52	0.40		1.02	0.71	0.70		0.69			

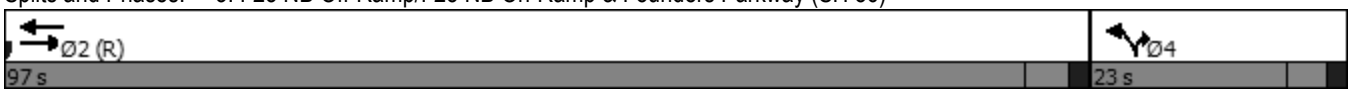
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 35 (29%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 17.1	Intersection LOS: B
Intersection Capacity Utilization 68.2%	ICU Level of Service C
Analysis Period (min) 15	

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

Splits and Phases: 3: I-25 NB Off-Ramp/I-25 NB On-Ramp & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	16	131	79	24	74	170	368	54	30	321	5
Future Volume (vph)	9	16	131	79	24	74	170	368	54	30	321	5
Satd. Flow (prot)	1770	1613	0	1770	1863	1583	1770	3539	1583	0	3518	0
Flt Permitted	0.447			0.656			0.523				0.904	
Satd. Flow (perm)	833	1613	0	1222	1863	1583	974	3539	1583	0	3193	0
Satd. Flow (RTOR)		142				218			218		3	
Lane Group Flow (vph)	10	159	0	86	26	80	185	400	59	0	387	0
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm	D.P+P	NA	
Protected Phases	3	8			4			6		5	2	
Permitted Phases	8			4		4	6		6	6		
Detector Phase	3	8		4	4	4	6	6	6	5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0	8.0	10.0	
Total Split (s)	8.0	22.0		14.0	14.0	14.0	30.0	30.0	30.0	8.0	38.0	
Total Split (%)	13.3%	36.7%		23.3%	23.3%	23.3%	50.0%	50.0%	50.0%	13.3%	63.3%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0		5.0	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None	None	C-Min	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	11.0	11.0		8.7	8.7	8.7	42.1	42.1	42.1		42.1	
Actuated g/C Ratio	0.18	0.18		0.14	0.14	0.14	0.70	0.70	0.70		0.70	
v/c Ratio	0.04	0.39		0.49	0.10	0.19	0.27	0.16	0.05		0.17	
Control Delay	16.7	7.5		32.8	22.2	1.0	5.0	2.3	0.1		5.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	16.7	7.5		32.8	22.2	1.0	5.0	2.3	0.1		5.3	
LOS	B	A		C	C	A	A	A	A		A	
Approach Delay		8.0			18.1			2.9			5.3	
Approach LOS		A			B			A			A	
Queue Length 50th (ft)	3	5		29	8	0	24	18	0		21	
Queue Length 95th (ft)	11	37		67	26	0	m23	m23	m0		63	
Internal Link Dist (ft)		422			420			368			300	
Turn Bay Length (ft)	60			95		65	70		95			
Base Capacity (vph)	243	578		196	299	437	683	2484	1176		2284	
Starvation Cap Reductn	0	0		0	0	0	0	0	0		0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0		0	
Storage Cap Reductn	0	0		0	0	0	0	0	0		0	
Reduced v/c Ratio	0.04	0.28		0.44	0.09	0.18	0.27	0.16	0.05		0.17	

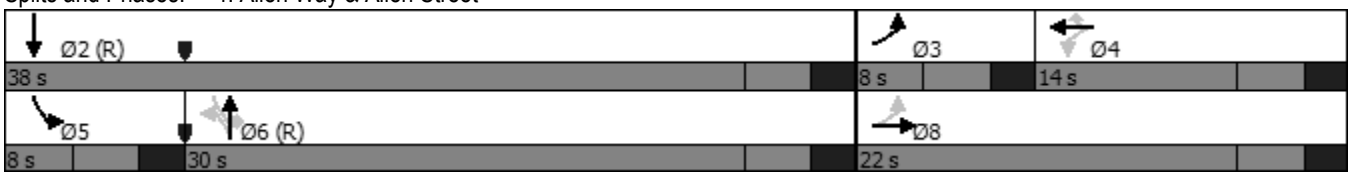
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 31 (52%), Referenced to phase 2:SBT and 6:NBSB, Start of Green
Natural Cycle: 50
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.49

Intersection Signal Delay: 6.3	Intersection LOS: A
Intersection Capacity Utilization 50.0%	ICU Level of Service A
Analysis Period (min) 15	

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

Splits and Phases: 4: Allen Way & Allen Street



Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	3	26	38	3	108	33	103	60	44	47	21
Future Vol, veh/h	39	3	26	38	3	108	33	103	60	44	47	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	60	-	-	75	-	75	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	42	3	28	41	3	117	36	112	65	48	51	23

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	436	408	63	358	354	112	74	0	0	177	0	0
Stage 1	159	159	-	184	184	-	-	-	-	-	-	-
Stage 2	277	249	-	174	170	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	531	533	1002	597	571	941	1526	-	-	1399	-	-
Stage 1	843	766	-	818	747	-	-	-	-	-	-	-
Stage 2	729	701	-	828	758	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	442	503	1002	552	538	941	1526	-	-	1399	-	-
Mov Cap-2 Maneuver	442	503	-	552	538	-	-	-	-	-	-	-
Stage 1	823	740	-	798	729	-	-	-	-	-	-	-
Stage 2	620	684	-	774	732	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.3	10.1	1.2	3
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1526	-	-	566	552	922	1399	-	-
HCM Lane V/C Ratio	0.024	-	-	0.131	0.075	0.131	0.034	-	-
HCM Control Delay (s)	7.4	-	-	12.3	12	9.5	7.7	-	-
HCM Lane LOS	A	-	-	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.2	0.5	0.1	-	-

Intersection	
Intersection Delay, s/veh	8.8
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	86	57	78	131	87	63
Future Vol, veh/h	86	57	78	131	87	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	93	62	85	142	95	68
Number of Lanes	1	1	1	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay	9	9.1	8.2
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	78	131	86	57	87	63
LT Vol	78	0	86	0	0	0
Through Vol	0	131	0	0	87	0
RT Vol	0	0	0	57	0	63
Lane Flow Rate	85	142	93	62	95	68
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.132	0.202	0.155	0.082	0.136	0.085
Departure Headway (Hd)	5.611	5.108	5.97	4.765	5.188	4.484
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	639	702	600	750	690	798
Service Time	3.345	2.842	3.709	2.503	2.924	2.219
HCM Lane V/C Ratio	0.133	0.202	0.155	0.083	0.138	0.085
HCM Control Delay	9.2	9.1	9.8	7.9	8.7	7.6
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.5	0.8	0.5	0.3	0.5	0.3

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	54	15	41	0	15	0	17	2	0	0	2	38
Future Vol, veh/h	54	15	41	0	15	0	17	2	0	0	2	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	59	16	45	0	16	0	18	2	0	0	2	41

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	16	0	0	61	0	0	195	173	39	174	195	16
Stage 1	-	-	-	-	-	-	157	157	-	16	16	-
Stage 2	-	-	-	-	-	-	38	16	-	158	179	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1602	-	-	1542	-	-	764	720	1033	789	700	1063
Stage 1	-	-	-	-	-	-	845	768	-	1004	882	-
Stage 2	-	-	-	-	-	-	977	882	-	844	751	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1602	-	-	1542	-	-	711	693	1033	765	673	1063
Mov Cap-2 Maneuver	-	-	-	-	-	-	711	693	-	765	673	-
Stage 1	-	-	-	-	-	-	813	739	-	966	882	-
Stage 2	-	-	-	-	-	-	937	882	-	810	722	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.6	0	10.2	8.6
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	709	1602	-	-	1542	-	-	1033
HCM Lane V/C Ratio	0.029	0.037	-	-	-	-	-	0.042
HCM Control Delay (s)	10.2	7.3	0	-	0	-	-	8.6
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	458	164	253	43	111	128	148	1980	18	235	2492	506
Future Volume (vph)	458	164	253	43	111	128	148	1980	18	235	2492	506
Satd. Flow (prot)	3433	1863	1583	1770	3256	0	3433	5080	0	1770	5085	1583
Flt Permitted	0.282			0.645			0.068			0.063		
Satd. Flow (perm)	1019	1863	1583	1201	3256	0	246	5080	0	117	5085	1583
Satd. Flow (RTOR)			164		139			1				431
Lane Group Flow (vph)	498	178	275	47	260	0	161	2172	0	255	2709	550
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		4	8			6			2		2
Detector Phase	7	4	4	3	8		1	6		5	2	2
Switch Phase												
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0		3.0	20.0		3.0	20.0	20.0
Minimum Split (s)	10.0	11.0	11.0	10.0	11.0		10.0	26.0		10.0	26.0	26.0
Total Split (s)	20.0	25.0	25.0	10.0	15.0		10.0	64.0		21.0	75.0	75.0
Total Split (%)	16.7%	20.8%	20.8%	8.3%	12.5%		8.3%	53.3%		17.5%	62.5%	62.5%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0		3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	29.2	20.2	20.2	14.2	8.2		65.9	59.5		80.8	69.4	69.4
Actuated g/C Ratio	0.24	0.17	0.17	0.12	0.07		0.55	0.50		0.67	0.58	0.58
v/c Ratio	0.91	0.57	0.68	0.28	0.74		0.58	0.86		0.89	0.92	0.50
Control Delay	62.2	54.5	28.7	40.6	38.4		22.7	31.5		62.1	29.5	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	62.2	54.5	28.7	40.6	38.4		22.7	31.5		62.1	29.5	4.7
LOS	E	D	C	D	D		C	C		E	C	A
Approach Delay		51.1			38.7			30.9			28.0	
Approach LOS		D			D			C			C	
Queue Length 50th (ft)	175	130	80	28	48		20	540		142	664	40
Queue Length 95th (ft)	#237	207	181	61	94		48	615		#288	749	109
Internal Link Dist (ft)		695			413			423			624	
Turn Bay Length (ft)	285		285	195			175			455		
Base Capacity (vph)	549	315	404	165	372		277	2520		300	2940	1097
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	0.91	0.57	0.68	0.28	0.70		0.58	0.86		0.85	0.92	0.50

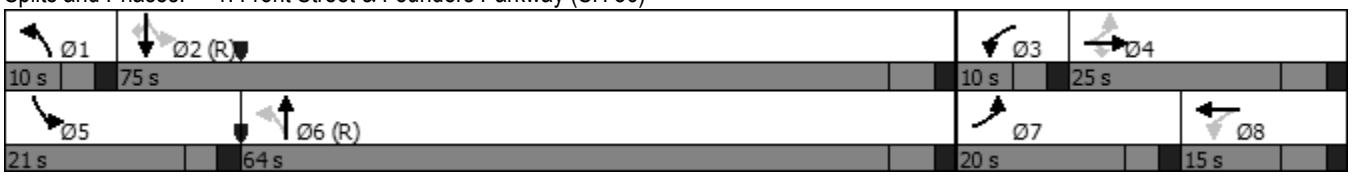
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 112 (93%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay: 32.5	Intersection LOS: C
Intersection Capacity Utilization 91.0%	ICU Level of Service E
Analysis Period (min) 15	

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

Splits and Phases: 1: Front Street & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	539	3108	354	69	2314	185	232	39	51	98	88	608
Future Volume (vph)	539	3108	354	69	2314	185	232	39	51	98	88	608
Satd. Flow (prot)	3433	5085	1583	1770	5085	1583	3433	1704	0	3433	1863	2787
Flt Permitted	0.950			0.068			0.695			0.611		
Satd. Flow (perm)	3433	5085	1583	127	5085	1583	2512	1704	0	2208	1863	2787
Satd. Flow (RTOR)			287			149		43				481
Lane Group Flow (vph)	586	3378	385	75	2515	201	252	97	0	107	96	661
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases			2	6		6	4			8		8
Detector Phase	5	2	2	1	6	6	7	4		3	8	8
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	26.0	26.0	10.0	26.0	26.0	10.0	11.0		11.0	11.0	11.0
Total Split (s)	25.0	83.0	83.0	10.0	68.0	68.0	10.0	16.0		11.0	17.0	17.0
Total Split (%)	20.8%	69.2%	69.2%	8.3%	56.7%	56.7%	8.3%	13.3%		9.2%	14.2%	14.2%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0		5.0	6.0	6.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	None
Act Effct Green (s)	20.3	79.3	79.3	63.0	62.0	62.0	15.7	9.7		17.7	10.7	10.7
Actuated g/C Ratio	0.17	0.66	0.66	0.52	0.52	0.52	0.13	0.08		0.15	0.09	0.09
v/c Ratio	1.01	1.01	0.34	0.56	0.96	0.23	0.68	0.55		0.28	0.58	0.96
Control Delay	64.8	27.3	4.2	51.1	38.2	5.2	56.2	42.9		45.7	68.2	44.5
Queue Delay	0.0	37.2	0.8	0.0	3.4	0.0	0.0	0.0		0.0	0.0	1.4
Total Delay	64.8	64.5	5.0	51.1	41.6	5.2	56.2	42.9		45.7	68.2	45.9
LOS	E	E	A	D	D	A	E	D		D	E	D
Approach Delay		59.3			39.2			52.5			48.3	
Approach LOS		E			D			D			D	
Queue Length 50th (ft)	~252	~1025	50	28	658	19	89	40		38	72	92
Queue Length 95th (ft)	m214	m525	m35	#62	#769	59	130	97		m67	m129	#241
Internal Link Dist (ft)		347			406			277			368	
Turn Bay Length (ft)	300			330			80			120		100
Base Capacity (vph)	579	3358	1142	135	2627	889	368	181		387	170	692
Starvation Cap Reductn	0	732	463	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	80	0	0	0		0	0	7
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.01	1.29	0.57	0.56	0.99	0.23	0.68	0.54		0.28	0.56	0.96

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 107 (89%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.01

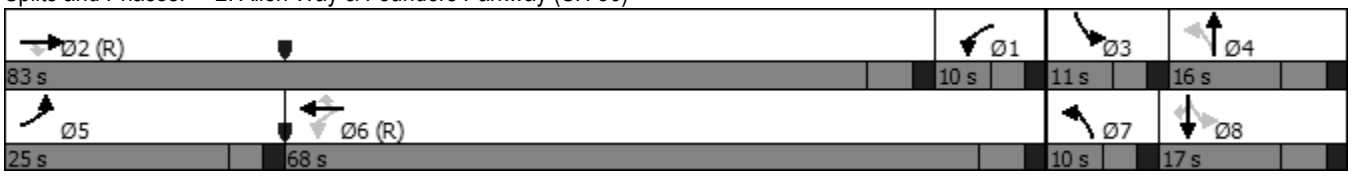
Intersection Signal Delay: 51.2	Intersection LOS: D
Intersection Capacity Utilization 91.7%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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

Splits and Phases: 2: Allen Way & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	3490	834	0	1748	1427	592	0	522	0	0	0
Future Volume (vph)	0	3490	834	0	1748	1427	592	0	522	0	0	0
Satd. Flow (prot)	0	4787	1362	0	3285	1441	3433	0	2787	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	4787	1362	0	3285	1441	3433	0	2787	0	0	0
Satd. Flow (RTOR)		7	364		64	425			27			
Lane Group Flow (vph)	0	3884	816	0	2396	1055	643	0	567	0	0	0
Turn Type		NA	Free		NA	Free	Prot		Prot			
Protected Phases		2			2		4		4			
Permitted Phases			Free			Free						
Detector Phase		2			2		4		4			
Switch Phase												
Minimum Initial (s)		20.0			20.0		5.0		5.0			
Minimum Split (s)		26.0			26.0		10.5		10.5			
Total Split (s)		92.0			92.0		28.0		28.0			
Total Split (%)		76.7%			76.7%		23.3%		23.3%			
Yellow Time (s)		4.0			4.0		3.5		3.5			
All-Red Time (s)		2.0			2.0		2.0		2.0			
Lost Time Adjust (s)		0.0			0.0		0.0		0.0			
Total Lost Time (s)		6.0			6.0		5.5		5.5			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		C-Max			C-Max		None		None			
Act Effct Green (s)		86.0	120.0		86.0	120.0	22.5		22.5			
Actuated g/C Ratio		0.72	1.00		0.72	1.00	0.19		0.19			
v/c Ratio		1.13	0.60		1.01	0.73	1.00		1.04			
Control Delay		82.9	2.0		24.2	7.4	84.4		95.2			
Queue Delay		0.1	0.0		35.0	0.0	0.0		37.2			
Total Delay		83.0	2.0		59.2	7.4	84.4		132.4			
LOS		F	A		E	A	F		F			
Approach Delay		68.9			43.3			106.9				
Approach LOS		E			D			F				
Queue Length 50th (ft)		~1358	0		~265	757	259		~259			
Queue Length 95th (ft)		#1432	0		m#1195	m815	#384		#387			
Internal Link Dist (ft)		649			347			213			215	
Turn Bay Length (ft)			500						100			
Base Capacity (vph)		3432	1362		2372	1441	643		544			
Starvation Cap Reductn		0	0		269	0	0		0			
Spillback Cap Reductn		253	0		0	0	0		394			
Storage Cap Reductn		0	0		0	0	0		0			
Reduced v/c Ratio		1.22	0.60		1.14	0.73	1.00		3.78			

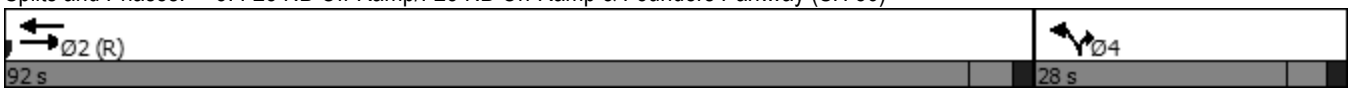
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 106 (88%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

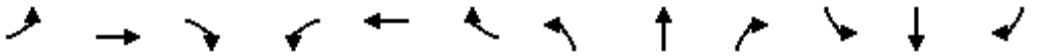
Maximum v/c Ratio: 1.13

Intersection Signal Delay: 64.4	Intersection LOS: E
Intersection Capacity Utilization 101.5%	ICU Level of Service G
Analysis Period (min) 15	

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

Splits and Phases: 3: I-25 NB Off-Ramp/I-25 NB On-Ramp & Founders Parkway (SH 86)





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	86	125	222	34	62	214	463	117	22	507	14
Future Volume (vph)	2	86	125	222	34	62	214	463	117	22	507	14
Satd. Flow (prot)	1770	1697	0	1770	1863	1583	1770	3539	1583	0	3518	0
Flt Permitted	0.578			0.616			0.394				0.925	
Satd. Flow (perm)	1077	1697	0	1147	1863	1583	734	3539	1583	0	3261	0
Satd. Flow (RTOR)		132				218			218		6	
Lane Group Flow (vph)	2	229	0	241	37	67	233	503	127	0	590	0
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm	D.P+P	NA	
Protected Phases	3	8			4			6		5	2	
Permitted Phases	8			4		4	6		6	6		
Detector Phase	3	8		4	4	4	6	6	6	5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0	8.0	10.0	
Total Split (s)	8.0	25.0		17.0	17.0	17.0	27.0	27.0	27.0	8.0	35.0	
Total Split (%)	13.3%	41.7%		28.3%	28.3%	28.3%	45.0%	45.0%	45.0%	13.3%	58.3%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0		5.0	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None	None	C-Min	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	20.2	20.2		18.6	18.6	18.6	29.8	29.8	29.8		29.8	
Actuated g/C Ratio	0.34	0.34		0.31	0.31	0.31	0.50	0.50	0.50		0.50	
v/c Ratio	0.00	0.35		0.68	0.06	0.10	0.64	0.29	0.14		0.36	
Control Delay	13.5	8.5		34.1	16.9	0.3	22.8	5.6	0.3		9.9	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	13.5	8.5		34.1	16.9	0.3	22.8	5.6	0.3		9.9	
LOS	B	A		C	B	A	C	A	A		A	
Approach Delay		8.6			25.7			9.5			9.9	
Approach LOS		A			C			A			A	
Queue Length 50th (ft)	1	24		72	9	0	66	28	0		62	
Queue Length 95th (ft)	4	69		#218	32	0	m92	m36	m0		93	
Internal Link Dist (ft)		422			420			368			300	
Turn Bay Length (ft)	60			95		65	70		95			
Base Capacity (vph)	408	658		355	577	640	365	1758	896		1633	
Starvation Cap Reductn	0	0		0	0	0	0	0	0		0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0		0	
Storage Cap Reductn	0	0		0	0	0	0	0	0		0	
Reduced v/c Ratio	0.00	0.35		0.68	0.06	0.10	0.64	0.29	0.14		0.36	

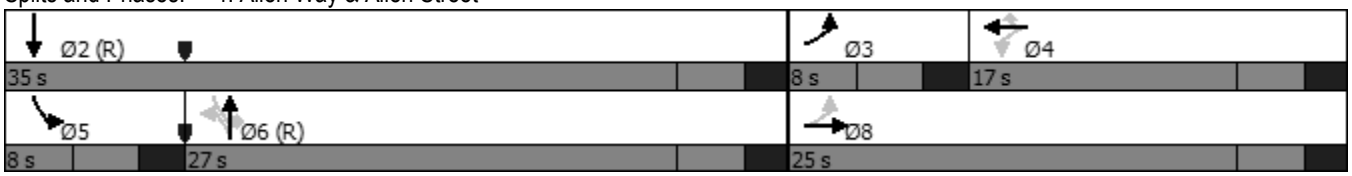
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 31 (52%), Referenced to phase 2:SBT and 6:NBSB, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 12.3	Intersection LOS: B
Intersection Capacity Utilization 69.1%	ICU Level of Service C
Analysis Period (min) 15	

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

Splits and Phases: 4: Allen Way & Allen Street



Intersection	
Int Delay, s/veh	10

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	84	16	75	127	10	86	82	151	133	56	145	24
Future Vol, veh/h	84	16	75	127	10	86	82	151	133	56	145	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	60	-	-	75	-	75	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	91	17	82	138	11	93	89	164	145	61	158	26

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	760	780	171	685	648	164	184	0	0	309	0	0
Stage 1	293	293	-	342	342	-	-	-	-	-	-	-
Stage 2	467	487	-	343	306	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	323	327	873	362	389	881	1391	-	-	1252	-	-
Stage 1	715	670	-	673	638	-	-	-	-	-	-	-
Stage 2	576	550	-	672	662	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	258	291	873	287	346	881	1391	-	-	1252	-	-
Mov Cap-2 Maneuver	258	291	-	287	346	-	-	-	-	-	-	-
Stage 1	669	637	-	630	597	-	-	-	-	-	-	-
Stage 2	473	515	-	564	630	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	24.1	20.8	1.7	2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1391	-	-	375	287	759	1252	-	-
HCM Lane V/C Ratio	0.064	-	-	0.507	0.481	0.137	0.049	-	-
HCM Control Delay (s)	7.8	-	-	24.1	28.6	10.5	8	-	-
HCM Lane LOS	A	-	-	C	D	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	2.8	2.5	0.5	0.2	-	-

Intersection	
Intersection Delay, s/veh	13.7
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	241	185	115	216	215	162
Future Vol, veh/h	241	185	115	216	215	162
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	262	201	125	235	234	176
Number of Lanes	1	1	1	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay	14.8	13.5	12.7
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	115	216	241	185	215	162
LT Vol	115	0	241	0	0	0
Through Vol	0	216	0	0	215	0
RT Vol	0	0	0	185	0	162
Lane Flow Rate	125	235	262	201	234	176
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.246	0.429	0.518	0.33	0.425	0.286
Departure Headway (Hd)	7.091	6.581	7.116	5.9	6.552	5.838
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	505	545	506	607	547	613
Service Time	4.857	4.346	4.871	3.655	4.316	3.602
HCM Lane V/C Ratio	0.248	0.431	0.518	0.331	0.428	0.287
HCM Control Delay	12.2	14.2	17.3	11.6	14.1	10.9
HCM Lane LOS	B	B	C	B	B	B
HCM 95th-tile Q	1	2.1	2.9	1.4	2.1	1.2

Intersection	
Int Delay, s/veh	8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	161	21	9	0	25	0	29	2	0	0	2	183
Future Vol, veh/h	161	21	9	0	25	0	29	2	0	0	2	183
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	175	23	10	0	27	0	32	2	0	0	2	199

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	27	0	0	33	0	0	506	405	28	406	410	27
Stage 1	-	-	-	-	-	-	378	378	-	27	27	-
Stage 2	-	-	-	-	-	-	128	27	-	379	383	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1587	-	-	1579	-	-	477	535	1047	555	531	1048
Stage 1	-	-	-	-	-	-	644	615	-	990	873	-
Stage 2	-	-	-	-	-	-	876	873	-	643	612	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1587	-	-	1579	-	-	352	475	1047	506	472	1048
Mov Cap-2 Maneuver	-	-	-	-	-	-	352	475	-	506	472	-
Stage 1	-	-	-	-	-	-	572	546	-	879	873	-
Stage 2	-	-	-	-	-	-	708	873	-	569	543	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	6.4	0	16.1	9.3
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	358	1587	-	-	1579	-	-	1034
HCM Lane V/C Ratio	0.094	0.11	-	-	-	-	-	0.194
HCM Control Delay (s)	16.1	7.5	0	-	0	-	-	9.3
HCM Lane LOS	C	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.3	0.4	-	-	0	-	-	0.7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	497	154	207	65	169	133	162	2219	55	228	2026	562
Future Volume (vph)	497	154	207	65	169	133	162	2219	55	228	2026	562
Satd. Flow (prot)	3433	1863	1583	1770	3306	0	3433	5065	0	1770	5085	1583
Flt Permitted	0.308			0.651			0.085			0.077		
Satd. Flow (perm)	1113	1863	1583	1213	3306	0	307	5065	0	143	5085	1583
Satd. Flow (RTOR)			196		109			5				437
Lane Group Flow (vph)	540	167	225	71	329	0	176	2472	0	248	2202	611
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		4	8			6			2		2
Detector Phase	7	4	4	3	8		1	6		5	2	2
Switch Phase												
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0		3.0	20.0		3.0	20.0	20.0
Minimum Split (s)	10.0	11.0	11.0	10.0	11.0		10.0	26.0		10.0	26.0	26.0
Total Split (s)	17.0	20.0	20.0	10.0	13.0		10.0	54.0		16.0	60.0	60.0
Total Split (%)	17.0%	20.0%	20.0%	10.0%	13.0%		10.0%	54.0%		16.0%	60.0%	60.0%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0		3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	25.0	16.0	16.0	13.0	7.0		54.0	48.0		65.0	54.0	54.0
Actuated g/C Ratio	0.25	0.16	0.16	0.13	0.07		0.54	0.48		0.65	0.54	0.54
v/c Ratio	0.97	0.56	0.54	0.38	0.99		0.55	1.02		0.92	0.80	0.58
Control Delay	67.3	48.2	13.8	37.3	79.6		16.3	48.9		61.6	21.6	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	67.3	48.2	13.8	37.3	79.6		16.3	48.9		61.6	21.6	6.4
LOS	E	D	B	D	E		B	D		E	C	A
Approach Delay		50.9			72.1			46.8			21.8	
Approach LOS		D			E			D			C	
Queue Length 50th (ft)	158	102	16	36	75		19	~583		104	395	54
Queue Length 95th (ft)	#233	#176	88	72	#168		36	#710		#252	462	145
Internal Link Dist (ft)		695			413			423			624	
Turn Bay Length (ft)	285		285	195			175			455		
Base Capacity (vph)	556	297	418	185	332		322	2433		271	2745	1055
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	0.97	0.56	0.54	0.38	0.99		0.55	1.02		0.92	0.80	0.58

Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 62 (62%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

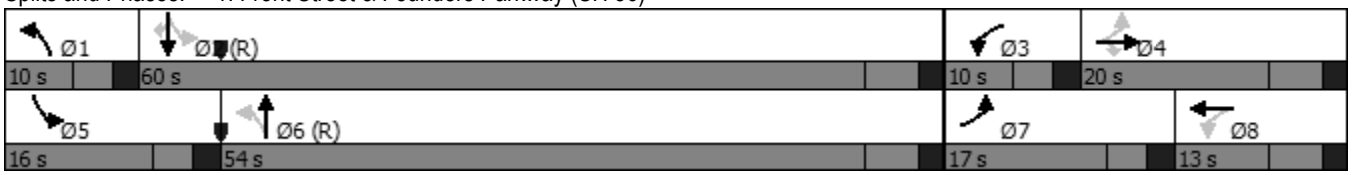
Maximum v/c Ratio: 1.02

Intersection Signal Delay: 37.9	Intersection LOS: D
Intersection Capacity Utilization 98.2%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Front Street & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	674	2491	323	64	2482	289	269	52	128	200	55	732
Future Volume (vph)	674	2491	323	64	2482	289	269	52	128	200	55	732
Satd. Flow (prot)	3433	5085	1583	1770	5085	1583	3433	1665	0	3433	1863	2787
Flt Permitted	0.950			0.087			0.718			0.571		
Satd. Flow (perm)	3433	5085	1583	162	5085	1583	2595	1665	0	2063	1863	2787
Satd. Flow (RTOR)			351			247		75				506
Lane Group Flow (vph)	733	2708	351	70	2698	314	292	196	0	217	60	796
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases			2	6		6	4			8		8
Detector Phase	5	2	2	1	6	6	7	4		3	8	8
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	26.0	26.0	10.0	26.0	26.0	10.0	11.0		11.0	11.0	11.0
Total Split (s)	22.0	67.0	67.0	10.0	55.0	55.0	10.0	12.0		11.0	13.0	13.0
Total Split (%)	22.0%	67.0%	67.0%	10.0%	55.0%	55.0%	10.0%	12.0%		11.0%	13.0%	13.0%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0		5.0	6.0	6.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	None
Act Effct Green (s)	17.0	63.0	63.0	50.0	49.0	49.0	12.0	6.0		14.0	7.0	7.0
Actuated g/C Ratio	0.17	0.63	0.63	0.50	0.49	0.49	0.12	0.06		0.14	0.07	0.07
v/c Ratio	1.26	0.85	0.31	0.43	1.08	0.35	0.83	1.15		0.58	0.46	1.20
Control Delay	152.7	19.0	2.8	35.5	71.3	4.8	59.6	143.9		43.5	56.7	119.0
Queue Delay	0.0	46.5	0.4	0.0	7.7	0.0	0.0	0.0		0.0	0.0	0.5
Total Delay	152.7	65.5	3.3	35.5	79.0	4.8	59.6	143.9		43.5	56.7	119.5
LOS	F	E	A	D	E	A	E	F		D	E	F
Approach Delay		76.6			70.5			93.4			100.6	
Approach LOS		E			E			F			F	
Queue Length 50th (ft)	~310	501	20	22	~709	22	87	~100		62	38	~167
Queue Length 95th (ft)	m#307	m497	m20	46	#803	69	#151	#243		97	79	#300
Internal Link Dist (ft)		347			406			277			368	
Turn Bay Length (ft)	300			330			80			120		100
Base Capacity (vph)	583	3203	1127	163	2491	901	353	170		371	130	665
Starvation Cap Reductn	0	862	385	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	453	0	0	0		0	0	45
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.26	1.16	0.47	0.43	1.32	0.35	0.83	1.15		0.58	0.46	1.28

Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 70 (70%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.26

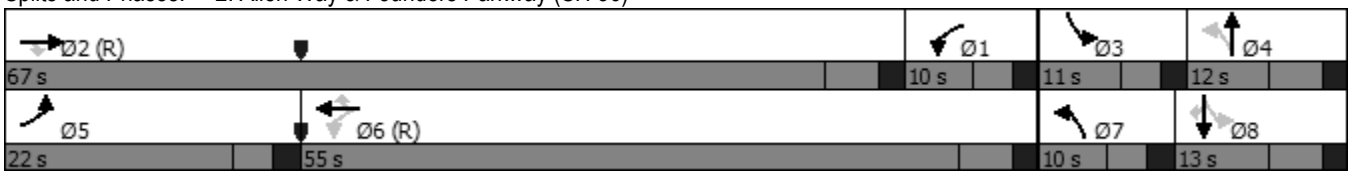
Intersection Signal Delay: 78.4	Intersection LOS: E
Intersection Capacity Utilization 101.8%	ICU Level of Service G
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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

Splits and Phases: 2: Allen Way & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2924	738	0	1981	1512	760	0	568	0	0	0
Future Volume (vph)	0	2924	738	0	1981	1512	760	0	568	0	0	0
Satd. Flow (prot)	0	4787	1362	0	3295	1441	3433	0	2787	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	4787	1362	0	3295	1441	3433	0	2787	0	0	0
Satd. Flow (RTOR)		8	461		58	474			33			
Lane Group Flow (vph)	0	3258	722	0	2646	1150	826	0	617	0	0	0
Turn Type		NA	Free		NA	Free	Prot		Prot			
Protected Phases		2			2		4		4			
Permitted Phases			Free			Free						
Detector Phase		2			2		4		4			
Switch Phase												
Minimum Initial (s)		20.0			20.0		5.0		5.0			
Minimum Split (s)		26.0			26.0		10.5		10.5			
Total Split (s)		74.0			74.0		26.0		26.0			
Total Split (%)		74.0%			74.0%		26.0%		26.0%			
Yellow Time (s)		4.0			4.0		3.5		3.5			
All-Red Time (s)		2.0			2.0		2.0		2.0			
Lost Time Adjust (s)		0.0			0.0		0.0		0.0			
Total Lost Time (s)		6.0			6.0		5.5		5.5			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		C-Max			C-Max		None		None			
Act Effct Green (s)		68.0	100.0		68.0	100.0	20.5		20.5			
Actuated g/C Ratio		0.68	1.00		0.68	1.00	0.20		0.20			
v/c Ratio		1.00	0.53		1.17	0.80	1.17		1.03			
Control Delay		32.5	1.5		91.9	8.5	129.9		83.7			
Queue Delay		32.9	0.0		0.5	0.0	0.0		29.8			
Total Delay		65.5	1.5		92.4	8.5	129.9		113.5			
LOS		E	A		F	A	F		F			
Approach Delay		53.9			67.0			122.9				
Approach LOS		D			E			F				
Queue Length 50th (ft)		~713	0		~1090	541	~326		~231			
Queue Length 95th (ft)		#937	0		m#930	m435	#444		#353			
Internal Link Dist (ft)		649			347			213			215	
Turn Bay Length (ft)			500						100			
Base Capacity (vph)		3257	1362		2259	1441	703		597			
Starvation Cap Reductn		0	0		375	0	0		0			
Spillback Cap Reductn		262	0		0	0	0		280			
Storage Cap Reductn		0	0		0	0	0		0			
Reduced v/c Ratio		1.09	0.53		1.40	0.80	1.17		1.95			

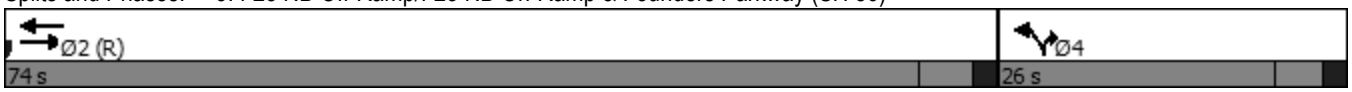
Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 80 (80%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.17

Intersection Signal Delay: 70.1	Intersection LOS: E
Intersection Capacity Utilization 100.9%	ICU Level of Service G
Analysis Period (min) 15	

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

Splits and Phases: 3: I-25 NB Off-Ramp/I-25 NB On-Ramp & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	77	198	195	79	99	226	559	115	80	518	5
Future Volume (vph)	14	77	198	195	79	99	226	559	115	80	518	5
Satd. Flow (prot)	1770	1662	0	1770	1863	1583	1770	3539	1583	0	3511	0
Flt Permitted	0.549			0.578			0.358				0.797	
Satd. Flow (perm)	1023	1662	0	1077	1863	1583	667	3539	1583	0	2818	0
Satd. Flow (RTOR)		215				218			218		2	
Lane Group Flow (vph)	15	299	0	212	86	108	246	608	125	0	655	0
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm	D.P+P	NA	
Protected Phases	3	8			4			6		5	2	
Permitted Phases	8			4		4	6		6	6		
Detector Phase	3	8		4	4	4	6	6	6	5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0	8.0	10.0	
Total Split (s)	8.0	24.0		16.0	16.0	16.0	28.0	28.0	28.0	8.0	36.0	
Total Split (%)	13.3%	40.0%		26.7%	26.7%	26.7%	46.7%	46.7%	46.7%	13.3%	60.0%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0		5.0	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None	None	C-Min	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	19.6	19.6		18.0	18.0	18.0	30.4	30.4	30.4		30.4	
Actuated g/C Ratio	0.33	0.33		0.30	0.30	0.30	0.51	0.51	0.51		0.51	
v/c Ratio	0.04	0.43		0.66	0.15	0.17	0.73	0.34	0.14		0.46	
Control Delay	14.5	7.5		34.9	18.2	0.6	27.6	9.4	0.5		10.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	14.5	7.5		34.9	18.2	0.6	27.6	9.4	0.5		10.7	
LOS	B	A		C	B	A	C	A	A		B	
Approach Delay		7.8			22.2			12.8			10.7	
Approach LOS		A			C			B			B	
Queue Length 50th (ft)	4	22		64	22	0	62	62	0		71	
Queue Length 95th (ft)	15	73		#202	61	0	#178	91	4		107	
Internal Link Dist (ft)		422			420			368			300	
Turn Bay Length (ft)	60			95		65	70		95			
Base Capacity (vph)	384	688		323	559	628	337	1791	909		1456	
Starvation Cap Reductn	0	0		0	0	0	0	0	0		0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0		0	
Storage Cap Reductn	0	0		0	0	0	0	0	0		0	
Reduced v/c Ratio	0.04	0.43		0.66	0.15	0.17	0.73	0.34	0.14		0.45	

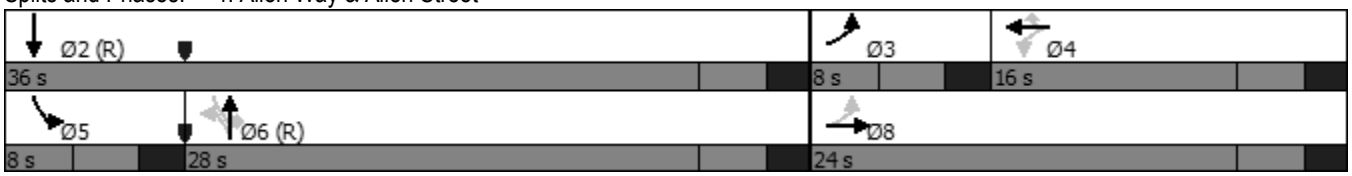
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 31 (52%), Referenced to phase 2:SBT and 6:NBSB, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 13.2	Intersection LOS: B
Intersection Capacity Utilization 75.9%	ICU Level of Service D
Analysis Period (min) 15	

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

Splits and Phases: 4: Allen Way & Allen Street



Intersection	
Int Delay, s/veh	17.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	110	4	70	186	9	60	82	194	149	63	192	38
Future Vol, veh/h	110	4	70	186	9	60	82	194	149	63	192	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	60	-	-	75	-	75	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	120	4	76	202	10	65	89	211	162	68	209	41

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	874	917	230	795	775	211	250	0	0	373	0	0
Stage 1	366	366	-	389	389	-	-	-	-	-	-	-
Stage 2	508	551	-	406	386	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	270	272	809	305	329	829	1316	-	-	1185	-	-
Stage 1	653	623	-	635	608	-	-	-	-	-	-	-
Stage 2	547	515	-	622	610	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	220	239	809	247	289	829	1316	-	-	1185	-	-
Mov Cap-2 Maneuver	220	239	-	247	289	-	-	-	-	-	-	-
Stage 1	609	587	-	592	567	-	-	-	-	-	-	-
Stage 2	462	480	-	527	575	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	36.7	48.7	1.5	1.8
HCM LOS	E	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1316	-	-	305	247	667	1185	-	-
HCM Lane V/C Ratio	0.068	-	-	0.656	0.819	0.112	0.058	-	-
HCM Control Delay (s)	7.9	-	-	36.7	62.6	11.1	8.2	-	-
HCM Lane LOS	A	-	-	E	F	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	4.3	6.3	0.4	0.2	-	-

Intersection	
Intersection Delay, s/veh	16.8
Intersection LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	288	142	118	252	239	256
Future Vol, veh/h	288	142	118	252	239	256
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	313	154	128	274	260	278
Number of Lanes	1	1	1	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay	19.4	15.9	15.1
HCM LOS	C	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	118	252	288	142	239	256
LT Vol	118	0	288	0	0	0
Through Vol	0	252	0	0	239	0
RT Vol	0	0	0	142	0	256
Lane Flow Rate	128	274	313	154	260	278
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.265	0.527	0.652	0.269	0.49	0.47
Departure Headway (Hd)	7.439	6.927	7.503	6.283	6.797	6.081
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	480	518	479	568	527	587
Service Time	5.227	4.715	5.279	4.058	4.581	3.864
HCM Lane V/C Ratio	0.267	0.529	0.653	0.271	0.493	0.474
HCM Control Delay	12.9	17.3	23.4	11.4	16	14.2
HCM Lane LOS	B	C	C	B	C	B
HCM 95th-tile Q	1.1	3	4.6	1.1	2.7	2.5

Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	204	20	5	0	38	0	3	0	0	0	0	235
Future Vol, veh/h	204	20	5	0	38	0	3	0	0	0	0	235
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	222	22	5	0	41	0	3	0	0	0	0	255

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	41	0	0	27	0	0	638	510	25	510	512	41
Stage 1	-	-	-	-	-	-	469	469	-	41	41	-
Stage 2	-	-	-	-	-	-	169	41	-	469	471	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1568	-	-	1587	-	-	389	467	1051	474	465	1030
Stage 1	-	-	-	-	-	-	575	561	-	974	861	-
Stage 2	-	-	-	-	-	-	833	861	-	575	560	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1568	-	-	1587	-	-	260	400	1051	422	398	1030
Mov Cap-2 Maneuver	-	-	-	-	-	-	260	400	-	422	398	-
Stage 1	-	-	-	-	-	-	492	480	-	834	861	-
Stage 2	-	-	-	-	-	-	626	861	-	492	479	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	6.8	0	19	9.6
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	260	1568	-	-	1587	-	-	1030
HCM Lane V/C Ratio	0.013	0.141	-	-	-	-	-	0.248
HCM Control Delay (s)	19	7.7	0	-	0	-	-	9.6
HCM Lane LOS	C	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0.5	-	-	0	-	-	1

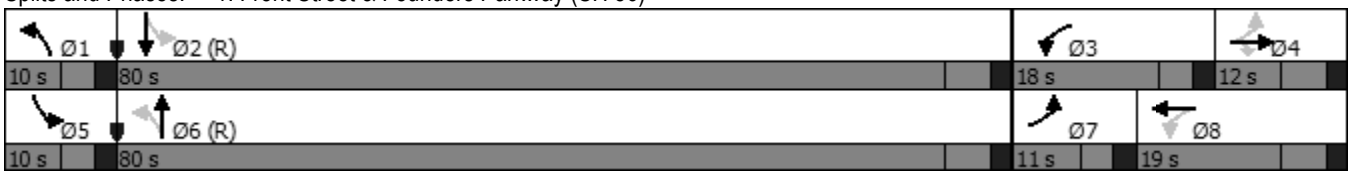
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	178	42	37	19	30	60	59	1526	10	53	901	166
Future Volume (vph)	178	42	37	19	30	60	59	1526	10	53	901	166
Satd. Flow (prot)	3433	1863	1583	1770	3189	0	1770	5080	0	1770	4968	0
Flt Permitted	0.549			0.727			0.209			0.105		
Satd. Flow (perm)	1984	1863	1583	1354	3189	0	389	5080	0	196	4968	0
Satd. Flow (RTOR)			164		65			1			57	
Lane Group Flow (vph)	193	46	40	21	98	0	64	1670	0	58	1159	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		4	8			6			2		
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0		3.0	20.0		3.0	20.0	
Minimum Split (s)	10.0	11.0	11.0	10.0	11.0		10.0	26.0		10.0	26.0	
Total Split (s)	11.0	12.0	12.0	18.0	19.0		10.0	80.0		10.0	80.0	
Total Split (%)	9.2%	10.0%	10.0%	15.0%	15.8%		8.3%	66.7%		8.3%	66.7%	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	17.6	14.2	14.2	16.1	8.3		85.7	79.8		85.6	79.7	
Actuated g/C Ratio	0.15	0.12	0.12	0.13	0.07		0.71	0.66		0.71	0.66	
v/c Ratio	0.53	0.21	0.12	0.10	0.35		0.18	0.49		0.27	0.35	
Control Delay	49.9	52.3	0.7	41.4	24.2		5.8	11.4		7.7	9.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	49.9	52.3	0.7	41.4	24.2		5.8	11.4		7.7	9.3	
LOS	D	D	A	D	C		A	B		A	A	
Approach Delay		43.2			27.3			11.2			9.2	
Approach LOS		D			C			B			A	
Queue Length 50th (ft)	69	32	0	14	13		10	222		9	127	
Queue Length 95th (ft)	99	73	0	36	39		26	292		25	173	
Internal Link Dist (ft)		695			413			423			624	
Turn Bay Length (ft)	285		285	195			175			455		
Base Capacity (vph)	363	220	332	274	403		347	3377		218	3319	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.53	0.21	0.12	0.08	0.24		0.18	0.49		0.27	0.35	

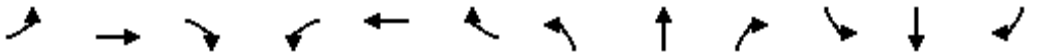
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 42 (35%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.53

Intersection Signal Delay: 13.7	Intersection LOS: B
Intersection Capacity Utilization 59.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Front Street & Founders Parkway (SH 86)





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	261	993	138	39	1602	137	98	21	55	66	15	318
Future Volume (vph)	261	993	138	39	1602	137	98	21	55	66	15	318
Satd. Flow (prot)	3433	4994	0	1770	5085	1583	1770	1662	0	1770	1863	2787
Flt Permitted	0.950			0.216			0.552			0.703		
Satd. Flow (perm)	3433	4994	0	402	5085	1583	1028	1662	0	1310	1863	2787
Satd. Flow (RTOR)		42				149		60				302
Lane Group Flow (vph)	284	1229	0	42	1741	149	107	83	0	72	16	346
Turn Type	Prot	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases				6		6	4			8		8
Detector Phase	5	2		1	6	6	7	4		3	8	8
Switch Phase												
Minimum Initial (s)	5.0	20.0		5.0	20.0	20.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	26.0		10.0	26.0	26.0	10.0	11.0		11.0	11.0	11.0
Total Split (s)	15.0	83.0		11.0	79.0	79.0	13.0	12.0		14.0	13.0	13.0
Total Split (%)	12.5%	69.2%		9.2%	65.8%	65.8%	10.8%	10.0%		11.7%	10.8%	10.8%
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	6.0	6.0	5.0	6.0		5.0	6.0	6.0
Lead/Lag	Lead	Lead		Lag	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	None
Act Effct Green (s)	15.2	64.6		65.1	64.1	64.1	22.1	11.1		18.0	7.2	7.2
Actuated g/C Ratio	0.13	0.54		0.54	0.53	0.53	0.18	0.09		0.15	0.06	0.06
v/c Ratio	0.65	0.45		0.10	0.64	0.16	0.41	0.40		0.31	0.14	0.77
Control Delay	62.6	19.1		16.3	21.5	2.7	44.3	25.9		44.6	60.3	26.1
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	62.6	19.2		16.3	21.5	2.7	44.3	25.9		44.6	60.3	26.1
LOS	E	B		B	C	A	D	C		D	E	C
Approach Delay		27.3			20.0			36.3			30.5	
Approach LOS		C			B			D			C	
Queue Length 50th (ft)	112	229		15	352	0	70	17		50	12	0
Queue Length 95th (ft)	#212	239		31	371	30	120	69		97	m37	#89
Internal Link Dist (ft)		347			406			277			368	
Turn Bay Length (ft)	300			330			80			120		100
Base Capacity (vph)	434	3408		435	3093	1021	260	208		244	119	461
Starvation Cap Reductn	0	524		0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.65	0.43		0.10	0.56	0.15	0.41	0.40		0.30	0.13	0.75

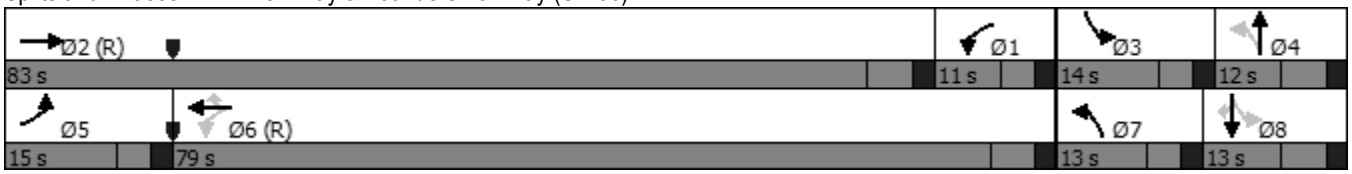
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 36 (30%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 24.6	Intersection LOS: C
Intersection Capacity Utilization 64.7%	ICU Level of Service C
Analysis Period (min) 15	

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

Splits and Phases: 2: Allen Way & Founders Parkway (SH 86)

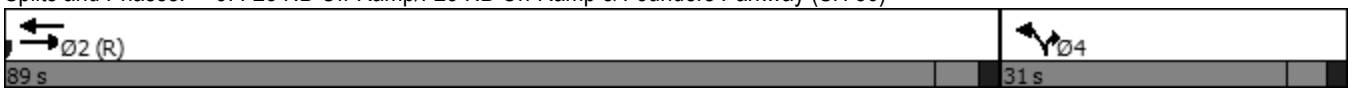


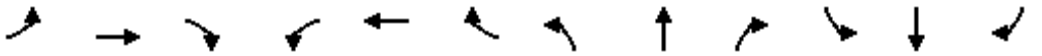
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1019	550	0	780	1334	225	0	224	0	0	0
Future Volume (vph)	0	1019	550	0	780	1334	225	0	224	0	0	0
Satd. Flow (prot)	0	4691	1362	0	3156	1441	3433	0	2787	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	4691	1362	0	3156	1441	3433	0	2787	0	0	0
Satd. Flow (RTOR)		70	383		417	725			232			
Lane Group Flow (vph)	0	1323	383	0	1573	725	245	0	243	0	0	0
Turn Type		NA	Free		NA	Free	Prot		Prot			
Protected Phases		2			2		4		4			
Permitted Phases			Free			Free						
Detector Phase		2			2		4		4			
Switch Phase												
Minimum Initial (s)		20.0			20.0		5.0		5.0			
Minimum Split (s)		26.0			26.0		10.5		10.5			
Total Split (s)		89.0			89.0		31.0		31.0			
Total Split (%)		74.2%			74.2%		25.8%		25.8%			
Yellow Time (s)		4.0			4.0		3.5		3.5			
All-Red Time (s)		2.0			2.0		2.0		2.0			
Lost Time Adjust (s)		0.0			0.0		0.0		0.0			
Total Lost Time (s)		6.0			6.0		5.5		5.5			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		C-Max			C-Max		None		None			
Act Effct Green (s)		94.6	120.0		94.6	120.0	13.9		13.9			
Actuated g/C Ratio		0.79	1.00		0.79	1.00	0.12		0.12			
v/c Ratio		0.36	0.28		0.61	0.50	0.62		0.46			
Control Delay		4.0	0.5		5.0	3.6	57.2		10.0			
Queue Delay		0.0	0.0		0.3	0.0	0.0		0.0			
Total Delay		4.0	0.5		5.3	3.6	57.2		10.0			
LOS		A	A		A	A	E		A			
Approach Delay		3.2			4.8			33.7				
Approach LOS		A			A			C				
Queue Length 50th (ft)		89	0		69	69	94		4			
Queue Length 95th (ft)		127	0		51	125	132		44			
Internal Link Dist (ft)		649			347			213			215	
Turn Bay Length (ft)			500						100			
Base Capacity (vph)		3713	1362		2576	1441	729		774			
Starvation Cap Reductn		0	0		390	0	0		0			
Spillback Cap Reductn		29	0		0	0	0		1			
Storage Cap Reductn		0	0		0	0	0		0			
Reduced v/c Ratio		0.36	0.28		0.72	0.50	0.34		0.31			

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 35 (29%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 7.3	Intersection LOS: A
Intersection Capacity Utilization 50.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: I-25 NB Off-Ramp/I-25 NB On-Ramp & Founders Parkway (SH 86)





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	12	92	71	19	56	119	257	43	22	225	4
Future Volume (vph)	7	12	92	71	19	56	119	257	43	22	225	4
Satd. Flow (prot)	1770	1615	0	1770	1863	1583	1770	3539	1583	0	3518	0
Flt Permitted	0.449			0.684			0.584				0.920	
Satd. Flow (perm)	836	1615	0	1274	1863	1583	1088	3539	1583	0	3250	0
Satd. Flow (RTOR)		100				218			218		3	
Lane Group Flow (vph)	8	113	0	77	21	61	129	279	47	0	273	0
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm	D.P+P	NA	
Protected Phases	3	8			4			6		5	2	
Permitted Phases	8			4		4	6		6	6		
Detector Phase	3	8		4	4	4	6	6	6	5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0	8.0	10.0	
Total Split (s)	12.0	27.0		15.0	15.0	15.0	21.0	21.0	21.0	12.0	33.0	
Total Split (%)	20.0%	45.0%		25.0%	25.0%	25.0%	35.0%	35.0%	35.0%	20.0%	55.0%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0		5.0	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None	None	C-Min	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	11.0	11.0		8.7	8.7	8.7	42.1	42.1	42.1		42.1	
Actuated g/C Ratio	0.18	0.18		0.14	0.14	0.14	0.70	0.70	0.70		0.70	
v/c Ratio	0.03	0.30		0.42	0.08	0.15	0.17	0.11	0.04		0.12	
Control Delay	16.0	7.3		29.5	21.3	0.7	4.2	2.1	0.0		5.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	16.0	7.3		29.5	21.3	0.7	4.2	2.1	0.0		5.4	
LOS	B	A		C	C	A	A	A	A		A	
Approach Delay		7.9			17.4			2.5			5.4	
Approach LOS		A			B			A			A	
Queue Length 50th (ft)	3	4		26	7	0	4	4	0		14	
Queue Length 95th (ft)	9	29		58	22	0	m33	22	m0		48	
Internal Link Dist (ft)		422			420			368			300	
Turn Bay Length (ft)	60			95		65	70		95			
Base Capacity (vph)	266	659		220	323	454	764	2484	1176		2290	
Starvation Cap Reductn	0	0		0	0	0	0	0	0		0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0		0	
Storage Cap Reductn	0	0		0	0	0	0	0	0		0	
Reduced v/c Ratio	0.03	0.17		0.35	0.07	0.13	0.17	0.11	0.04		0.12	

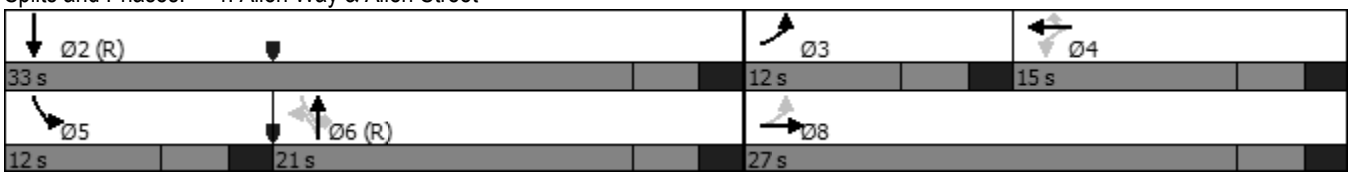
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 31 (52%), Referenced to phase 2:SBT and 6:NBSB, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.42

Intersection Signal Delay: 6.3	Intersection LOS: A
Intersection Capacity Utilization 37.2%	ICU Level of Service A
Analysis Period (min) 15	

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

Splits and Phases: 4: Allen Way & Allen Street



Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	4	18	40	4	98	23	72	47	38	33	15
Future Vol, veh/h	28	4	18	40	4	98	23	72	47	38	33	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	60	-	-	75	-	75	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	30	4	20	43	4	107	25	78	51	41	36	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	335	305	44	266	262	78	52	0	0	129	0	0
Stage 1	126	126	-	128	128	-	-	-	-	-	-	-
Stage 2	209	179	-	138	134	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	619	608	1026	687	643	983	1554	-	-	1457	-	-
Stage 1	878	792	-	876	790	-	-	-	-	-	-	-
Stage 2	793	751	-	865	785	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	530	581	1026	648	615	983	1554	-	-	1457	-	-
Mov Cap-2 Maneuver	530	581	-	648	615	-	-	-	-	-	-	-
Stage 1	864	770	-	862	777	-	-	-	-	-	-	-
Stage 2	692	739	-	820	763	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.1	9.7	1.2	3.3
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1554	-	-	647	648	960	1457	-	-
HCM Lane V/C Ratio	0.016	-	-	0.084	0.067	0.115	0.028	-	-
HCM Control Delay (s)	7.4	-	-	11.1	11	9.2	7.5	-	-
HCM Lane LOS	A	-	-	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.2	0.4	0.1	-	-

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	63	40	55	94	68	51
Future Vol, veh/h	63	40	55	94	68	51
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	68	43	60	102	74	55
Number of Lanes	1	1	1	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay	8.5	8.6	7.9
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	55	94	63	40	68	51
LT Vol	55	0	63	0	0	0
Through Vol	0	94	0	0	68	0
RT Vol	0	0	0	40	0	51
Lane Flow Rate	60	102	68	43	74	55
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.09	0.14	0.109	0.055	0.102	0.066
Departure Headway (Hd)	5.445	4.943	5.73	4.526	4.985	4.282
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	660	727	627	793	721	838
Service Time	3.163	2.661	3.45	2.246	2.703	2
HCM Lane V/C Ratio	0.091	0.14	0.108	0.054	0.103	0.066
HCM Control Delay	8.7	8.5	9.2	7.5	8.3	7.3
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.3	0.5	0.4	0.2	0.3	0.2

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	48	14	29	0	21	0	12	2	0	0	2	54
Future Vol, veh/h	48	14	29	0	21	0	12	2	0	0	2	54
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	52	15	32	0	23	0	13	2	0	0	2	59

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	23	0	0	47	0	0	189	158	31	159	174	23
Stage 1	-	-	-	-	-	-	135	135	-	23	23	-
Stage 2	-	-	-	-	-	-	54	23	-	136	151	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1592	-	-	1560	-	-	771	734	1043	807	719	1054
Stage 1	-	-	-	-	-	-	868	785	-	995	876	-
Stage 2	-	-	-	-	-	-	958	876	-	867	772	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1592	-	-	1560	-	-	708	709	1043	784	695	1054
Mov Cap-2 Maneuver	-	-	-	-	-	-	708	709	-	784	695	-
Stage 1	-	-	-	-	-	-	838	758	-	961	876	-
Stage 2	-	-	-	-	-	-	902	876	-	835	746	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.9	0	10.2	8.7
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	708	1592	-	-	1560	-	-	1035
HCM Lane V/C Ratio	0.021	0.033	-	-	-	-	-	0.059
HCM Control Delay (s)	10.2	7.3	0	-	0	-	-	8.7
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	321	122	177	32	81	90	103	1386	15	165	1745	354
Future Volume (vph)	321	122	177	32	81	90	103	1386	15	165	1745	354
Satd. Flow (prot)	3433	1863	1583	1770	3260	0	1770	5075	0	1770	4958	0
Flt Permitted	0.445			0.672			0.056			0.116		
Satd. Flow (perm)	1608	1863	1583	1252	3260	0	104	5075	0	216	4958	0
Satd. Flow (RTOR)			164		98			2			71	
Lane Group Flow (vph)	349	133	192	35	186	0	112	1523	0	179	2282	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		4	8			6			2		
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0		3.0	20.0		3.0	20.0	
Minimum Split (s)	10.0	11.0	11.0	10.0	11.0		10.0	26.0		10.0	26.0	
Total Split (s)	13.0	13.0	13.0	13.0	13.0		11.0	74.0		20.0	83.0	
Total Split (%)	10.8%	10.8%	10.8%	10.8%	10.8%		9.2%	61.7%		16.7%	69.2%	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	18.1	12.3	12.3	15.1	7.0		80.1	73.1		87.2	77.0	
Actuated g/C Ratio	0.15	0.10	0.10	0.13	0.06		0.67	0.61		0.73	0.64	
v/c Ratio	0.96	0.70	0.62	0.19	0.66		0.74	0.49		0.63	0.71	
Control Delay	85.5	73.5	22.1	44.5	38.3		49.0	14.0		17.8	15.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	85.5	73.5	22.1	44.5	38.3		49.0	14.0		17.8	15.2	
LOS	F	E	C	D	D		D	B		B	B	
Approach Delay		65.1			39.2			16.4			15.4	
Approach LOS		E			D			B			B	
Queue Length 50th (ft)	~131	~119	21	23	35		32	220		34	384	
Queue Length 95th (ft)	#201	#256	#133	53	74		#131	293		88	436	
Internal Link Dist (ft)		695			413			423			624	
Turn Bay Length (ft)	285		285	195			175			455		
Base Capacity (vph)	364	191	309	201	282		152	3093		354	3206	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.96	0.70	0.62	0.17	0.66		0.74	0.49		0.51	0.71	

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 112 (93%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

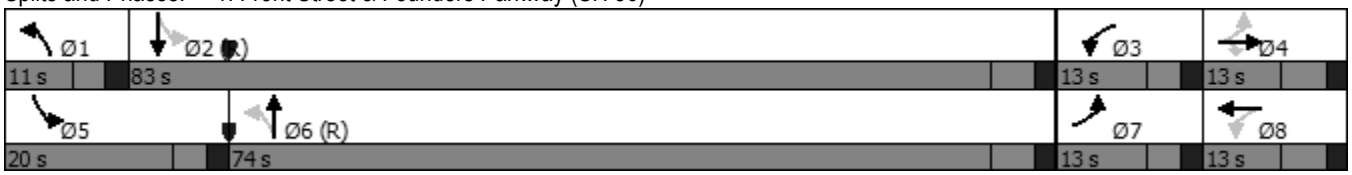
Maximum v/c Ratio: 0.96

Intersection Signal Delay: 23.5	Intersection LOS: C
Intersection Capacity Utilization 79.9%	ICU Level of Service D
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Front Street & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	394	2176	248	48	1620	130	163	30	51	68	59	439
Future Volume (vph)	394	2176	248	48	1620	130	163	30	51	68	59	439
Satd. Flow (prot)	3433	5009	0	1770	5085	1583	1770	1688	0	1770	1863	2787
Flt Permitted	0.950			0.066			0.527			0.700		
Satd. Flow (perm)	3433	5009	0	123	5085	1583	982	1688	0	1304	1863	2787
Satd. Flow (RTOR)		33				141		53				378
Lane Group Flow (vph)	428	2635	0	52	1761	141	177	88	0	74	64	477
Turn Type	Prot	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases				6		6	4			8		8
Detector Phase	5	2		1	6	6	7	4		3	8	8
Switch Phase												
Minimum Initial (s)	5.0	20.0		5.0	20.0	20.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	26.0		10.0	26.0	26.0	10.0	11.0		11.0	11.0	11.0
Total Split (s)	20.0	83.0		11.0	74.0	74.0	13.0	13.0		13.0	13.0	13.0
Total Split (%)	16.7%	69.2%		9.2%	61.7%	61.7%	10.8%	10.8%		10.8%	10.8%	10.8%
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	6.0	6.0	5.0	6.0		5.0	6.0	6.0
Lead/Lag	Lead	Lead		Lag	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	None
Act Effct Green (s)	16.0	77.9		67.5	65.5	65.5	18.8	11.0		15.9	7.1	7.1
Actuated g/C Ratio	0.13	0.65		0.56	0.55	0.55	0.16	0.09		0.13	0.06	0.06
v/c Ratio	0.93	0.81		0.35	0.63	0.15	0.82	0.44		0.37	0.58	0.92
Control Delay	79.9	12.2		33.4	19.9	2.3	76.1	32.8		50.7	79.2	40.5
Queue Delay	0.0	1.3		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.5
Total Delay	79.9	13.4		33.4	20.0	2.3	76.1	32.8		50.7	79.2	41.0
LOS	E	B		C	B	A	E	C		D	E	D
Approach Delay		22.7			19.0			61.7			46.1	
Approach LOS		C			B			E			D	
Queue Length 50th (ft)	182	187		17	319	0	126	27		50	53	57
Queue Length 95th (ft)	m#278	312		35	362	28	#229	#91		m94	m#99	#152
Internal Link Dist (ft)		347			406			277			368	
Turn Bay Length (ft)	300			330			80			120		100
Base Capacity (vph)	458	3272		151	2881	958	215	202		207	110	520
Starvation Cap Reductn	0	398		0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0		0	42	0	0	0		0	0	3
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.93	0.92		0.34	0.62	0.15	0.82	0.44		0.36	0.58	0.92

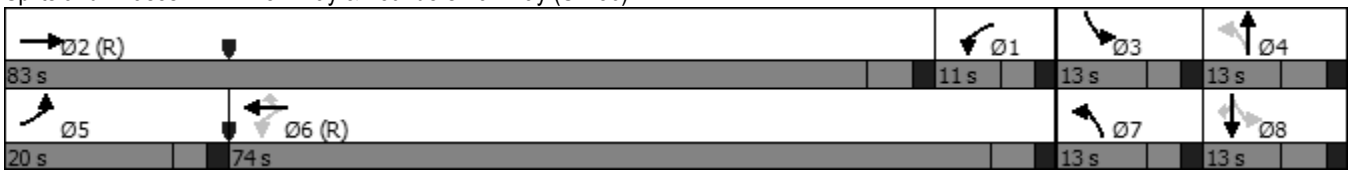
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 107 (89%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 25.7	Intersection LOS: C
Intersection Capacity Utilization 81.6%	ICU Level of Service D
Analysis Period (min) 15	

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

Splits and Phases: 2: Allen Way & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2458	584	0	1229	1004	415	0	368	0	0	0
Future Volume (vph)	0	2458	584	0	1229	1004	415	0	368	0	0	0
Satd. Flow (prot)	0	4787	1362	0	3285	1441	3433	0	2787	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	4787	1362	0	3285	1441	3433	0	2787	0	0	0
Satd. Flow (RTOR)		6	361		53	424			27			
Lane Group Flow (vph)	0	2736	571	0	1685	742	451	0	400	0	0	0
Turn Type		NA	Free		NA	Free	Prot		Prot			
Protected Phases		2			2		4		4			
Permitted Phases			Free			Free						
Detector Phase		2			2		4		4			
Switch Phase												
Minimum Initial (s)		20.0			20.0		5.0		5.0			
Minimum Split (s)		26.0			26.0		10.5		10.5			
Total Split (s)		85.0			85.0		35.0		35.0			
Total Split (%)		70.8%			70.8%		29.2%		29.2%			
Yellow Time (s)		4.0			4.0		3.5		3.5			
All-Red Time (s)		2.0			2.0		2.0		2.0			
Lost Time Adjust (s)		0.0			0.0		0.0		0.0			
Total Lost Time (s)		6.0			6.0		5.5		5.5			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		C-Max			C-Max		None		None			
Act Effct Green (s)		86.5	120.0		86.5	120.0	22.0		22.0			
Actuated g/C Ratio		0.72	1.00		0.72	1.00	0.18		0.18			
v/c Ratio		0.79	0.42		0.71	0.51	0.72		0.75			
Control Delay		13.9	1.0		6.6	2.6	52.4		52.0			
Queue Delay		0.0	0.0		0.1	0.0	0.0		0.2			
Total Delay		13.9	1.0		6.7	2.6	52.4		52.2			
LOS		B	A		A	A	D		D			
Approach Delay		11.7			5.5			52.3				
Approach LOS		B			A			D				
Queue Length 50th (ft)		477	0		119	0	170		156			
Queue Length 95th (ft)		656	0		m146	m434	213		205			
Internal Link Dist (ft)		649			347			213			215	
Turn Bay Length (ft)			500						100			
Base Capacity (vph)		3452	1362		2382	1441	843		705			
Starvation Cap Reductn		0	0		51	0	0		0			
Spillback Cap Reductn		0	0		0	0	0		41			
Storage Cap Reductn		0	0		0	0	0		0			
Reduced v/c Ratio		0.79	0.42		0.72	0.51	0.53		0.60			

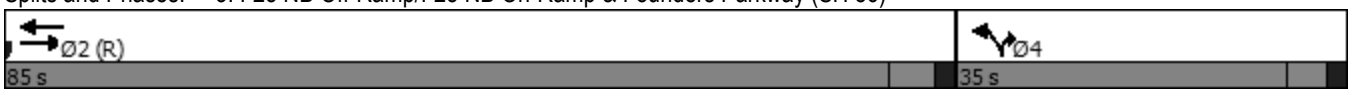
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 106 (88%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

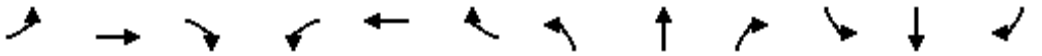
Maximum v/c Ratio: 0.79

Intersection Signal Delay: 14.6	Intersection LOS: B
Intersection Capacity Utilization 74.3%	ICU Level of Service D
Analysis Period (min) 15	

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

Splits and Phases: 3: I-25 NB Off-Ramp/I-25 NB On-Ramp & Founders Parkway (SH 86)





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	63	88	165	25	47	150	324	100	19	355	10
Future Volume (vph)	2	63	88	165	25	47	150	324	100	19	355	10
Satd. Flow (prot)	1770	1699	0	1770	1863	1583	1770	3539	1583	0	3514	0
Flt Permitted	0.543			0.653			0.507				0.930	
Satd. Flow (perm)	1011	1699	0	1216	1863	1583	944	3539	1583	0	3278	0
Satd. Flow (RTOR)		96				218			218		6	
Lane Group Flow (vph)	2	164	0	179	27	51	163	352	109	0	418	0
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm	D.P+P	NA	
Protected Phases	3	8			4			6		5	2	
Permitted Phases	8			4		4	6		6	6		
Detector Phase	3	8		4	4	4	6	6	6	5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0	8.0	10.0	
Total Split (s)	12.0	27.0		15.0	15.0	15.0	21.0	21.0	21.0	12.0	33.0	
Total Split (%)	20.0%	45.0%		25.0%	25.0%	25.0%	35.0%	35.0%	35.0%	20.0%	55.0%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0		5.0	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None	None	C-Min	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	16.0	16.0		13.8	13.8	13.8	34.0	34.0	34.0		34.0	
Actuated g/C Ratio	0.27	0.27		0.23	0.23	0.23	0.57	0.57	0.57		0.57	
v/c Ratio	0.01	0.31		0.64	0.06	0.10	0.31	0.18	0.11		0.22	
Control Delay	13.5	9.0		35.1	18.6	0.4	17.4	11.9	5.1		7.6	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	13.5	9.0		35.1	18.6	0.4	17.4	11.9	5.1		7.6	
LOS	B	A		D	B	A	B	B	A		A	
Approach Delay		9.0			26.5			12.2			7.6	
Approach LOS		A			C			B			A	
Queue Length 50th (ft)	1	19		55	7	0	78	86	18		34	
Queue Length 95th (ft)	4	50		#156	26	0	m84	m76	m8		70	
Internal Link Dist (ft)		422			420			368			300	
Turn Bay Length (ft)	60			95		65	70		95			
Base Capacity (vph)	358	683		280	429	532	534	2005	991		1860	
Starvation Cap Reductn	0	0		0	0	0	0	0	0		0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0		0	
Storage Cap Reductn	0	0		0	0	0	0	0	0		0	
Reduced v/c Ratio	0.01	0.24		0.64	0.06	0.10	0.31	0.18	0.11		0.22	

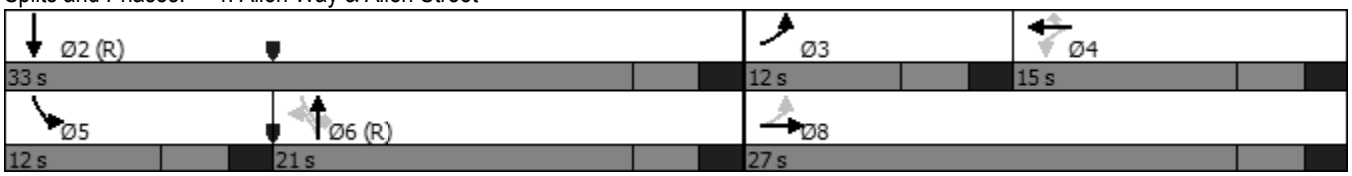
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 31 (52%), Referenced to phase 2:SBT and 6:NBSB, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 13.0	Intersection LOS: B
Intersection Capacity Utilization 54.2%	ICU Level of Service A
Analysis Period (min) 15	

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

Splits and Phases: 4: Allen Way & Allen Street



Intersection	
Int Delay, s/veh	7.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	59	14	53	98	9	75	58	106	108	64	101	17
Future Vol, veh/h	59	14	53	98	9	75	58	106	108	64	101	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	60	-	-	75	-	75	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	64	15	58	107	10	82	63	115	117	70	110	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	605	617	119	537	509	115	128	0	0	232	0	0
Stage 1	259	259	-	241	241	-	-	-	-	-	-	-
Stage 2	346	358	-	296	268	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	410	405	933	455	467	937	1458	-	-	1336	-	-
Stage 1	746	694	-	762	706	-	-	-	-	-	-	-
Stage 2	670	628	-	712	687	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	342	367	933	384	424	937	1458	-	-	1336	-	-
Mov Cap-2 Maneuver	342	367	-	384	424	-	-	-	-	-	-	-
Stage 1	714	658	-	729	676	-	-	-	-	-	-	-
Stage 2	577	601	-	618	651	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.7	14.2	1.6	2.8
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1458	-	-	471	384	829	1336	-	-
HCM Lane V/C Ratio	0.043	-	-	0.291	0.277	0.11	0.052	-	-
HCM Control Delay (s)	7.6	-	-	15.7	17.9	9.9	7.8	-	-
HCM Lane LOS	A	-	-	C	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.2	1.1	0.4	0.2	-	-

Intersection	
Intersection Delay, s/veh	10.7
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	178	130	81	157	154	119
Future Vol, veh/h	178	130	81	157	154	119
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	193	141	88	171	167	129
Number of Lanes	1	1	1	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay	11.3	10.7	10.1
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	81	157	178	130	154	119
LT Vol	81	0	178	0	0	0
Through Vol	0	157	0	0	154	0
RT Vol	0	0	0	130	0	119
Lane Flow Rate	88	171	193	141	167	129
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.157	0.28	0.35	0.208	0.274	0.186
Departure Headway (Hd)	6.416	5.909	6.505	5.295	5.891	5.181
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	560	609	553	678	611	693
Service Time	4.145	3.638	4.229	3.019	3.619	2.91
HCM Lane V/C Ratio	0.157	0.281	0.349	0.208	0.273	0.186
HCM Control Delay	10.3	10.9	12.7	9.4	10.8	9.1
HCM Lane LOS	B	B	B	A	B	A
HCM 95th-tile Q	0.6	1.1	1.6	0.8	1.1	0.7

Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	143	27	7	0	25	0	20	2	0	0	2	147
Future Vol, veh/h	143	27	7	0	25	0	20	2	0	0	2	147
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	155	29	8	0	27	0	22	2	0	0	2	160

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	27	0	0	37	0	0	451	370	33	371	374	27
Stage 1	-	-	-	-	-	-	343	343	-	27	27	-
Stage 2	-	-	-	-	-	-	108	27	-	344	347	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1587	-	-	1574	-	-	519	560	1041	586	557	1048
Stage 1	-	-	-	-	-	-	672	637	-	990	873	-
Stage 2	-	-	-	-	-	-	897	873	-	671	635	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1587	-	-	1574	-	-	405	504	1041	539	501	1048
Mov Cap-2 Maneuver	-	-	-	-	-	-	405	504	-	539	501	-
Stage 1	-	-	-	-	-	-	605	573	-	891	873	-
Stage 2	-	-	-	-	-	-	758	873	-	602	572	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	6.1	0	14.3	9.1
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	412	1587	-	-	1574	-	-	1033
HCM Lane V/C Ratio	0.058	0.098	-	-	-	-	-	0.157
HCM Control Delay (s)	14.3	7.5	0	-	0	-	-	9.1
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0.3	-	-	0	-	-	0.6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	348	113	145	47	123	93	114	1554	41	160	1419	394
Future Volume (vph)	348	113	145	47	123	93	114	1554	41	160	1419	394
Satd. Flow (prot)	3433	1863	1583	1770	3313	0	1770	5065	0	1770	4917	0
Flt Permitted	0.483			0.678			0.084			0.080		
Satd. Flow (perm)	1745	1863	1583	1263	3313	0	156	5065	0	149	4917	0
Satd. Flow (RTOR)			196		101			5			98	
Lane Group Flow (vph)	378	123	158	51	235	0	124	1734	0	174	1970	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		4	8			6			2		
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0		3.0	20.0		3.0	20.0	
Minimum Split (s)	10.0	11.0	11.0	10.0	11.0		10.0	26.0		10.0	26.0	
Total Split (s)	14.0	13.0	13.0	20.0	19.0		12.0	52.0		15.0	55.0	
Total Split (%)	14.0%	13.0%	13.0%	20.0%	19.0%		12.0%	52.0%		15.0%	55.0%	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	22.5	14.3	14.3	19.5	10.8		57.0	48.9		61.4	51.1	
Actuated g/C Ratio	0.22	0.14	0.14	0.20	0.11		0.57	0.49		0.61	0.51	
v/c Ratio	0.70	0.46	0.40	0.18	0.52		0.61	0.70		0.72	0.77	
Control Delay	38.9	46.7	6.1	29.0	27.6		28.5	22.3		35.4	21.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	38.9	46.7	6.1	29.0	27.6		28.5	22.3		35.4	21.6	
LOS	D	D	A	C	C		C	C		D	C	
Approach Delay		32.5			27.8			22.7			22.7	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	101	74	0	24	41		29	321		54	354	
Queue Length 95th (ft)	142	134	34	53	78		#99	379		#147	420	
Internal Link Dist (ft)		695			413			423			624	
Turn Bay Length (ft)	285		285	195			175			455		
Base Capacity (vph)	543	265	394	402	518		205	2479		257	2560	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.70	0.46	0.40	0.13	0.45		0.60	0.70		0.68	0.77	

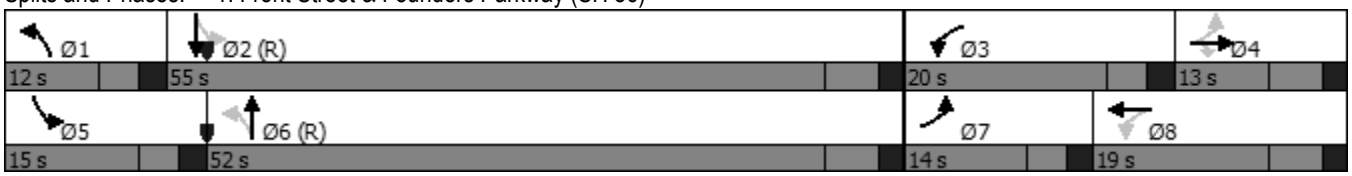
Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 62 (62%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 24.3	Intersection LOS: C
Intersection Capacity Utilization 77.2%	ICU Level of Service D
Analysis Period (min) 15	

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

Splits and Phases: 1: Front Street & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	487	1744	226	45	1738	202	189	38	90	140	41	528
Future Volume (vph)	487	1744	226	45	1738	202	189	38	90	140	41	528
Satd. Flow (prot)	3433	4999	0	1770	5085	1583	1770	1665	0	1770	1863	2787
Flt Permitted	0.950			0.101			0.634			0.598		
Satd. Flow (perm)	3433	4999	0	188	5085	1583	1181	1665	0	1114	1863	2787
Satd. Flow (RTOR)		34				220		93				535
Lane Group Flow (vph)	529	2142	0	49	1889	220	205	139	0	152	45	574
Turn Type	Prot	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases				6		6	4			8		8
Detector Phase	5	2		1	6	6	7	4		3	8	8
Switch Phase												
Minimum Initial (s)	5.0	20.0		5.0	20.0	20.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	26.0		10.0	26.0	26.0	10.0	11.0		11.0	11.0	11.0
Total Split (s)	20.0	58.0		11.0	49.0	49.0	18.0	13.0		18.0	13.0	13.0
Total Split (%)	20.0%	58.0%		11.0%	49.0%	49.0%	18.0%	13.0%		18.0%	13.0%	13.0%
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	6.0	6.0	5.0	6.0		5.0	6.0	6.0
Lead/Lag	Lead	Lead		Lag	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	None
Act Effct Green (s)	16.5	57.2		43.3	42.3	42.3	21.2	7.8		19.2	6.8	6.8
Actuated g/C Ratio	0.16	0.57		0.43	0.42	0.42	0.21	0.08		0.19	0.07	0.07
v/c Ratio	0.93	0.75		0.28	0.88	0.28	0.64	0.65		0.53	0.36	0.84
Control Delay	63.3	20.9		30.2	32.1	3.4	41.6	32.7		37.7	52.8	17.9
Queue Delay	0.0	1.9		0.0	10.3	0.0	0.0	0.0		0.0	0.0	1.3
Total Delay	63.3	22.8		30.2	42.5	3.4	41.6	32.7		37.7	52.8	19.2
LOS	E	C		C	D	A	D	C		D	D	B
Approach Delay		30.8			38.2			38.0			24.8	
Approach LOS		C			D			D			C	
Queue Length 50th (ft)	~187	368		17	390	0	109	28		79	28	13
Queue Length 95th (ft)	#294	464		39	459	41	178	#112		136	64	#94
Internal Link Dist (ft)		347			406			277			368	
Turn Bay Length (ft)	300			330			80			120		100
Base Capacity (vph)	566	2875		176	2186	806	333	215		316	130	692
Starvation Cap Reductn	0	539		0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0		0	301	0	0	0		0	0	31
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.93	0.92		0.28	1.00	0.27	0.62	0.65		0.48	0.35	0.87

Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 70 (70%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

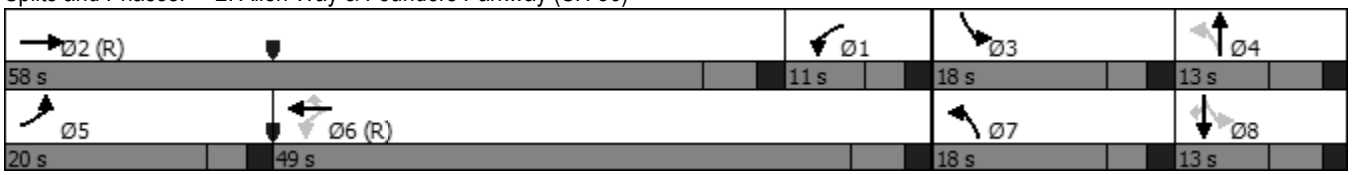
Maximum v/c Ratio: 0.93

Intersection Signal Delay: 33.1	Intersection LOS: C
Intersection Capacity Utilization 81.1%	ICU Level of Service D
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Allen Way & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2061	517	0	1393	1065	532	0	400	0	0	0
Future Volume (vph)	0	2061	517	0	1393	1065	532	0	400	0	0	0
Satd. Flow (prot)	0	4787	1362	0	3295	1441	3433	0	2787	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	4787	1362	0	3295	1441	3433	0	2787	0	0	0
Satd. Flow (RTOR)		6	459		49	475			33			
Lane Group Flow (vph)	0	2296	506	0	1861	811	578	0	435	0	0	0
Turn Type		NA	Free		NA	Free	Prot		Prot			
Protected Phases		2			2		4		4			
Permitted Phases			Free			Free						
Detector Phase		2			2		4		4			
Switch Phase												
Minimum Initial (s)		20.0			20.0		5.0		5.0			
Minimum Split (s)		26.0			26.0		10.5		10.5			
Total Split (s)		68.0			68.0		32.0		32.0			
Total Split (%)		68.0%			68.0%		32.0%		32.0%			
Yellow Time (s)		4.0			4.0		3.5		3.5			
All-Red Time (s)		2.0			2.0		2.0		2.0			
Lost Time Adjust (s)		0.0			0.0		0.0		0.0			
Total Lost Time (s)		6.0			6.0		5.5		5.5			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		C-Max			C-Max		None		None			
Act Effct Green (s)		66.2	100.0		66.2	100.0	22.3		22.3			
Actuated g/C Ratio		0.66	1.00		0.66	1.00	0.22		0.22			
v/c Ratio		0.72	0.37		0.85	0.56	0.75		0.67			
Control Delay		13.2	0.8		11.0	3.8	42.7		37.8			
Queue Delay		0.1	0.0		34.7	0.0	0.0		56.5			
Total Delay		13.3	0.8		45.7	3.8	42.7		94.3			
LOS		B	A		D	A	D		F			
Approach Delay		11.1			33.0			64.9				
Approach LOS		B			C			E				
Queue Length 50th (ft)		335	0		611	231	177		132			
Queue Length 95th (ft)		447	0		742	m357	225		181			
Internal Link Dist (ft)		649			347			213			215	
Turn Bay Length (ft)			500						100			
Base Capacity (vph)		3170	1362		2197	1441	909		762			
Starvation Cap Reductn		0	0		459	0	0		0			
Spillback Cap Reductn		126	0		0	0	0		389			
Storage Cap Reductn		0	0		0	0	0		0			
Reduced v/c Ratio		0.75	0.37		1.07	0.56	0.64		1.17			

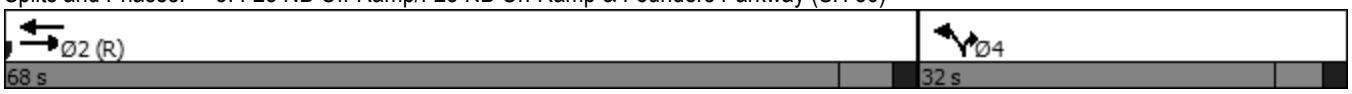
Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 80 (80%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 28.5	Intersection LOS: C
Intersection Capacity Utilization 73.3%	ICU Level of Service D
Analysis Period (min) 15	

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

Splits and Phases: 3: I-25 NB Off-Ramp/I-25 NB On-Ramp & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	57	139	151	57	72	159	392	96	59	363	4
Future Volume (vph)	10	57	139	151	57	72	159	392	96	59	363	4
Satd. Flow (prot)	1770	1665	0	1770	1863	1583	1770	3539	1583	0	3511	0
Flt Permitted	0.519			0.625			0.486				0.847	
Satd. Flow (perm)	967	1665	0	1164	1863	1583	905	3539	1583	0	2995	0
Satd. Flow (RTOR)		151				218			218		2	
Lane Group Flow (vph)	11	213	0	164	62	78	173	426	104	0	463	0
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm	D.P+P	NA	
Protected Phases	3	8			4			6		5	2	
Permitted Phases	8			4		4	6		6	6		
Detector Phase	3	8		4	4	4	6	6	6	5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0	8.0	10.0	
Total Split (s)	12.0	27.0		15.0	15.0	15.0	21.0	21.0	21.0	12.0	33.0	
Total Split (%)	20.0%	45.0%		25.0%	25.0%	25.0%	35.0%	35.0%	35.0%	20.0%	55.0%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0		5.0	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None	None	C-Min	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	15.4	15.4		13.1	13.1	13.1	34.6	34.6	34.6		34.6	
Actuated g/C Ratio	0.26	0.26		0.22	0.22	0.22	0.58	0.58	0.58		0.58	
v/c Ratio	0.03	0.39		0.65	0.15	0.15	0.33	0.21	0.10		0.27	
Control Delay	14.1	7.8		37.0	19.9	0.6	10.5	7.4	0.2		7.8	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	14.1	7.8		37.0	19.9	0.6	10.5	7.4	0.2		7.8	
LOS	B	A		D	B	A	B	A	A		A	
Approach Delay		8.1			24.2			7.1			7.8	
Approach LOS		A			C			A			A	
Queue Length 50th (ft)	3	17		51	17	0	29	34	0		38	
Queue Length 95th (ft)	11	53		#149	48	0	84	71	0		80	
Internal Link Dist (ft)		422			420			368			300	
Turn Bay Length (ft)	60			95		65	70		95			
Base Capacity (vph)	342	706		256	410	518	521	2039	1005		1726	
Starvation Cap Reductn	0	0		0	0	0	0	0	0		0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0		0	
Storage Cap Reductn	0	0		0	0	0	0	0	0		0	
Reduced v/c Ratio	0.03	0.30		0.64	0.15	0.15	0.33	0.21	0.10		0.27	

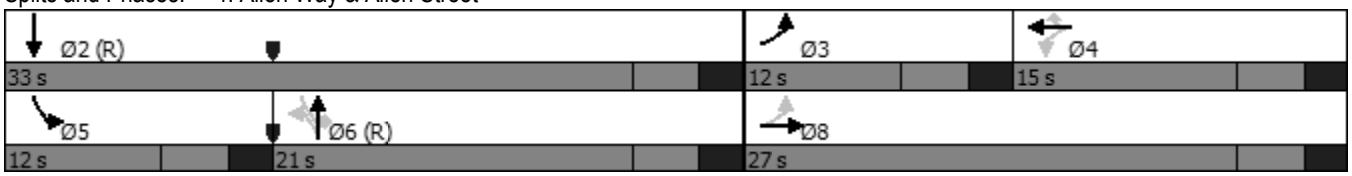
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 31 (52%), Referenced to phase 2:SBT and 6:NBSB, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 10.5	Intersection LOS: B
Intersection Capacity Utilization 59.3%	ICU Level of Service B
Analysis Period (min) 15	

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

Splits and Phases: 4: Allen Way & Allen Street



Intersection	
Int Delay, s/veh	8.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	77	6	49	141	8	60	58	136	117	66	135	27
Future Vol, veh/h	77	6	49	141	8	60	58	136	117	66	135	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	60	-	-	75	-	75	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	84	7	53	153	9	65	63	148	127	72	147	29

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	681	707	162	610	594	148	176	0	0	275	0	0
Stage 1	306	306	-	274	274	-	-	-	-	-	-	-
Stage 2	375	401	-	336	320	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	364	360	883	407	418	899	1400	-	-	1288	-	-
Stage 1	704	662	-	732	683	-	-	-	-	-	-	-
Stage 2	646	601	-	678	652	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	307	325	883	348	377	899	1400	-	-	1288	-	-
Mov Cap-2 Maneuver	307	325	-	348	377	-	-	-	-	-	-	-
Stage 1	672	625	-	699	652	-	-	-	-	-	-	-
Stage 2	565	574	-	595	615	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.6	18.9	1.4	2.3
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1400	-	-	406	348	773	1288	-	-
HCM Lane V/C Ratio	0.045	-	-	0.353	0.44	0.096	0.056	-	-
HCM Control Delay (s)	7.7	-	-	18.6	23.2	10.1	8	-	-
HCM Lane LOS	A	-	-	C	C	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.6	2.2	0.3	0.2	-	-

Intersection	
Intersection Delay, s/veh	11.7
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	209	99	83	181	173	185
Future Vol, veh/h	209	99	83	181	173	185
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	227	108	90	197	188	201
Number of Lanes	1	1	1	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay	12.9	11.5	10.9
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	83	181	209	99	173	185
LT Vol	83	0	209	0	0	0
Through Vol	0	181	0	0	173	0
RT Vol	0	0	0	99	0	185
Lane Flow Rate	90	197	227	108	188	201
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.166	0.334	0.428	0.167	0.315	0.297
Departure Headway (Hd)	6.62	6.112	6.786	5.574	6.022	5.312
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	542	588	532	644	598	676
Service Time	4.36	3.852	4.523	3.311	3.758	3.047
HCM Lane V/C Ratio	0.166	0.335	0.427	0.168	0.314	0.297
HCM Control Delay	10.7	11.9	14.5	9.4	11.5	10.3
HCM Lane LOS	B	B	B	A	B	B
HCM 95th-tile Q	0.6	1.5	2.1	0.6	1.3	1.2

Intersection	
Int Delay, s/veh	7.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	169	24	4	0	36	0	3	0	0	0	0	188
Future Vol, veh/h	169	24	4	0	36	0	3	0	0	0	0	188
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	184	26	4	0	39	0	3	0	0	0	0	204

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	39	0	0	30	0	0	537	435	28	435	437	39
Stage 1	-	-	-	-	-	-	396	396	-	39	39	-
Stage 2	-	-	-	-	-	-	141	39	-	396	398	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1571	-	-	1583	-	-	455	514	1047	531	513	1033
Stage 1	-	-	-	-	-	-	629	604	-	976	862	-
Stage 2	-	-	-	-	-	-	862	862	-	629	603	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1571	-	-	1583	-	-	332	453	1047	483	452	1033
Mov Cap-2 Maneuver	-	-	-	-	-	-	332	453	-	483	452	-
Stage 1	-	-	-	-	-	-	554	532	-	860	862	-
Stage 2	-	-	-	-	-	-	691	862	-	554	531	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	6.5	0	16	9.3
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	332	1571	-	-	1583	-	-	1033
HCM Lane V/C Ratio	0.01	0.117	-	-	-	-	-	0.198
HCM Control Delay (s)	16	7.6	0	-	0	-	-	9.3
HCM Lane LOS	C	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0.4	-	-	0	-	-	0.7

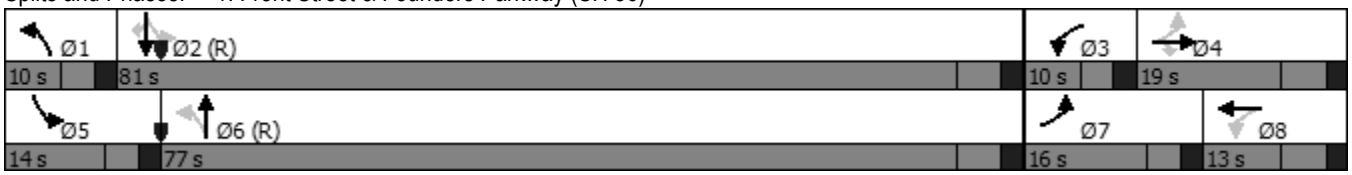
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	255	58	53	26	42	85	84	2179	14	75	1287	237
Future Volume (vph)	255	58	53	26	42	85	84	2179	14	75	1287	237
Satd. Flow (prot)	3433	1863	1583	1770	3185	0	3433	5080	0	1770	5085	1583
Flt Permitted	0.420			0.716			0.151			0.055		
Satd. Flow (perm)	1518	1863	1583	1334	3185	0	546	5080	0	102	5085	1583
Satd. Flow (RTOR)			118		76			1				258
Lane Group Flow (vph)	277	63	58	28	138	0	91	2383	0	82	1399	258
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		4	8			6			2		2
Detector Phase	7	4	4	3	8		1	6		5	2	2
Switch Phase												
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0		3.0	20.0		3.0	20.0	20.0
Minimum Split (s)	10.0	11.0	11.0	10.0	11.0		10.0	26.0		10.0	26.0	26.0
Total Split (s)	16.0	19.0	19.0	10.0	13.0		10.0	77.0		14.0	81.0	81.0
Total Split (%)	13.3%	15.8%	15.8%	8.3%	10.8%		8.3%	64.2%		11.7%	67.5%	67.5%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0		3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	23.6	16.6	16.6	12.6	6.6		80.3	75.2		83.5	75.2	75.2
Actuated g/C Ratio	0.20	0.14	0.14	0.10	0.06		0.67	0.63		0.70	0.63	0.63
v/c Ratio	0.59	0.25	0.18	0.18	0.56		0.19	0.75		0.47	0.44	0.24
Control Delay	47.6	51.1	1.2	42.4	35.2		6.1	18.4		20.9	12.1	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	47.6	51.1	1.2	42.4	35.2		6.1	18.4		20.9	12.1	1.6
LOS	D	D	A	D	D		A	B		C	B	A
Approach Delay		41.4			36.4			18.0			11.0	
Approach LOS		D			D			B			B	
Queue Length 50th (ft)	96	46	0	18	24		9	469		17	191	0
Queue Length 95th (ft)	139	92	0	44	58		16	556		59	223	30
Internal Link Dist (ft)		695			413			423			624	
Turn Bay Length (ft)	285		285	195			175			455		
Base Capacity (vph)	473	257	320	158	257		491	3185		197	3186	1088
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	0.59	0.25	0.18	0.18	0.54		0.19	0.75		0.42	0.44	0.24

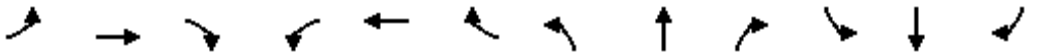
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 42 (35%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 18.0	Intersection LOS: B
Intersection Capacity Utilization 76.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Front Street & Founders Parkway (SH 86)





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	373	1418	197	55	2287	195	140	29	269	95	25	442
Future Volume (vph)	373	1418	197	55	2287	195	140	29	269	95	25	442
Satd. Flow (prot)	3433	5085	1583	1770	5085	1583	3433	1611	0	3433	1863	2787
Flt Permitted	0.950			0.146			0.740			0.222		
Satd. Flow (perm)	3433	5085	1583	272	5085	1583	2674	1611	0	802	1863	2787
Satd. Flow (RTOR)			214			154		102				428
Lane Group Flow (vph)	405	1541	214	60	2486	212	152	324	0	103	27	480
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases			2	6		6	4			8		8
Detector Phase	5	2	2	1	6	6	7	4		3	8	8
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	26.0	26.0	10.0	26.0	26.0	10.0	11.0		11.0	11.0	11.0
Total Split (s)	20.0	76.0	76.0	10.0	66.0	66.0	10.0	23.0		11.0	24.0	24.0
Total Split (%)	16.7%	63.3%	63.3%	8.3%	55.0%	55.0%	8.3%	19.2%		9.2%	20.0%	20.0%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0		5.0	6.0	6.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	None
Act Effct Green (s)	15.0	58.2	58.2	61.0	60.0	60.0	23.0	17.0		25.0	18.0	18.0
Actuated g/C Ratio	0.12	0.48	0.48	0.51	0.50	0.50	0.19	0.14		0.21	0.15	0.15
v/c Ratio	0.94	0.62	0.24	0.16	0.98	0.24	0.28	1.03		0.35	0.10	0.61
Control Delay	85.1	21.3	1.7	22.2	43.0	5.8	38.3	93.2		40.6	47.8	14.2
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0		0.0	0.0	0.3
Total Delay	85.1	21.4	1.7	22.2	43.0	5.8	38.4	93.2		40.6	47.8	14.5
LOS	F	C	A	C	D	A	D	F		D	D	B
Approach Delay		31.4			39.7			75.7			20.4	
Approach LOS		C			D			E			C	
Queue Length 50th (ft)	158	300	0	23	668	23	48	~195		34	19	0
Queue Length 95th (ft)	#260	281	22	46	#809	64	77	#380		62	m50	97
Internal Link Dist (ft)		347			406			277			368	
Turn Bay Length (ft)	300			330			80			120		100
Base Capacity (vph)	429	3051	1035	373	2542	868	544	315		298	279	781
Starvation Cap Reductn	0	434	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	48	0		0	0	50
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.94	0.59	0.21	0.16	0.98	0.24	0.31	1.03		0.35	0.10	0.66

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 36 (30%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.03

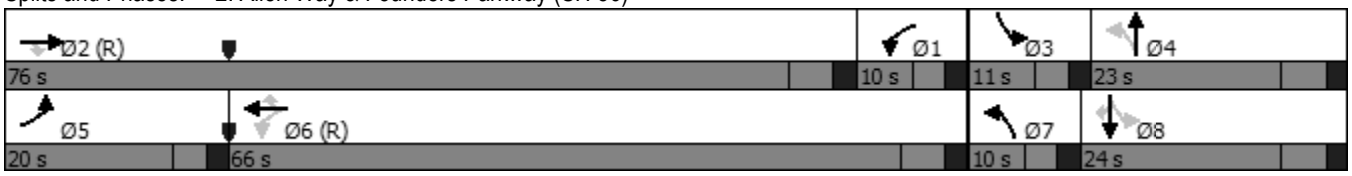
Intersection Signal Delay: 37.6	Intersection LOS: D
Intersection Capacity Utilization 95.5%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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

Splits and Phases: 2: Allen Way & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1454	785	0	1111	1902	320	0	321	0	0	0
Future Volume (vph)	0	1454	785	0	1111	1902	320	0	321	0	0	0
Satd. Flow (prot)	0	4691	1362	0	3156	1441	3433	0	2787	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	4691	1362	0	3156	1441	3433	0	2787	0	0	0
Satd. Flow (RTOR)		90	546		533	1033			119			
Lane Group Flow (vph)	0	1887	546	0	2242	1033	348	0	349	0	0	0
Turn Type		NA	Free		NA	Free	Prot		Prot			
Protected Phases		2			2		4		4			
Permitted Phases			Free			Free						
Detector Phase		2			2		4		4			
Switch Phase												
Minimum Initial (s)		20.0			20.0		5.0		5.0			
Minimum Split (s)		26.0			26.0		10.5		10.5			
Total Split (s)		97.0			97.0		23.0		23.0			
Total Split (%)		80.8%			80.8%		19.2%		19.2%			
Yellow Time (s)		4.0			4.0		3.5		3.5			
All-Red Time (s)		2.0			2.0		2.0		2.0			
Lost Time Adjust (s)		0.0			0.0		0.0		0.0			
Total Lost Time (s)		6.0			6.0		5.5		5.5			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		C-Max			C-Max		None		None			
Act Effct Green (s)		92.4	120.0		92.4	120.0	16.1		16.1			
Actuated g/C Ratio		0.77	1.00		0.77	1.00	0.13		0.13			
v/c Ratio		0.52	0.40		0.88	0.72	0.75		0.73			
Control Delay		5.7	0.9		10.3	9.4	60.9		42.0			
Queue Delay		0.0	0.0		15.3	0.0	0.0		0.0			
Total Delay		5.7	0.9		25.6	9.4	60.9		42.0			
LOS		A	A		C	A	E		D			
Approach Delay		4.6			20.5			51.4				
Approach LOS		A			C			D				
Queue Length 50th (ft)		182	0		235	224	134		97			
Queue Length 95th (ft)		213	0		m206	m215	185		154			
Internal Link Dist (ft)		649			347			213			215	
Turn Bay Length (ft)			500						100			
Base Capacity (vph)		3631	1362		2551	1441	500		508			
Starvation Cap Reductn		0	0		358	0	0		0			
Spillback Cap Reductn		0	0		0	0	0		0			
Storage Cap Reductn		0	0		0	0	0		0			
Reduced v/c Ratio		0.52	0.40		1.02	0.72	0.70		0.69			

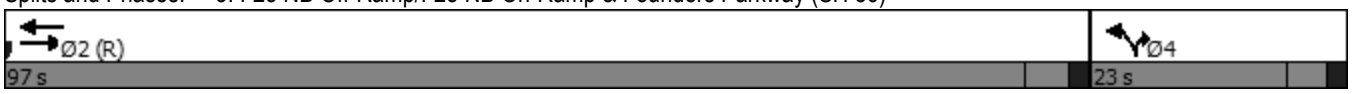
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 35 (29%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 17.8	Intersection LOS: B
Intersection Capacity Utilization 68.5%	ICU Level of Service C
Analysis Period (min) 15	

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

Splits and Phases: 3: I-25 NB Off-Ramp/I-25 NB On-Ramp & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	17	131	95	26	78	170	368	60	31	321	5
Future Volume (vph)	9	17	131	95	26	78	170	368	60	31	321	5
Satd. Flow (prot)	1770	1615	0	1770	1863	1583	1770	3539	1583	0	3518	0
Flt Permitted	0.463			0.656			0.522				0.902	
Satd. Flow (perm)	862	1615	0	1222	1863	1583	972	3539	1583	0	3186	0
Satd. Flow (RTOR)		142				218			218		3	
Lane Group Flow (vph)	10	160	0	103	28	85	185	400	65	0	388	0
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm	D.P+P	NA	
Protected Phases	3	8			4			6		5	2	
Permitted Phases	8			4		4	6		6	6		
Detector Phase	3	8		4	4	4	6	6	6	5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0	8.0	10.0	
Total Split (s)	8.0	24.0		16.0	16.0	16.0	28.0	28.0	28.0	8.0	36.0	
Total Split (%)	13.3%	40.0%		26.7%	26.7%	26.7%	46.7%	46.7%	46.7%	13.3%	60.0%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0		5.0	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None	None	C-Min	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	11.3	11.3		9.5	9.5	9.5	41.8	41.8	41.8		41.8	
Actuated g/C Ratio	0.19	0.19		0.16	0.16	0.16	0.70	0.70	0.70		0.70	
v/c Ratio	0.04	0.38		0.53	0.10	0.20	0.27	0.16	0.06		0.17	
Control Delay	16.7	7.5		33.1	21.2	1.0	4.8	2.3	0.1		5.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	16.7	7.5		33.1	21.2	1.0	4.8	2.3	0.1		5.3	
LOS	B	A		C	C	A	A	A	A		A	
Approach Delay		8.0			19.0			2.8			5.3	
Approach LOS		A			B			A			A	
Queue Length 50th (ft)	3	6		34	9	0	23	18	0		22	
Queue Length 95th (ft)	11	38		75	27	0	m20	m21	m0		61	
Internal Link Dist (ft)		422			420			368			300	
Turn Bay Length (ft)	60			95		65	70		95			
Base Capacity (vph)	243	613		229	348	473	677	2465	1169		2232	
Starvation Cap Reductn	0	0		0	0	0	0	0	0		0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0		0	
Storage Cap Reductn	0	0		0	0	0	0	0	0		0	
Reduced v/c Ratio	0.04	0.26		0.45	0.08	0.18	0.27	0.16	0.06		0.17	

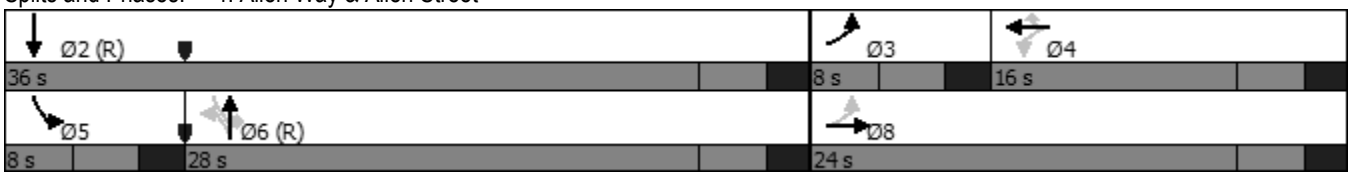
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 31 (52%), Referenced to phase 2:SBT and 6:NBSB, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.53

Intersection Signal Delay: 6.5	Intersection LOS: A
Intersection Capacity Utilization 51.0%	ICU Level of Service A
Analysis Period (min) 15	

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

Splits and Phases: 4: Allen Way & Allen Street



Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	4	26	51	4	130	33	103	65	52	47	21
Future Vol, veh/h	39	4	26	51	4	130	33	103	65	52	47	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	60	-	-	75	-	75	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	42	4	28	55	4	141	36	112	71	57	51	23

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	469	432	63	377	372	112	74	0	0	183	0	0
Stage 1	177	177	-	184	184	-	-	-	-	-	-	-
Stage 2	292	255	-	193	188	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	505	516	1002	580	558	941	1526	-	-	1392	-	-
Stage 1	825	753	-	818	747	-	-	-	-	-	-	-
Stage 2	716	696	-	809	745	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	406	483	1002	532	522	941	1526	-	-	1392	-	-
Mov Cap-2 Maneuver	406	483	-	532	522	-	-	-	-	-	-	-
Stage 1	805	722	-	798	729	-	-	-	-	-	-	-
Stage 2	591	679	-	749	714	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.9	10.5	1.2	3.3
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1526	-	-	530	532	919	1392	-	-
HCM Lane V/C Ratio	0.024	-	-	0.142	0.104	0.158	0.041	-	-
HCM Control Delay (s)	7.4	-	-	12.9	12.6	9.7	7.7	-	-
HCM Lane LOS	A	-	-	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.3	0.6	0.1	-	-

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	89	57	78	133	93	70
Future Vol, veh/h	89	57	78	133	93	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	97	62	85	145	101	76
Number of Lanes	1	1	1	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay	9.2	9.2	8.3
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	78	133	89	57	93	70
LT Vol	78	0	89	0	0	0
Through Vol	0	133	0	0	93	0
RT Vol	0	0	0	57	0	70
Lane Flow Rate	85	145	97	62	101	76
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.133	0.206	0.161	0.083	0.146	0.095
Departure Headway (Hd)	5.637	5.134	6.006	4.8	5.203	4.498
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	636	698	597	744	688	794
Service Time	3.373	2.87	3.749	2.543	2.942	2.237
HCM Lane V/C Ratio	0.134	0.208	0.162	0.083	0.147	0.096
HCM Control Delay	9.2	9.2	9.9	8	8.8	7.7
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.5	0.8	0.6	0.3	0.5	0.3

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	64	19	41	0	24	0	17	2	0	0	2	65
Future Vol, veh/h	64	19	41	0	24	0	17	2	0	0	2	65
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	70	21	45	0	26	0	18	2	0	0	2	71

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	26	0	0	66	0	0	247	210	44	211	232	26
Stage 1	-	-	-	-	-	-	184	184	-	26	26	-
Stage 2	-	-	-	-	-	-	63	26	-	185	206	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1588	-	-	1536	-	-	707	687	1026	746	668	1050
Stage 1	-	-	-	-	-	-	818	747	-	992	874	-
Stage 2	-	-	-	-	-	-	948	874	-	817	731	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1588	-	-	1536	-	-	635	655	1026	718	637	1050
Mov Cap-2 Maneuver	-	-	-	-	-	-	635	655	-	718	637	-
Stage 1	-	-	-	-	-	-	780	713	-	946	874	-
Stage 2	-	-	-	-	-	-	882	874	-	777	697	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.8	0	10.8	8.8
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	637	1588	-	-	1536	-	-	1030
HCM Lane V/C Ratio	0.032	0.044	-	-	-	-	-	0.071
HCM Control Delay (s)	10.8	7.4	0	-	0	-	-	8.8
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	458	170	253	44	115	128	148	1980	20	235	2492	506
Future Volume (vph)	458	170	253	44	115	128	148	1980	20	235	2492	506
Satd. Flow (prot)	3433	1863	1583	1770	3260	0	3433	5075	0	1770	5085	1583
Flt Permitted	0.280			0.641			0.068			0.063		
Satd. Flow (perm)	1012	1863	1583	1194	3260	0	246	5075	0	117	5085	1583
Satd. Flow (RTOR)			164		139			2				431
Lane Group Flow (vph)	498	185	275	48	264	0	161	2174	0	255	2709	550
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		4	8			6			2		2
Detector Phase	7	4	4	3	8		1	6		5	2	2
Switch Phase												
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0		3.0	20.0		3.0	20.0	20.0
Minimum Split (s)	10.0	11.0	11.0	10.0	11.0		10.0	26.0		10.0	26.0	26.0
Total Split (s)	20.0	25.0	25.0	10.0	15.0		10.0	64.0		21.0	75.0	75.0
Total Split (%)	16.7%	20.8%	20.8%	8.3%	12.5%		8.3%	53.3%		17.5%	62.5%	62.5%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0		3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	29.3	20.3	20.3	14.3	8.3		65.8	59.5		80.7	69.4	69.4
Actuated g/C Ratio	0.24	0.17	0.17	0.12	0.07		0.55	0.50		0.67	0.58	0.58
v/c Ratio	0.91	0.59	0.68	0.29	0.75		0.58	0.86		0.89	0.92	0.50
Control Delay	62.3	55.3	28.7	40.8	39.2		22.8	31.6		62.1	29.5	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	62.3	55.3	28.7	40.8	39.2		22.8	31.6		62.1	29.5	4.7
LOS	E	E	C	D	D		C	C		E	C	A
Approach Delay		51.3			39.5			31.0			28.0	
Approach LOS		D			D			C			C	
Queue Length 50th (ft)	175	135	80	29	50		20	541		142	664	40
Queue Length 95th (ft)	#238	215	181	61	96		48	616		#288	749	109
Internal Link Dist (ft)		695			413			423			624	
Turn Bay Length (ft)	285		285	195			175			455		
Base Capacity (vph)	549	316	404	166	373		277	2516		300	2939	1097
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	0.91	0.59	0.68	0.29	0.71		0.58	0.86		0.85	0.92	0.50

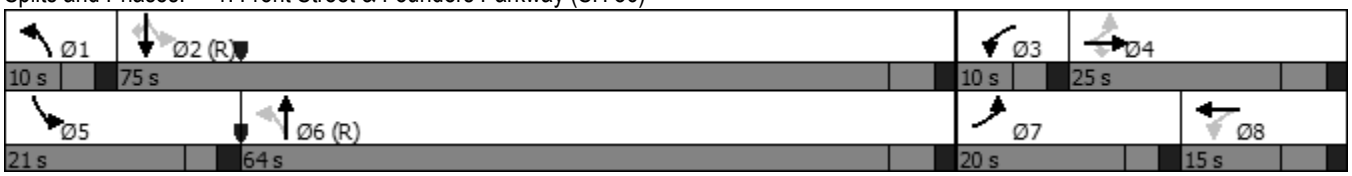
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 112 (93%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay: 32.6	Intersection LOS: C
Intersection Capacity Utilization 91.1%	ICU Level of Service F
Analysis Period (min) 15	

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

Splits and Phases: 1: Front Street & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	555	3108	354	69	2314	185	232	41	51	98	89	618
Future Volume (vph)	555	3108	354	69	2314	185	232	41	51	98	89	618
Satd. Flow (prot)	3433	5085	1583	1770	5085	1583	3433	1708	0	3433	1863	2787
Flt Permitted	0.950			0.068			0.694			0.586		
Satd. Flow (perm)	3433	5085	1583	127	5085	1583	2508	1708	0	2118	1863	2787
Satd. Flow (RTOR)			293			149		40				497
Lane Group Flow (vph)	603	3378	385	75	2515	201	252	100	0	107	97	672
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases			2	6		6	4			8		8
Detector Phase	5	2	2	1	6	6	7	4		3	8	8
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	26.0	26.0	10.0	26.0	26.0	10.0	11.0		11.0	11.0	11.0
Total Split (s)	26.0	84.0	84.0	10.0	68.0	68.0	10.0	15.0		11.0	16.0	16.0
Total Split (%)	21.7%	70.0%	70.0%	8.3%	56.7%	56.7%	8.3%	12.5%		9.2%	13.3%	13.3%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0		5.0	6.0	6.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	None
Act Effct Green (s)	21.0	80.0	80.0	63.0	62.0	62.0	15.0	9.0		17.0	10.0	10.0
Actuated g/C Ratio	0.18	0.67	0.67	0.52	0.52	0.52	0.12	0.08		0.14	0.08	0.08
v/c Ratio	1.00	1.00	0.33	0.56	0.96	0.23	0.72	0.61		0.29	0.63	0.98
Control Delay	62.7	24.4	3.9	51.1	38.2	5.2	58.8	49.2		46.4	71.8	47.0
Queue Delay	0.0	39.5	0.8	0.0	3.4	0.0	0.0	0.0		0.0	0.0	2.0
Total Delay	62.7	63.9	4.7	51.1	41.5	5.2	58.8	49.2		46.4	71.8	49.0
LOS	E	E	A	D	D	A	E	D		D	E	D
Approach Delay		58.5			39.2			56.1			51.2	
Approach LOS		E			D			E			D	
Queue Length 50th (ft)	~251	~1012	49	28	658	19	90	45		38	74	92
Queue Length 95th (ft)	m218	m500	m33	#62	#769	59	#134	#112		m68	m#135	#251
Internal Link Dist (ft)		347			406			277			368	
Turn Bay Length (ft)	300			330			80			120		100
Base Capacity (vph)	600	3390	1153	135	2627	889	352	165		365	155	687
Starvation Cap Reductn	0	777	475	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	79	0	0	0		0	0	7
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.00	1.29	0.57	0.56	0.99	0.23	0.72	0.61		0.29	0.63	0.99

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 107 (89%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.00

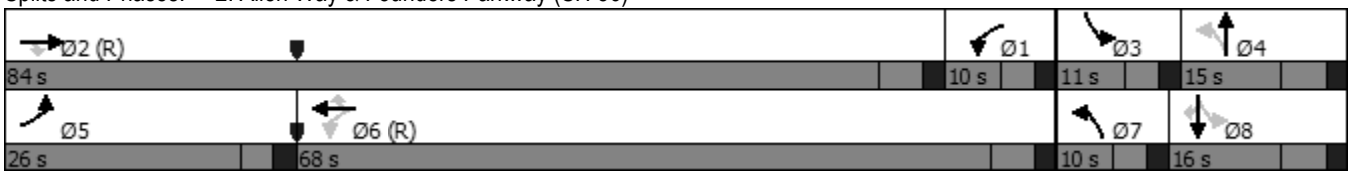
Intersection Signal Delay: 51.2	Intersection LOS: D
Intersection Capacity Utilization 91.7%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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

Splits and Phases: 2: Allen Way & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	3504	834	0	1753	1432	592	0	524	0	0	0
Future Volume (vph)	0	3504	834	0	1753	1432	592	0	524	0	0	0
Satd. Flow (prot)	0	4787	1362	0	3285	1441	3433	0	2787	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	4787	1362	0	3285	1441	3433	0	2787	0	0	0
Satd. Flow (RTOR)		7	362		64	425			27			
Lane Group Flow (vph)	0	3900	816	0	2403	1059	643	0	570	0	0	0
Turn Type		NA	Free		NA	Free	Prot		Prot			
Protected Phases		2			2		4		4			
Permitted Phases			Free			Free						
Detector Phase		2			2		4		4			
Switch Phase												
Minimum Initial (s)		20.0			20.0		5.0		5.0			
Minimum Split (s)		26.0			26.0		10.5		10.5			
Total Split (s)		92.0			92.0		28.0		28.0			
Total Split (%)		76.7%			76.7%		23.3%		23.3%			
Yellow Time (s)		4.0			4.0		3.5		3.5			
All-Red Time (s)		2.0			2.0		2.0		2.0			
Lost Time Adjust (s)		0.0			0.0		0.0		0.0			
Total Lost Time (s)		6.0			6.0		5.5		5.5			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		C-Max			C-Max		None		None			
Act Effct Green (s)		86.0	120.0		86.0	120.0	22.5		22.5			
Actuated g/C Ratio		0.72	1.00		0.72	1.00	0.19		0.19			
v/c Ratio		1.14	0.60		1.01	0.73	1.00		1.05			
Control Delay		84.9	2.0		24.8	7.5	84.4		96.7			
Queue Delay		0.1	0.0		34.1	0.0	0.0		34.9			
Total Delay		85.1	2.0		58.9	7.5	84.4		131.6			
LOS		F	A		E	A	F		F			
Approach Delay		70.7			43.2			106.6				
Approach LOS		E			D			F				
Queue Length 50th (ft)		~1368	0		~271	760	259		~262			
Queue Length 95th (ft)		#1443	0		m#1193	m823	#384		#390			
Internal Link Dist (ft)		649			347			213			215	
Turn Bay Length (ft)			500						100			
Base Capacity (vph)		3432	1362		2372	1441	643		544			
Starvation Cap Reductn		0	0		267	0	0		0			
Spillback Cap Reductn		253	0		0	0	0		390			
Storage Cap Reductn		0	0		0	0	0		0			
Reduced v/c Ratio		1.23	0.60		1.14	0.73	1.00		3.70			

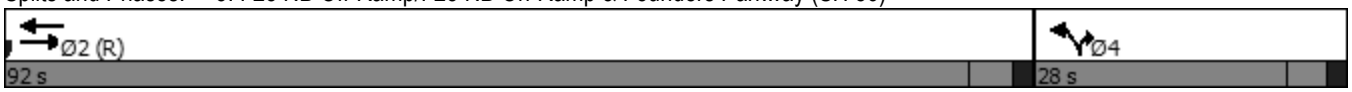
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 106 (88%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

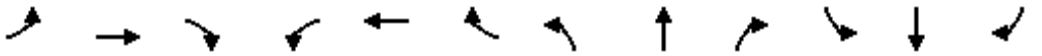
Maximum v/c Ratio: 1.14

Intersection Signal Delay: 65.2	Intersection LOS: E
Intersection Capacity Utilization 101.8%	ICU Level of Service G
Analysis Period (min) 15	

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

Splits and Phases: 3: I-25 NB Off-Ramp/I-25 NB On-Ramp & Founders Parkway (SH 86)





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	88	125	233	35	65	214	463	135	26	507	14
Future Volume (vph)	2	88	125	233	35	65	214	463	135	26	507	14
Satd. Flow (prot)	1770	1699	0	1770	1863	1583	1770	3539	1583	0	3518	0
Flt Permitted	0.581			0.614			0.388				0.918	
Satd. Flow (perm)	1082	1699	0	1144	1863	1583	723	3539	1583	0	3236	0
Satd. Flow (RTOR)		131				218			218		6	
Lane Group Flow (vph)	2	232	0	253	38	71	233	503	147	0	594	0
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm	D.P+P	NA	
Protected Phases	3	8			4			6		5	2	
Permitted Phases	8			4		4	6		6	6		
Detector Phase	3	8		4	4	4	6	6	6	5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0	8.0	10.0	
Total Split (s)	8.0	26.0		18.0	18.0	18.0	26.0	26.0	26.0	8.0	34.0	
Total Split (%)	13.3%	43.3%		30.0%	30.0%	30.0%	43.3%	43.3%	43.3%	13.3%	56.7%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0		5.0	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None	None	C-Min	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	20.8	20.8		19.2	19.2	19.2	29.2	29.2	29.2		29.2	
Actuated g/C Ratio	0.35	0.35		0.32	0.32	0.32	0.49	0.49	0.49		0.49	
v/c Ratio	0.00	0.34		0.69	0.06	0.11	0.66	0.29	0.17		0.38	
Control Delay	13.0	8.3		33.8	16.2	0.3	24.1	6.1	0.6		10.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	13.0	8.3		33.8	16.2	0.3	24.1	6.1	0.6		10.5	
LOS	B	A		C	B	A	C	A	A		B	
Approach Delay		8.3			25.4			9.9			10.5	
Approach LOS		A			C			A			B	
Queue Length 50th (ft)	1	25		74	9	0	68	35	1		65	
Queue Length 95th (ft)	4	68		#223	32	0	m95	m44	m0		98	
Internal Link Dist (ft)		422			420			368			300	
Turn Bay Length (ft)	60			95		65	70		95			
Base Capacity (vph)	420	680		365	595	653	352	1724	883		1581	
Starvation Cap Reductn	0	0		0	0	0	0	0	0		0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0		0	
Storage Cap Reductn	0	0		0	0	0	0	0	0		0	
Reduced v/c Ratio	0.00	0.34		0.69	0.06	0.11	0.66	0.29	0.17		0.38	

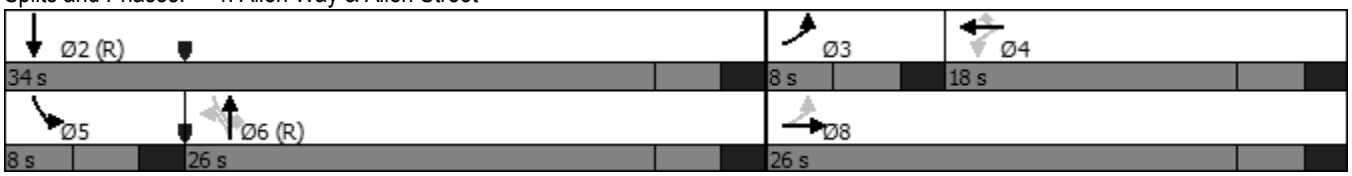
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 31 (52%), Referenced to phase 2:SBT and 6:NBSB, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 12.6	Intersection LOS: B
Intersection Capacity Utilization 69.9%	ICU Level of Service C
Analysis Period (min) 15	

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

Splits and Phases: 4: Allen Way & Allen Street



Intersection	
Int Delay, s/veh	12.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	84	18	75	136	11	101	82	151	147	80	145	24
Future Vol, veh/h	84	18	75	136	11	101	82	151	147	80	145	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	60	-	-	75	-	75	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	91	20	82	148	12	110	89	164	160	87	158	26

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	828	847	171	738	700	164	184	0	0	324	0	0
Stage 1	345	345	-	342	342	-	-	-	-	-	-	-
Stage 2	483	502	-	396	358	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	290	299	873	334	363	881	1391	-	-	1236	-	-
Stage 1	671	636	-	673	638	-	-	-	-	-	-	-
Stage 2	565	542	-	629	628	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	222	260	873	257	316	881	1391	-	-	1236	-	-
Mov Cap-2 Maneuver	222	260	-	257	316	-	-	-	-	-	-	-
Stage 1	628	591	-	630	597	-	-	-	-	-	-	-
Stage 2	454	507	-	513	584	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	29.8	24.8	1.7	2.6
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1391	-	-	332	257	749	1236	-	-
HCM Lane V/C Ratio	0.064	-	-	0.579	0.575	0.163	0.07	-	-
HCM Control Delay (s)	7.8	-	-	29.8	36.4	10.7	8.1	-	-
HCM Lane LOS	A	-	-	D	E	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	3.5	3.3	0.6	0.2	-	-

Intersection	
Intersection Delay, s/veh	14.1
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	249	185	115	222	219	167
Future Vol, veh/h	249	185	115	222	219	167
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	271	201	125	241	238	182
Number of Lanes	1	1	1	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay	15.3	13.9	13
HCM LOS	C	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	115	222	249	185	219	167
LT Vol	115	0	249	0	0	0
Through Vol	0	222	0	0	219	0
RT Vol	0	0	0	185	0	167
Lane Flow Rate	125	241	271	201	238	182
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.248	0.445	0.538	0.332	0.437	0.297
Departure Headway (Hd)	7.147	6.636	7.161	5.945	6.604	5.89
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	501	541	503	603	543	608
Service Time	4.914	4.403	4.921	3.704	4.369	3.655
HCM Lane V/C Ratio	0.25	0.445	0.539	0.333	0.438	0.299
HCM Control Delay	12.3	14.7	18	11.7	14.4	11.2
HCM Lane LOS	B	B	C	B	B	B
HCM 95th-tile Q	1	2.3	3.1	1.4	2.2	1.2

Intersection	
Int Delay, s/veh	8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	191	31	9	0	31	0	29	2	0	0	2	202
Future Vol, veh/h	191	31	9	0	31	0	29	2	0	0	2	202
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	208	34	10	0	34	0	32	2	0	0	2	220

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	34	0	0	44	0	0	600	489	39	490	494	34
Stage 1	-	-	-	-	-	-	455	455	-	34	34	-
Stage 2	-	-	-	-	-	-	145	34	-	456	460	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1578	-	-	1564	-	-	413	480	1033	489	476	1039
Stage 1	-	-	-	-	-	-	585	569	-	982	867	-
Stage 2	-	-	-	-	-	-	858	867	-	584	566	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1578	-	-	1564	-	-	291	415	1033	437	412	1039
Mov Cap-2 Maneuver	-	-	-	-	-	-	291	415	-	437	412	-
Stage 1	-	-	-	-	-	-	506	492	-	849	867	-
Stage 2	-	-	-	-	-	-	675	867	-	503	490	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	6.3	0	18.7	9.5
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	297	1578	-	-	1564	-	-	1024
HCM Lane V/C Ratio	0.113	0.132	-	-	-	-	-	0.217
HCM Control Delay (s)	18.7	7.6	0	-	0	-	-	9.5
HCM Lane LOS	C	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.4	0.5	-	-	0	-	-	0.8

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	228	2026	562	162	2219	57	497	159	207	66	174	133
Future Volume (vph)	228	2026	562	162	2219	57	497	159	207	66	174	133
Satd. Flow (prot)	1770	5085	1583	3433	5065	0	3433	1863	1583	1770	3309	0
Flt Permitted	0.078			0.086			0.296			0.648		
Satd. Flow (perm)	145	5085	1583	311	5065	0	1070	1863	1583	1207	3309	0
Satd. Flow (RTOR)			420		5				172		110	
Lane Group Flow (vph)	248	2202	611	176	2474	0	540	173	225	72	334	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4		4	8		
Detector Phase	5	2	2	1	6		7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	3.0	20.0	20.0	3.0	20.0		3.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	10.0	26.0	26.0	10.0	26.0		10.0	11.0	11.0	10.0	11.0	
Total Split (s)	16.0	58.5	58.5	11.0	53.5		17.0	18.5	18.5	12.0	13.5	
Total Split (%)	16.0%	58.5%	58.5%	11.0%	53.5%		17.0%	18.5%	18.5%	12.0%	13.5%	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0	6.0	5.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	
Act Effct Green (s)	64.5	52.5	52.5	54.5	47.5		25.5	14.9	14.9	15.2	7.5	
Actuated g/C Ratio	0.64	0.52	0.52	0.54	0.48		0.26	0.15	0.15	0.15	0.08	
v/c Ratio	0.91	0.83	0.59	0.49	1.03		0.97	0.62	0.59	0.33	0.96	
Control Delay	45.5	30.6	14.1	14.1	52.6		66.9	52.7	18.8	33.8	70.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	45.5	30.6	14.1	14.1	52.6		66.9	52.7	18.8	33.8	70.6	
LOS	D	C	B	B	D		E	D	B	C	E	
Approach Delay		28.5			50.0			52.7			64.0	
Approach LOS		C			D			D			E	
Queue Length 50th (ft)	127	435	163	19	~620		157	108	31	36	75	
Queue Length 95th (ft)	m#163	m493	m222	35	#717		#233	#209	109	72	#166	
Internal Link Dist (ft)		1018			611			608			363	
Turn Bay Length (ft)	455			175			285		285	195		
Base Capacity (vph)	272	2669	1030	356	2408		556	277	382	226	349	
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.91	0.83	0.59	0.49	1.03		0.97	0.62	0.59	0.32	0.96	

Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 62 (62%), Referenced to phase 2:SETL and 6:NWTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.03

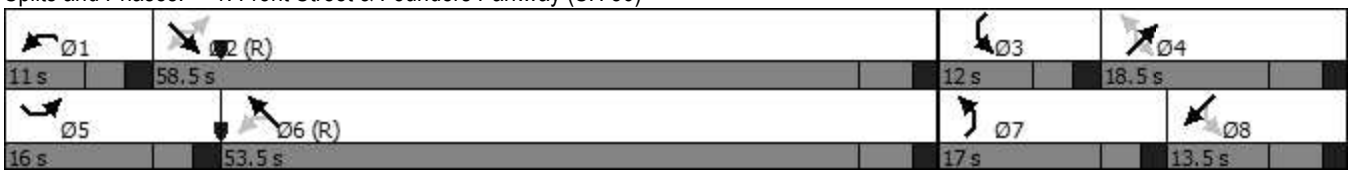
Intersection Signal Delay: 41.9	Intersection LOS: D
Intersection Capacity Utilization 98.4%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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

Splits and Phases: 1: Front Street & Founders Parkway (SH 86)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	688	2491	323	64	2482	289	269	53	128	200	57	744
Future Volume (vph)	688	2491	323	64	2482	289	269	53	128	200	57	744
Satd. Flow (prot)	3433	5085	1583	1770	5085	1583	3433	1665	0	3433	1863	2787
Flt Permitted	0.950			0.091			0.717			0.571		
Satd. Flow (perm)	3433	5085	1583	170	5085	1583	2591	1665	0	2063	1863	2787
Satd. Flow (RTOR)			350			237		78				537
Lane Group Flow (vph)	748	2708	351	70	2698	314	292	197	0	217	62	809
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases			2	6		6	4			8		8
Detector Phase	5	2	2	1	6	6	7	4		3	8	8
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	26.0	26.0	10.0	26.0	26.0	10.0	11.0		11.0	11.0	11.0
Total Split (s)	23.0	66.0	66.0	10.0	53.0	53.0	11.0	12.0		12.0	13.0	13.0
Total Split (%)	23.0%	66.0%	66.0%	10.0%	53.0%	53.0%	11.0%	12.0%		12.0%	13.0%	13.0%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0		5.0	6.0	6.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	None
Act Effct Green (s)	18.0	62.0	62.0	48.0	47.0	47.0	13.0	6.0		15.0	7.0	7.0
Actuated g/C Ratio	0.18	0.62	0.62	0.48	0.47	0.47	0.13	0.06		0.15	0.07	0.07
v/c Ratio	1.21	0.86	0.32	0.43	1.13	0.36	0.75	1.14		0.54	0.48	1.17
Control Delay	138.7	13.4	1.3	20.0	78.5	2.0	51.1	138.1		40.7	57.4	105.1
Queue Delay	0.0	12.7	0.0	0.0	0.1	0.0	9.4	0.0		0.0	0.0	1.6
Total Delay	138.7	26.0	1.3	20.0	78.6	2.0	60.4	138.1		40.7	57.4	106.6
LOS	F	C	A	B	E	A	E	F		D	E	F
Approach Delay		45.9			69.5			91.7			90.7	
Approach LOS		D			E			F			F	
Queue Length 50th (ft)	~302	371	9	14	~734	25	85	~97		62	39	~154
Queue Length 95th (ft)	m#296	m360	m9	m14	m#717	m24	#137	#240		96	82	#288
Internal Link Dist (ft)		399			1018			243			294	
Turn Bay Length (ft)	300			330			90			120		100
Base Capacity (vph)	617	3153	1114	163	2389	869	387	173		405	130	694
Starvation Cap Reductn	0	486	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	78	0	68	0		0	0	138
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.21	1.02	0.32	0.43	1.17	0.36	0.92	1.14		0.54	0.48	1.46

Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.21

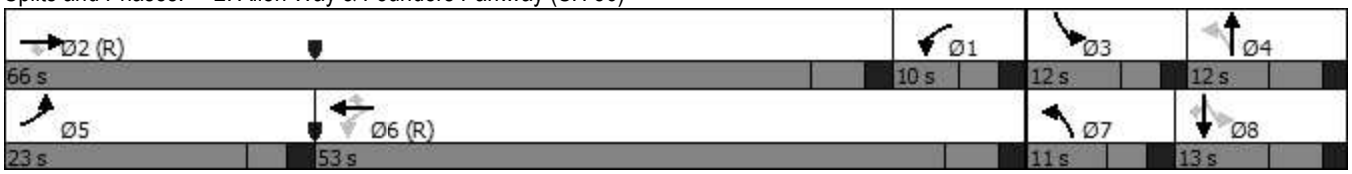
Intersection Signal Delay: 62.9	Intersection LOS: E
Intersection Capacity Utilization 102.3%	ICU Level of Service G
Analysis Period (min) 15	

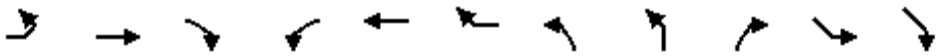
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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

Splits and Phases: 2: Allen Way & Founders Parkway (SH 86)





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL2	NBL	NBR	SEL	SER
Lane Configurations											
Traffic Volume (vph)	0	2936	738	0	1987	1518	760	0	570	0	0
Future Volume (vph)	0	2936	738	0	1987	1518	760	0	570	0	0
Satd. Flow (prot)	0	4787	1362	0	3295	1441	3433	0	2787	0	0
Flt Permitted							0.950				
Satd. Flow (perm)	0	4787	1362	0	3295	1441	3433	0	2787	0	0
Satd. Flow (RTOR)		8	459		58	474			33		
Lane Group Flow (vph)	0	3271	722	0	2655	1155	826	0	620	0	0
Turn Type		NA	Free		NA	Free	Prot		Prot		
Protected Phases		2			2		4		4		
Permitted Phases			Free			Free					
Detector Phase		2			2		4		4		
Switch Phase											
Minimum Initial (s)		20.0			20.0		5.0		5.0		
Minimum Split (s)		26.0			26.0		10.5		10.5		
Total Split (s)		74.0			74.0		26.0		26.0		
Total Split (%)		74.0%			74.0%		26.0%		26.0%		
Yellow Time (s)		4.0			4.0		3.5		3.5		
All-Red Time (s)		2.0			2.0		2.0		2.0		
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		
Total Lost Time (s)		6.0			6.0		5.5		5.5		
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode		C-Max			C-Max		None		None		
Act Effct Green (s)		68.0	100.0		68.0	100.0	20.5		20.5		
Actuated g/C Ratio		0.68	1.00		0.68	1.00	0.20		0.20		
v/c Ratio		1.00	0.53		1.18	0.80	1.17		1.04		
Control Delay		33.6	1.5		98.1	9.5	129.9		85.0		
Queue Delay		28.5	0.0		0.0	0.0	0.0		0.6		
Total Delay		62.1	1.5		98.1	9.5	129.9		85.6		
LOS		E	A		F	A	F		F		
Approach Delay		51.1			71.2			110.9			
Approach LOS		D			E			F			
Queue Length 50th (ft)		~733	0		~1091	297	~326		~233		
Queue Length 95th (ft)		#944	0		m#450	m114	#444		#356		
Internal Link Dist (ft)		429			399			361		299	
Turn Bay Length (ft)			500						100		
Base Capacity (vph)		3257	1362		2259	1441	703		597		
Starvation Cap Reductn		0	0		0	0	0		0		
Spillback Cap Reductn		228	0		0	0	0		1		
Storage Cap Reductn		0	0		0	0	0		0		
Reduced v/c Ratio		1.08	0.53		1.18	0.80	1.17		1.04		

Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 80 (80%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.18

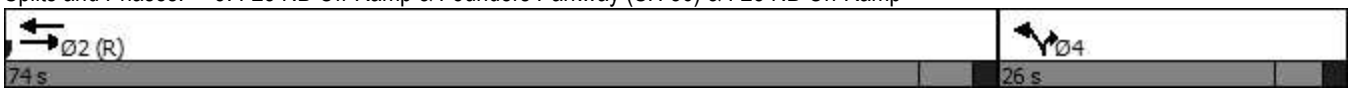
Intersection Signal Delay: 68.7	Intersection LOS: E
Intersection Capacity Utilization 101.1%	ICU Level of Service G
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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

Splits and Phases: 3: I-25 NB Off-Ramp & Founders Parkway (SH 86) & I-25 NB On-Ramp



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	79	198	209	80	102	226	559	130	83	518	5
Future Volume (vph)	14	79	198	209	80	102	226	559	130	83	518	5
Satd. Flow (prot)	1770	1663	0	1770	1863	1583	1770	3539	1583	0	3511	0
Flt Permitted	0.551			0.577			0.353				0.791	
Satd. Flow (perm)	1026	1663	0	1075	1863	1583	658	3539	1583	0	2797	0
Satd. Flow (RTOR)		215				218			218		2	
Lane Group Flow (vph)	15	301	0	227	87	111	246	608	141	0	658	0
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm	D.P+P	NA	
Protected Phases	3	8			4			6		5	2	
Permitted Phases	8			4		4	6		6	6		
Detector Phase	3	8		4	4	4	6	6	6	5	2	
Switch Phase												
Minimum Initial (s)	3.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0	
Minimum Split (s)	8.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0	8.0	10.0	
Total Split (s)	8.0	25.0		17.0	17.0	17.0	27.0	27.0	27.0	8.0	35.0	
Total Split (%)	13.3%	41.7%		28.3%	28.3%	28.3%	45.0%	45.0%	45.0%	13.3%	58.3%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0		5.0	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None	None	C-Min	C-Min	C-Min	None	C-Min	
Act Effct Green (s)	20.1	20.1		18.5	18.5	18.5	29.9	29.9	29.9		29.9	
Actuated g/C Ratio	0.34	0.34		0.31	0.31	0.31	0.50	0.50	0.50		0.50	
v/c Ratio	0.04	0.43		0.69	0.15	0.17	0.75	0.34	0.16		0.47	
Control Delay	13.9	7.2		35.3	17.6	0.6	30.3	9.8	0.8		11.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	13.9	7.2		35.3	17.6	0.6	30.3	9.8	0.8		11.2	
LOS	B	A		D	B	A	C	A	A		B	
Approach Delay		7.5			22.6			13.6			11.2	
Approach LOS		A			C			B			B	
Queue Length 50th (ft)	4	21		68	22	0	66	64	0		75	
Queue Length 95th (ft)	14	72		#210	60	1	#184	95	8		113	
Internal Link Dist (ft)		422			385			294			300	
Turn Bay Length (ft)	60			95		65	70		95			
Base Capacity (vph)	387	699		331	574	639	328	1763	898		1399	
Starvation Cap Reductn	0	0		0	0	0	0	0	0		0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0		0	
Storage Cap Reductn	0	0		0	0	0	0	0	0		0	
Reduced v/c Ratio	0.04	0.43		0.69	0.15	0.17	0.75	0.34	0.16		0.47	

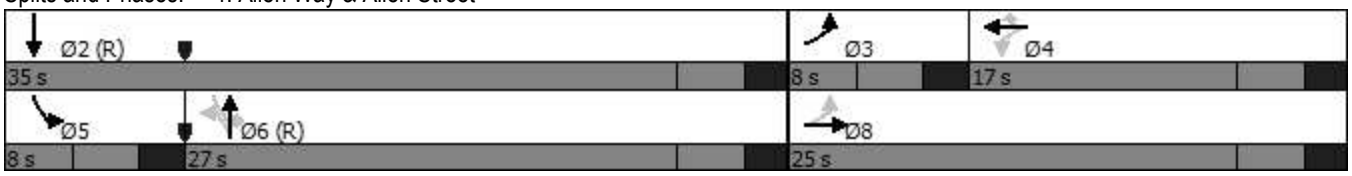
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 31 (52%), Referenced to phase 2:SBT and 6:NBSB, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 13.7	Intersection LOS: B
Intersection Capacity Utilization 76.9%	ICU Level of Service D
Analysis Period (min) 15	

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

Splits and Phases: 4: Allen Way & Allen Street



Intersection	
Int Delay, s/veh	24.6

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	83	192	38	82	194	161	110	6	70	197	10	78
Future Vol, veh/h	83	192	38	82	194	161	110	6	70	197	10	78
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	80	-	-	75	-	75	-	-	-	60	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	90	209	41	89	211	175	120	7	76	214	11	85

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	386	0	0	250	0	0	935	974	230	840	819	211
Stage 1	-	-	-	-	-	-	410	410	-	389	389	-
Stage 2	-	-	-	-	-	-	525	564	-	451	430	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1172	-	-	1316	-	-	246	252	809	285	310	829
Stage 1	-	-	-	-	-	-	619	595	-	635	608	-
Stage 2	-	-	-	-	-	-	536	508	-	588	583	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1172	-	-	1316	-	-	191	217	809	225	267	829
Mov Cap-2 Maneuver	-	-	-	-	-	-	191	217	-	225	267	-
Stage 1	-	-	-	-	-	-	571	549	-	586	567	-
Stage 2	-	-	-	-	-	-	440	473	-	486	538	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	2.2	1.5	49.5	68.2
HCM LOS			E	F

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1	SWLn2
Capacity (veh/h)	270	1316	-	-	1172	-	-	225	669
HCM Lane V/C Ratio	0.749	0.068	-	-	0.077	-	-	0.952	0.143
HCM Control Delay (s)	49.5	7.9	-	-	8.3	-	-	93.6	11.3
HCM Lane LOS	E	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	5.4	0.2	-	-	0.2	-	-	8.3	0.5

Intersection	
Intersection Delay, s/veh	17.3
Intersection LOS	C

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	244	262	118	257	295	142
Future Vol, veh/h	244	262	118	257	295	142
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	265	285	128	279	321	154
Number of Lanes	1	1	1	1	1	1

Approach	SE	NW	NE
Opposing Approach	NW	SE	
Opposing Lanes	2	2	0
Conflicting Approach Left		NE	SE
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NE		NW
Conflicting Lanes Right	2	0	2
HCM Control Delay	15.5	16.3	20.3
HCM LOS	C	C	C

Lane	NELn1	NELn2	NWLn1	NWLn2	SELn1	SELn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	0%	0%	100%	100%	0%
Vol Right, %	0%	100%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	295	142	118	257	244	262
LT Vol	295	0	118	0	0	0
Through Vol	0	0	0	257	244	0
RT Vol	0	142	0	0	0	262
Lane Flow Rate	321	154	128	279	265	285
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.672	0.271	0.267	0.542	0.504	0.485
Departure Headway (Hd)	7.548	6.327	7.495	6.983	6.845	6.129
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	478	565	476	514	522	584
Service Time	5.327	4.106	5.29	4.778	4.635	3.918
HCM Lane V/C Ratio	0.672	0.273	0.269	0.543	0.508	0.488
HCM Control Delay	24.6	11.5	13	17.8	16.5	14.6
HCM Lane LOS	C	B	B	C	C	B
HCM 95th-tile Q	4.9	1.1	1.1	3.2	2.8	2.6

Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	230	28	5	0	45	0	3	0	0	0	0	258
Future Vol, veh/h	230	28	5	0	45	0	3	0	0	0	0	258
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	250	30	5	0	49	0	3	0	0	0	0	280

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	49	0	0	35	0	0	722	582	33	582	584	49
Stage 1	-	-	-	-	-	-	533	533	-	49	49	-
Stage 2	-	-	-	-	-	-	189	49	-	533	535	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1558	-	-	1576	-	-	342	425	1041	424	423	1020
Stage 1	-	-	-	-	-	-	531	525	-	964	854	-
Stage 2	-	-	-	-	-	-	813	854	-	531	524	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1558	-	-	1576	-	-	217	355	1041	371	354	1020
Mov Cap-2 Maneuver	-	-	-	-	-	-	217	355	-	371	354	-
Stage 1	-	-	-	-	-	-	444	439	-	806	854	-
Stage 2	-	-	-	-	-	-	589	854	-	444	438	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	6.8	0	21.8	9.9
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	217	1558	-	-	1576	-	-	1020
HCM Lane V/C Ratio	0.015	0.16	-	-	-	-	-	0.275
HCM Control Delay (s)	21.8	7.8	0	-	0	-	-	9.9
HCM Lane LOS	C	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0.6	-	-	0	-	-	1.1

APPENDIX D

Capacity Worksheets – E Allen Street & Alexander Place

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	4	26	51	4	130	33	103	65	52	47	21
Future Vol, veh/h	39	4	26	51	4	130	33	103	65	52	47	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	42	4	28	55	4	141	36	112	71	57	51	23
Number of Lanes	0	1	0	1	1	0	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	1
HCM Control Delay	9.6	9.3	9.2	9.4
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	57%	100%	0%	100%	0%
Vol Thru, %	0%	100%	0%	6%	0%	3%	0%	69%
Vol Right, %	0%	0%	100%	38%	0%	97%	0%	31%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	33	103	65	69	51	134	52	68
LT Vol	33	0	0	39	51	0	52	0
Through Vol	0	103	0	4	0	4	0	47
RT Vol	0	0	65	26	0	130	0	21
Lane Flow Rate	36	112	71	75	55	146	57	74
Geometry Grp	8	8	8	8	8	8	8	8
Degree of Util (X)	0.062	0.178	0.097	0.126	0.097	0.202	0.1	0.117
Departure Headway (Hd)	6.233	5.729	5.027	6.044	6.28	5.103	6.399	5.675
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	578	629	717	595	573	708	562	634
Service Time	3.937	3.433	2.727	3.762	3.987	2.803	4.113	3.389
HCM Lane V/C Ratio	0.062	0.178	0.099	0.126	0.096	0.206	0.101	0.117
HCM Control Delay	9.3	9.7	8.3	9.6	9.7	9.1	9.8	9.1
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0.6	0.3	0.4	0.3	0.8	0.3	0.4

Intersection	
Intersection Delay, s/veh	4.4
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	74	200	219	131
Demand Flow Rate, veh/h	76	204	223	133
Vehicles Circulating, veh/h	166	194	105	97
Vehicles Exiting, veh/h	64	134	137	301
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	3.7	4.9	4.5	3.8
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	76	204	223	133
Cap Entry Lane, veh/h	1165	1132	1240	1250
Entry HV Adj Factor	0.973	0.980	0.981	0.985
Flow Entry, veh/h	74	200	219	131
Cap Entry, veh/h	1133	1110	1216	1231
V/C Ratio	0.065	0.180	0.180	0.106
Control Delay, s/veh	3.7	4.9	4.5	3.8
LOS	A	A	A	A
95th %tile Queue, veh	0	1	1	0

Intersection	
Intersection Delay, s/veh	13.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	84	18	75	136	11	101	82	151	147	80	145	24
Future Vol, veh/h	84	18	75	136	11	101	82	151	147	80	145	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	91	20	82	148	12	110	89	164	160	87	158	26
Number of Lanes	0	1	0	1	1	0	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	1
HCM Control Delay	15.7	13.4	12.7	14.1
HCM LOS	C	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	47%	100%	0%	100%	0%
Vol Thru, %	0%	100%	0%	10%	0%	10%	0%	86%
Vol Right, %	0%	0%	100%	42%	0%	90%	0%	14%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	82	151	147	177	136	112	80	169
LT Vol	82	0	0	84	136	0	80	0
Through Vol	0	151	0	18	0	11	0	145
RT Vol	0	0	147	75	0	101	0	24
Lane Flow Rate	89	164	160	192	148	122	87	184
Geometry Grp	8	8	8	8	8	8	8	8
Degree of Util (X)	0.192	0.331	0.29	0.41	0.331	0.234	0.195	0.38
Departure Headway (Hd)	7.762	7.251	6.536	7.673	8.067	6.916	8.065	7.449
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	462	496	550	469	445	519	444	483
Service Time	5.515	5.003	4.287	5.431	5.824	4.672	5.821	5.205
HCM Lane V/C Ratio	0.193	0.331	0.291	0.409	0.333	0.235	0.196	0.381
HCM Control Delay	12.4	13.6	12	15.7	14.8	11.8	12.8	14.7
HCM Lane LOS	B	B	B	C	B	B	B	B
HCM 95th-tile Q	0.7	1.4	1.2	2	1.4	0.9	0.7	1.8

Intersection	
Intersection Delay, s/veh	6.6
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	193	270	413	271
Demand Flow Rate, veh/h	197	275	421	277
Vehicles Circulating, veh/h	401	351	202	254
Vehicles Exiting, veh/h	130	272	396	372
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.2	6.7	7.1	6.0
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	197	275	421	277
Cap Entry Lane, veh/h	917	965	1123	1065
Entry HV Adj Factor	0.978	0.981	0.980	0.978
Flow Entry, veh/h	193	270	413	271
Cap Entry, veh/h	896	946	1101	1041
V/C Ratio	0.215	0.285	0.375	0.260
Control Delay, s/veh	6.2	6.7	7.1	6.0
LOS	A	A	A	A
95th %tile Queue, veh	1	1	2	1

Intersection	
Intersection Delay, s/veh	18
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	110	6	70	197	10	78	82	194	161	83	192	38
Future Vol, veh/h	110	6	70	197	10	78	82	194	161	83	192	38
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	120	7	76	214	11	85	89	211	175	90	209	41
Number of Lanes	0	1	0	1	1	0	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	1
HCM Control Delay	19.7	18.6	15.7	19.5
HCM LOS	C	C	C	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	59%	100%	0%	100%	0%
Vol Thru, %	0%	100%	0%	3%	0%	11%	0%	83%
Vol Right, %	0%	0%	100%	38%	0%	89%	0%	17%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	82	194	161	186	197	88	83	230
LT Vol	82	0	0	110	197	0	83	0
Through Vol	0	194	0	6	0	10	0	192
RT Vol	0	0	161	70	0	78	0	38
Lane Flow Rate	89	211	175	202	214	96	90	250
Geometry Grp	8	8	8	8	8	8	8	8
Degree of Util (X)	0.213	0.474	0.359	0.491	0.53	0.206	0.222	0.571
Departure Headway (Hd)	8.615	8.099	7.378	8.735	8.906	7.757	8.854	8.216
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	419	447	490	412	405	462	405	440
Service Time	6.315	5.799	5.078	6.492	6.66	5.511	6.608	5.97
HCM Lane V/C Ratio	0.212	0.472	0.357	0.49	0.528	0.208	0.222	0.568
HCM Control Delay	13.6	17.9	14.2	19.7	21.3	12.5	14.1	21.4
HCM Lane LOS	B	C	B	C	C	B	B	C
HCM 95th-tile Q	0.8	2.5	1.6	2.6	3	0.8	0.8	3.5

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	203	310	475	340
Demand Flow Rate, veh/h	207	316	484	347
Vehicles Circulating, veh/h	523	428	221	320
Vehicles Exiting, veh/h	144	277	509	424
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.4	8.1	8.1	7.4
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	207	316	484	347
Cap Entry Lane, veh/h	809	892	1101	996
Entry HV Adj Factor	0.980	0.980	0.981	0.979
Flow Entry, veh/h	203	310	475	340
Cap Entry, veh/h	793	874	1080	975
V/C Ratio	0.256	0.354	0.439	0.349
Control Delay, s/veh	7.4	8.1	8.1	7.4
LOS	A	A	A	A
95th %tile Queue, veh	1	2	2	2

Final Report

Alexander Way
Fiscal Impact Analysis

The Economics of Land Use

Prepared for:
Town of Castle Rock

Prepared by:
Economic & Planning Systems, Inc.

January 6, 2023

EPS #223147

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1. Introduction and Summary of Findings

This report summarizes the analysis and conclusions of Economic & Planning Systems (EPS) regarding the fiscal impacts of the proposed Alexander Way development (Alexander Way) on the Town of Castle Rock, Colorado. The applicants, Tierra Investors and Alexander 445 LLC (Developer) are proposing to annex the property into the Town of Castle Rock and zone the property as a Planned Development Plan. The Alexander Way property consists of approximately 78 acres and is located east of the Silver Heights subdivision in unincorporated Douglas County, north of the Brewer Court and Alexander Place intersection, and west of the Diamond Ridge Estates neighborhood, as shown in **Figure 1**.

Figure 1. Alexander Way Vicinity Map

The proposed development plan includes 55 custom single family detached units and 22 duplexes, which are envisioned as live/work units, as shown in **Figure 2**. The project is also planned to provide 30 acres of open space.

Figure 2. Alexander Way Conceptual Site Plan

Scope of Work

The findings of the analysis are presented in three sections following this Introduction and Summary of Findings as follows:

- **Fiscal Impact Model Key Assumptions** – This section describes the proposed development program by phase, detailing market inputs including estimated annual absorption and sales and lease values.
- **Fiscal Model Assumptions** – This section describes the financial model developed by EPS to estimate the fiscal impacts of the proposed development on the Town of Castle Rock. The model was developed using the Town's 2022 adopted budget to identify the major revenues, expenditures, and trends. The model inputs include revenue and expenditure factors by land use category.
- **Fiscal Impacts** – This section provides a summary of the estimated annual revenues, expenditures, and net fiscal impacts of the proposed development program in total.

Summary of Findings

1. ***The proposed Alexander Way development is anticipated to generate sufficient annual revenues to pay for expected operating costs for the Town at full buildout.***

   The estimated net fiscal impact of the project is a positive $113,813 per year at buildout for the three major Town funds combined (General Fund at $89,645, Transportation Fund at $23,426, and Community Center Fund at $742).

2. ***At full stabilization, retail sales tax is estimated as the highest ongoing revenue source from the project.***

   Retail sales tax collected from future transactions by residents in the development are anticipated to total approximately $166,943. Additional ongoing revenue sources include property tax collected by the Town, property tax remitted by a metro district, and other revenue sources (i.e., licenses & permits, fines & forfeitures, etc.) at $99,184 per year. Total ongoing revenues associated with the project total an estimated $266,128 per year.

3. ***At full stabilization, the highest ongoing expenditures from the project are associated with providing police and fire services.***

   Police and fire expenditures, which are estimated using the service population nexus factor and categorized as a general expenditure, are expected to total an estimated $73,547 annually. Expenditures related to other departments (i.e., Town Council, Town Manager, etc.) are estimated to total approximately $78,768. Total ongoing expenditures from the project are estimated at $152,315.

4. ***It should be noted that based on the level of data available, a fiscal impact analysis provides an order of magnitude estimate of project revenues and expenses based on the current Town budget.***

   Based on the planning level assumptions used in fiscal impact analysis, this level of positive revenues can be considered approximately net neutral. The aggregate fiscal impacts could be lower if the estimated household incomes are lower than estimated or if the household sizes are larger, resulting in higher service level costs to the Town. The objective of the analysis is not to forecast a precise level of cost and revenues, but rather to determine if the project is estimated to generate sufficient revenues to cover the costs of providing Town services, and in order to not cause an unreasonable cost burden to the Town government and to the Town's existing residents, businesses, and taxpayers.

   As with any fiscal projection, there is a margin of error associated with estimating future costs and revenues based on the Town's current budget. To the extent that the Town is providing services at a level below desired levels based on budget constraints, the analysis may underrepresent the future costs of providing services to the project.

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2. Fiscal Impact Model Key Assumptions

This section of the report summarizes the proposed development program and absorption by land use category. Additionally, key assumptions related to the development's market value and estimated household income are detailed.

Development Program

Residential Development Program

Alexander Way is proposed to contain a total of 77 for-sale housing units including 55 single family detached units and 22 duplex units, as shown in **Table 1**. The single family detached units are anticipated to absorb over a period of nine years beginning in 2025, while the duplex units are anticipated to absorb over a period of five years. The development does not contain any commercial space.

Table 1. Development Program

Type	Total	2025	2026	2027	2028	2029	2030	2031	2032	2033
Residential Development (Units)										
Single Family Detached	55	7	7	7	7	7	5	5	5	5
Duplex	22	5	5	5	5	2	0	0	0	0
Total/Average	**77**	**12**	**12**	**12**	**12**	**9**	**5**	**5**	**5**	**5**

Source: Developer; Economic & Planning Systems

Key Assumptions

Development Value

Key valuation assumptions for the development, used as inputs to the fiscal impact analysis, are summarized in **Table 2**. Based on sales and construction values, the project is estimated to have a nominal total market value of $165.0 million at buildout in 2033.

Table 2. Alexander Way Property Valuation

Description	Factor	Total Value
Residential Development Value		
Single Family Detached	$2.5M per unit	$137.5M
Duplex	$1.25M per unit	$27.5M
Total/Average	**$2.1M per unit**	**$165.0M**

Source: Developer; Economic & Planning Systems

To underpin the Developer's assumptions related to the value of each product type, EPS compiled data on comparable projects in Castle Rock, as shown in **Table 3**. Comparable projects include Sapphire Pointe, Piñon Soleil, and Copper Blush. Each project was selected based on characteristics such as lot size, home size, geographic attributes, and age.

Table 3. Comparable Projects

Description	City	Development	Year Built	Year Sold	Home Sq. Ft.	Lot Acreage	Sale Price (Total)	Sale Price (PSF)
Single Family Detached								
7460 Sapphire Pointe Blvd	Castle Rock	Sapphire Pointe	2019	2020	3,074	1.11	$2,766,685	$900
7478 Sapphire Pointe Blvd	Castle Rock	Sapphire Pointe	2020	2021	2,934	1.07	$2,435,000	$830
7460 Sapphire Pointe Blvd	Castle Rock	Sapphire Pointe	2019	2021	3,074	1.11	$3,100,000	$1,008
7436 Sapphire Pointe Blvd	Castle Rock	Sapphire Pointe	2020	2021	2,822	0.71	$2,320,000	$822
1803 Avenida Del Sol	Castle Rock	Piñon Soleil	2018	2021	3,748	1.01	$1,470,000	$392
2178 Sierra Verde Ct	Castle Rock	Piñon Soleil	2017	2020	5,778	1.00	$3,000,000	$519
1764 Via Los Pinon	Castle Rock	Piñon Soleil	2020	2020	6,858	1.00	$4,050,000	$591
2163 Sierra Verde Ct	Castle Rock	Piñon Soleil	2018	2020	2,938	0.90	$1,670,000	$568
2198 Avenida Del Sol	Castle Rock	Piñon Soleil	N/A	2018	6,222	1.00	$2,540,000	$408
4705 Mira Del Sol Ct	Castle Rock	Piñon Soleil	2019	2019	3,678	0.99	$1,675,000	$455
Average					**4,113**	**0.99**	**$2,502,669**	**$649**
Duplex								
5189 Copper Blush Ct	Castle Rock	Copper Blush	2020	2020	1,592	0.10	$852,005	$535
5187 Copper Blush Ct	Castle Rock	Copper Blush	2020	2020	1,611	0.10	$846,223	$525
5188 Copper Blush Ct	Castle Rock	Copper Blush	2020	2021	1,611	0.10	$875,000	$543
5186 Copper Blush Ct	Castle Rock	Copper Blush	2020	2021	1,592	0.10	$893,000	$561
Average					**1,602**	**0.10**	**$866,557**	**$541**

Source: Zonda; Economic & Planning Systems

Comparable single family detached homes ranged from 2,822 to 6,858 square feet, averaging 4,113 square feet. The homes sold for an average price of $2.5 million or $649 per square foot. At the future Alexander Way development, the Developer has indicated that homes will average 5,000 square feet with an average sale price of $2.5 million or $500 per square foot.

Comparable duplexes averaged 1,602 square feet and sold for an average price of $866,557 or $541 per square foot. At the proposed Alexander Way development, the Developer has indicated that duplexes will be considerably larger, averaging 3,000 square feet per unit, with an average sales price of $1.25 million or $417 per square foot.

Based on the comparable projects located elsewhere in Castle Rock, EPS considers the Developer's assumptions on pricing to be feasible.

A selected sample of recently built single family and duplex homes located in Castle Rock are profiled below.

7460 Sapphire Pointe Blvd

Sapphire Pointe
Single Family Detached

Home Size: 3,074 sq. ft.

Lot Size: 1.11 acres

Year Built: 2019

Sale Price: $3.1 million

7436 Sapphire Pointe Blvd

Sapphire Pointe
Single Family Detached

Home Size: 2,822 sq. ft.

Lot Size: 0.71 acres

Year Built: 2020

Sale Price: $2.3 million

1803 Avenida Del Sol

Piñon Soleil
Single Family Detached

Home Size: 3,748 sq. ft.

Lot Size: 1.01 acres

Year Built: 2018

Sale Price: $1.5 million

1764 Via Los Pinon

Piñon Soleil
Single Family Detached

Home Size: 6,858 sq. ft.

Lot Size: 1.0 acres

Year Built: 2020

Sale Price: $4.1 million

5188 Copper Blush Ct

Copper Blush
Duplex

Home Size: 1,611 sq. ft.

Lot Size: 0.10 acres

Year Built: 2020

Sale Price: $875,000

Source: Zonda; Zillow; Economic & Planning Systems

Household Income

The Town of Castle Rock, like most Colorado municipalities, is very dependent on retail sales taxes. Sales taxes currently account for two-thirds of General Fund revenues. While the development is not anticipated to include any retail space, the project will generate new sales tax revenues from retail expenditures made by residents of the new housing units.

EPS estimates resident retail spending as a percent of average household income. Household income is estimated based on the sales price of the homes in the project and assuming 30 percent of income is needed to pay for housing costs. For the Alexander Way development, household income is an estimated $575,000 for the single family detached units and $285,000 for the duplex units, which equates to a weighted average of $492,000. The project at buildout is estimated to have total personal income (TPI) of $37.9 million, with $3.9 million estimated to be spent on retail purchases within the town or online, as shown in **Table 4**. The portion of retail sales tax accrued to the Town is estimated in the next section of the report.

Table 4. Retail Total Personal Income (TPI)

Description	Total
Household Income	
New Households	77
Average HH Income	$492,000
Total Personal Income	**$37,884,000**
Household Spending Pattern	
% Retail Spending	14.6%
Total Retail Spending	$5,545,449
Local Capture (% of Spending)	70%
Local Spending	**$3,882,404**

Source: Developer; Economic & Planning Systems

Using data from the Bureau of Labor Statistics Consumer Expenditure Survey, the percent of income spent on retail purchases (irrespective of location) is shown by income range in **Table 5**.

Table 5. Household Retail Expenditure Assumptions

Household Income Range	Average HH Income	Total Spent on Retail	% Total Spent on Retail
$30,000 - $39,999	$34,780	$14,523	41.8%
$40,000 - $49,000	$44,683	$16,408	36.7%
$50,000 - $69,999	$59,210	$18,398	31.1%
$70,000 - $99,999	$83,658	$22,371	26.7%
$100,000 - $149,999	$121,162	$27,159	22.4%
$150,000 - $199,999	$171,570	$33,371	19.5%
$200,000 or greater	$316,328	$46,304	14.6%

Source: Bureau of Labor Statistics; Consumer Expenditure Survey 2021; Economic & Planning Systems

EPS estimates Castle Rock stores will capture approximately 70.0 percent of household retail spending in stores within town limits (or on internet sales subject to Town taxes), as shown in **Table 6**.

Table 6. Retail Capture Rate by Store Category

Description	% Total	Capture Rate
Store Category		
Convenience Goods	31.2%	90%
Shopper's Goods	38.7%	50%
Eating and Drinking	20.0%	75%
Building Material & Garden	10.1%	75%
Weighted Average		**70%**

Source: Economic & Planning Systems

3. Fiscal Model Assumptions

This section describes the revenue and expenditure factors used in the fiscal impact model to estimate the fiscal impacts of the proposed development on the Town of Castle Rock. The Town's 2022 annual budget was used to identify the major revenues, expenditures, and trends. The calculation of model inputs, including revenue and expenditure factors by land use category, are then estimated.

Demographic Factors

Demographic inputs are used to determine baseline Town service levels on a per resident or per employee basis. For many of the Town's revenues and expenditures, this analysis utilizes a "Proportionate Share" methodology to estimate the cost of providing services to future development based on current expenditures. It also estimates current revenues in a similar manner. This methodology derives demand for Town services, proportional to town residents and employees over a typical 24-hour period. It provides a basis in the model for computing the cost per service hour for a given population across Town departments providing services to the proposed development. These factors are summarized in **Table 7**, and show an overall service demand split of approximately 77 percent residential/23 percent commercial.

Table 7. Demographic Factors

Description	Factor	Amount
Demographic Factors		
Population		79,364
Households		27,662
Housing Units		29,227
Jobs		24,312
Maintained Lane Miles		715
Retail Area (sf)		4,247,357
Office/Inst. Area (sf)		1,299,529
Industrial Area (sf)		1,242,105
Lodging Area (sf)		N/A
Proportionate Share Estimate		
Residential Conditions		
Population		79,364
Non-Working Residents	55.8%	42,746
Working Residents	44.2%	36,618
Out Commuter Residents	82.5%	29,990
Live/Work Residents	17.5%	6,628
Residential Service Demand		
Non-Working Residents	20 hours per day	854,912
Out Commuter Residents	14 hours per day	419,867
Live/Work Residents	14 hours per day	92,791
Residential Total		**1,367,570**
Commercial Conditions		
Total Jobs		24,312
Less: Mult. Job Holders	5.60%	1,361
Total Employment		**22,951**
In-Commuting Employees	72.05%	16,323
Live/Work Employees	27.95%	6,628
Employment Service Demand		
Non-Working Residents	4 hours per day	170,982
In-Commuting Employees	10 hours per day	163,226
Live/Work Employees	10 hours per day	66,279
Commercial Total		**400,488**
Total Service Demand		**1,768,057**
Residential Service Demand		**1,367,570**
% of Total		77.3%
Commercial Service Demand		**400,488**
% of Total		22.7%

Source: Town of Castle Rock; Economic & Planning Systems

Nexus to Growth Factors

Specific revenues and expenditures are tied to future development through nexus to growth factors, which account for the relationship between revenues/ expenditures and new development. Factors used in this model include:

- **Case Studies** – Indicate that a specific revenue or expenditure item was estimated using project-specific data. Case studies used in this analysis include detailed estimates of property tax and sales tax revenues.
- **Residents** – Correlates the specific revenue or expenditure item to future growth in residents.
- **Employees (Commercial)** – Correlates the specific revenue or expenditure item to future growth in employees.
- **Service Population** – Reflects the service demand hours associated with residents and employees in the town. The model shows roughly 77 percent of service demand is attributed to providing services to residential development and 23 percent of service demand is attributed to serving commercial development.
- **Fixed Revenues/Expenditures** – Indicates that a specific revenue or expenditure budget item does not have a nexus to growth and as a result is therefore not expected to increase due to the growth associated with new development. For specific revenue items that are estimated to be fixed, expenditures are adjusted accordingly, thus both the revenues and expenditures are adjusted equally. Net expenditures for individual departments are calculated by subtracting department-specific revenue items or the department's pro rata share of fixed revenues from total department expenditures.

Variability Factors

In addition to nexus to growth factors, the model includes assumptions relating to fixed and variable revenues and expenditures. This is captured in a "variability factor" that enables the model to account for the proportion of revenues or expenditures that are assumed to be variable (i.e., impacted by future development). Generally, revenues are typically assumed to be 100 percent variable and expenditures are estimated to be 25 to 100 percent variable depending on the department. For example, Town administrative functions are relatively fixed and therefore have a lower level of variability. Existing staff are able to accommodate a substantial amount of growth without adding staff or other costs. By contrast, other functions, such as streets or public safety, have a high variability, reflecting a strong correlation between new growth and the need to expand services.

General Fund

This section summarizes the revenue and expenditure assumptions used to estimate the net fiscal impact of the Alexander Way development on the Town's General Fund. The analysis is based on the Town's adopted 2022 budget.

Revenues

The model accounts for General Fund revenue impacts from the Alexander Way development by linking each major revenue source to a nexus to growth factor and variability factor, as summarized below and shown in **Table 8**.

Sales Tax – Annual sales tax revenues are estimated based on the adopted 2022 budget and account for 66.6 percent of the Town's General Fund revenue. Of the Town's total 4.0 percent sales tax rate, 70.29 percent of the generated revenue is allotted to the General Fund. Sales tax revenues from the Alexander Way development are estimated through a case study that estimates future sales tax revenues based on the spending potential and local capture of taxable retail expenditures made by new households associated with the project, shown previously in **Table 4**.

Property Tax – Property taxes represent 2.3 percent of the Town's General Fund revenues and are estimated through a case study based on the anticipated assessed value of Alexander Way. The development's estimated sales values are applied the state's residential assessment rate of 7.15 percent and then multiplied by the Town mill levy of 1.139.

Other Revenues – Other revenue sources represent the remaining 31.1 percent of the Town's General Fund revenue. Of these revenue sources, only four were determined to have a nexus to growth, the largest being Motor Vehicle Tax (6.7 percent of total revenue). These revenue streams are primarily estimated based on the growth in service population. The remaining revenue sources in the budget were determined to have no significant nexus to this project and are therefore not estimated.

Expenditures

All departments funded through the Town's General Fund, apart from Parks, are accounted for on a service population basis, as shown in **Table 8**. Based on the anticipated level of future growth in the Town and the current staffing levels in these departments, department expenditures are estimated to range from 25 to 100 variable. Parks are accounted for based on the residential population only (no costs are assigned to commercial development).

Table 8. General Fund Nexus to Growth Factors

Description	Adopted Budget 2022	% of Total	Nexus Factor	Variability	Res. Hourly 1,367,570	Comm. Hourly 400,488	Total Hourly 1,768,057
General Fund Revenues							
Property	$ 1,467,849	2.3%	Case Study	100.0%	$ -	$ -	$ -
Use Tax	$ -	0.0%	N/A	100.0%	$ -	$ -	$ -
Sales Tax	$ 43,106,714	66.6%	Case Study	100.0%	$ -	$ -	$ -
Motor Vehicle Tax	$ 4,331,278	6.7%	Residential	100.0%	$ 3.17	$ -	$ -
Other Taxes	$ 396,730	0.6%	N/A	100.0%	$ -	$ -	$ -
Franchise Fees	$ 2,509,241	3.9%	Service Population	100.0%	$ -	$ -	$ 1.42
Licenses & Permits	$ 133,816	0.2%	Service Population	100.0%	$ -	$ -	$ 0.08
Intergovernmental	$ 2,614,092	4.0%	N/A	100.0%	$ -	$ -	$ -
Charges for Service	$ 2,906,638	4.5%	N/A	100.0%	$ -	$ -	$ -
Management Fees	$ 4,205,990	6.5%	N/A	100.0%	$ -	$ -	$ -
Fines & Forfeitures	$ 391,764	0.6%	Service Population	100.0%	$ -	$ -	$ 0.22
Investment Earnings	$ 368,383	0.6%	Fixed	100.0%	$ -	$ -	$ -
System Development Fees	$ -	0.0%	N/A	100.0%	$ -	$ -	$ -
Contributions & Donations	$ 1,336,000	2.1%	N/A	100.0%	$ -	$ -	$ -
Transfers In	$ 719,259	1.1%	N/A	100.0%	$ -	$ -	$ -
Interfund Loan Revenue	$ 1,112,318	1.7%	N/A	100.0%	$ -	$ -	$ -
Debt & Financing Revenue	$ -	0.0%	N/A	100.0%	$ -	$ -	$ -
Other Revenue	$ 245,343	0.4%	N/A	100.0%	$ -	$ -	$ -
Fund Balance Transfer	$ (1,131,160)	-1.7%	Fixed	100.0%	$ -	$ -	$ -
Total	**$ 64,714,255**	**100.0%**			**$ 3.17**	**$ -**	**$ 1.72**
General Fund Expenditures							
Town Council	$ 382,381	0.6%	Service Population	25.0%	$ -	$ -	$ 0.04
Town Manager	$ 1,045,192	1.6%	Service Population	25.0%	$ -	$ -	$ 0.12
Human Resources	$ 807,103	1.2%	Service Population	50.0%	$ -	$ -	$ 0.18
Community Relations	$ 1,009,388	1.6%	Service Population	50.0%	$ -	$ -	$ 0.23
DoIT	$ 3,910,294	6.0%	Service Population	50.0%	$ -	$ -	$ 0.89
Facilities	$ 1,392,413	2.2%	Service Population	50.0%	$ -	$ -	$ 0.32
Town Attorney	$ 1,145,619	1.8%	Service Population	50.0%	$ -	$ -	$ 0.26
Town Clerk	$ 452,775	0.7%	Service Population	50.0%	$ -	$ -	$ 0.10
Municipal Court	$ 467,163	0.7%	Service Population	50.0%	$ -	$ -	$ 0.11
Finance - Departmental	$ 3,401,247	5.3%	Service Population	50.0%	$ -	$ -	$ 0.77
Police	$ 19,865,933	30.7%	Service Population	100.0%	$ -	$ -	$ 9.02
Fire	$ 18,494,264	28.6%	Service Population	100.0%	$ -	$ -	$ 8.40
Development Services	$ 690,788	1.1%	Service Population	50.0%	$ -	$ -	$ 0.16
Parks	$ 10,389,061	16.1%	Residential	100.0%	$ 6.10	$ -	$ -
Finance Non-Departmental	$ 1,260,634	1.9%	Service Population	50.0%	$ -	$ -	$ 0.29
Total	**$ 64,714,255**	**100.0%**			**$ 6.10**	**$ -**	**$ 20.88**

Source: Town of Castle Rock; Economic & Planning Systems

Transportation Fund

This section summarizes the revenue and expenditure assumptions used to estimate the net fiscal impact of the Alexander Way development on the Town's Transportation Fund. The analysis is based on the Town's adopted 2022 Budget.

Revenues

Variable revenue sources for the Transportation Fund are primarily attributable to sales tax, use tax, and motor vehicle tax, as shown in **Table 9**.

Sales Tax – The Town of Castle Rock's sales tax rate is 4.0 percent, of which 24.46 percent is allotted for the Transportation Fund. Similar to the General Fund, sales tax revenue generation from the Alexander Way development is estimated based on new household spending. Sales tax revenues account for 40.8 percent of the fund's total revenue.

Motor Vehicle Tax – Motor vehicle tax accounts for roughly 6.4 percent of the Town's Transportation Fund revenues. It is estimated using a residential nexus factor.

Use Tax – Roughly 36 percent of the Town's residential use tax revenues are allotted to the Transportation Fund. Use tax revenues are estimated on a one-time basis based on the value of materials associated with new development. The material value is estimated as 50 percent of construction value (the other 50 percent is assumed to be labor) and multiplied by the Town's 4.0 percent use tax rate. Use tax revenues accounts for 7.6 percent of the fund's total revenue.

Expenditures

Transportation Fund expenditures are estimated based on a Cost per Lane Mile case study. This approach applies the average cost of maintaining one lane mile in the town to the estimated number of new lane miles associated with Alexander Way. The development is anticipated to require 1.25 new miles of two lane roads.

Table 9. Transportation Fund Nexus to Growth Factors

Description		Adopted Budget 2022	% of Total	Nexus Factor	Variability	Res. Hourly 1,367,570	Comm. Hourly 400,488	Total Hourly 1,768,057	Per Ln Mile 715
Transportation Fund Revenues									
Property Tax	$	-	0.0%	N/A	100.0%	$ -	$ -	$ -	$ -
Use Tax	$	2,803,639	7.6%	Case Study	100.0%	$ -	$ -	$ -	$ -
Sales Tax	$	14,998,011	40.8%	Case Study	100.0%	$ -	$ -	$ -	$ -
Motor Vehicle Tax	$	2,348,951	6.4%	Residential	100.0%	$ 1.72	$ -	$ -	$ -
Other Taxes	$	-	0.0%	N/A	100.0%	$ -	$ -	$ -	$ -
Franchise Fees	$	-	0.0%	N/A	100.0%	$ -	$ -	$ -	$ -
Licenses & Permits	$	-	0.0%	N/A	100.0%	$ -	$ -	$ -	$ -
Intergovernmental	$	8,069,414	22.0%	Fixed	100.0%	$ -	$ -	$ -	$ -
Charges for Service	$	-	0.0%	N/A	100.0%	$ -	$ -	$ -	$ -
Management Fees	$	-	0.0%	N/A	100.0%	$ -	$ -	$ -	$ -
Fines & Forfeitures	$	-	0.0%	N/A	100.0%	$ -	$ -	$ -	$ -
Investment Earnings	$	112,865	0.3%	Fixed	100.0%	$ -	$ -	$ -	$ -
Impact Fees	$	-	0.0%	N/A	100.0%	$ -	$ -	$ -	$ -
System Development Fees	$	-	0.0%	N/A	100.0%	$ -	$ -	$ -	$ -
Contributions & Donations	$	-	0.0%	N/A	100.0%	$ -	$ -	$ -	$ -
Transfers In	$	-	0.0%	N/A	100.0%	$ -	$ -	$ -	$ -
Interfund Loan Revenue	$	-	0.0%	N/A	100.0%	$ -	$ -	$ -	$ -
Debt & Financing Revenue	$	-	0.0%	N/A	100.0%	$ -	$ -	$ -	$ -
Other Revenue	$	5,155	0.0%	Fixed	100.0%	$ -	$ -	$ -	$ -
Fund Balance Transfer	$	8,390,148	22.8%	Fixed	100.0%	$ -	$ -	$ -	$ -
Total	**$**	**36,728,183**	**100.0%**			**$ 1.72**	**$ -**	**$ -**	**$ -**
Transportation Fund Expenditures									
Personnel	$	5,362,650	14.6%	Per Lane Mile	50.0%	$ -	$ -	$ -	$ 2,057
Services & Other	$	23,273,286	63.4%	Per Lane Mile	100.0%	$ -	$ -	$ -	$ 17,858
Supplies	$	814,487	2.2%	Per Lane Mile	100.0%	$ -	$ -	$ -	$ 625
Capital	$	1,115,950	3.0%	Per Lane Mile	100.0%	$ -	$ -	$ -	$ 856
Debt & Financing	$	907,400	2.5%	Per Lane Mile	100.0%	$ -	$ -	$ -	$ 696
Interfund Loan	$	-	0.0%	Per Lane Mile	100.0%	$ -	$ -	$ -	$ -
Transfers Out	$	5,254,410	14.3%	Per Lane Mile	100.0%	$ -	$ -	$ -	$ 4,032
Total	**$**	**36,728,183**	**100.0%**			**$ -**	**$ -**	**$ -**	**$ 26,125**

Source: Town of Castle Rock; Economic & Planning Systems

Community Center Fund

This section summarizes the revenue and expenditure assumptions used to estimate the net fiscal impact of the Alexander Way development to the Town's Community Center Fund. The analysis is based on the Town's adopted 2022 Budget.

Revenues

Variable revenue sources for the Community Center Fund are primarily attributable to sales tax, use tax, and motor vehicle tax, as shown in **Table 10** below.

Sales Tax – Of Castle Rock's 4.0 percent sales tax rate, 5.25 percent is allotted to the Community Center Fund. Similar to the General Fund and Transportation Fund, sales tax revenue generation from the Alexander Way development is estimated through a case study that estimates retail spending by new households in the project. Sales tax revenues account for 38.1 percent of the fund's expenditures only.

Motor Vehicle Tax – Motor vehicle tax accounts for 5.0 percent of the Town's Community Center Fund revenues. It is estimated using a residential nexus factor.

Use Tax – Approximately 6 percent of the Town's residential use tax revenues are allotted to the Community Center Fund. Use tax revenues are estimated on a one-time basis based on the estimated development value and corresponding material value associated with each use. The total material value is multiplied by the Town's 4.0 percent use tax rate to provide an estimate of revenues attributable to the Alexander Way development. Use tax revenues account for 5.1 percent of the fund's total revenue.

Expenditures

Community Center Fund expenditures are estimated based on the Town's service population and all expenditure line items are estimated based on a variability factor of 100 percent, apart from Personnel, which is assumed to be 80 percent variable.

Table 10. Community Center Fund Nexus to Growth Factors

Description	Adopted Budget 2022	% of Total	Nexus Factor	Variability	Res. Hourly 1,367,570	Comm. Hourly 400,488	Total Hourly 1,768,057
Community Center Fund Revenues							
Property Tax	$ -	0.0%	N/A	100.0%	$ -	$ -	$ -
Use Tax	$ 433,409	5.1%	Case Study	100.0%	$ -	$ -	$ -
Sales Tax	$ 3,219,305	38.1%	Case Study	100.0%	$ -	$ -	$ -
Motor Vehicle Tax	$ 424,886	5.0%	Residential	100.0%	$ 0.31	$ -	$ -
Other Taxes	$ -	0.0%	N/A	100.0%	$ -	$ -	$ -
Franchise Fees	$ -	0.0%	N/A	100.0%	$ -	$ -	$ -
Licenses & Permits	$ -	0.0%	N/A	100.0%	$ -	$ -	$ -
Intergovernmental	$ -	0.0%	N/A	100.0%	$ -	$ -	$ -
Charges for Service	$ 4,292,533	50.8%	N/A	100.0%	$ -	$ -	$ -
Management Fees	$ -	0.0%	N/A	100.0%	$ -	$ -	$ -
Fines & Forfeitures	$ -	0.0%	N/A	100.0%	$ -	$ -	$ -
Investment Earnings	$ 11,903	0.1%	Fixed	100.0%	$ -	$ -	$ -
Impact Fees	$ -	0.0%	N/A	100.0%	$ -	$ -	$ -
System Development Fees	$ -	0.0%	N/A	100.0%	$ -	$ -	$ -
Contributions & Donations	$ -	0.0%	N/A	100.0%	$ -	$ -	$ -
Transfers In	$ -	0.0%	N/A	100.0%	$ -	$ -	$ -
Interfund Loan Revenue	$ -	0.0%	N/A	100.0%	$ -	$ -	$ -
Debt & Financing Revenue	$ -	0.0%	N/A	100.0%	$ -	$ -	$ -
Other Revenue	$ 17,918	0.2%	N/A	100.0%	$ -	$ -	$ -
Fund Balance Transfer	$ 46,486	0.6%	Fixed	100.0%	$ -	$ -	$ -
Total	**$ 8,446,440**	**100.0%**			**$ 0.31**	**$ -**	**$ -**
Community Center Fund Expenditures							
Personnel	$ 5,051,860	59.8%	Service Population	80.0%	$ -	$ -	$ 1.10
Services & Other	$ 2,367,220	28.0%	Service Population	100.0%	$ -	$ -	$ 0.65
Supplies	$ 569,822	6.7%	Service Population	100.0%	$ -	$ -	$ 0.16
Capital	$ 350,000	4.1%	Service Population	100.0%	$ -	$ -	$ 0.10
Debt & Financing	$ -	0.0%	Service Population	100.0%	$ -	$ -	$ -
Interfund Loan	$ -	0.0%	Service Population	100.0%	$ -	$ -	$ -
Transfers Out	$ 107,538	1.3%	Service Population	100.0%	$ -	$ -	$ 0.03
Total	**$ 8,446,440**	**100.0%**			**$ -**	**$ -**	**$ 2.03**

Source: Town of Castle Rock; Economic & Planning Systems

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4. Fiscal Impacts

This section of the reports summarizes the estimated Town revenues, expenditures, and net fiscal impacts of the proposed development program by fund.

Fiscal Impact by Fund

Revenues

Ongoing and one-time revenue generation estimates were provided for the General Fund, Transportation Fund, and Community Center Fund. Ongoing annual revenue associated with the Alexander Way project is estimated to average $266,128 at full stabilization. Additionally, one-time use tax revenues total an estimated $3.5 million over the course of buildout, from 2025 to 2033. Revenue generation estimates are shown in **Table 11** and summarized below.

Table 11. Summary of Revenues, Expenditures, and Net Fiscal Impact by Fund

Description	General Fund	Transportation Fund	Community Center Fund	Other Funds [1]	Total
Ongoing Revenues					
Sales Tax - General	$109,158	$37,985	$8,153	--	$155,296
Sales Tax - County Transfer	--	$11,647	--	--	$11,647
Property Tax - Town	$13,437	--	--	--	$13,437
Property Tax - Metro District	$58,988	--	--	--	$58,988
General Revenue	$19,143	$6,450	$1,167	--	$26,760
Total	**$200,726**	**$56,082**	**$9,320**	--	**$266,128**
Ongoing Expenditures					
Total	**-$111,081**	**-$32,656**	**-$8,577**	--	**-152,315**
Ongoing Net Fiscal Impact	**$89,645**	**$23,426**	**$742**	**$0**	**$113,813**
One-Time Revenues					
Use Tax - General	**--**	$1,197,570	$185,130	$1,917,300	3,300,000
Use Tax - County Transfer	--	$247,500	--	--	$247,500
Total	**--**	**$1,445,070**	**$185,130**	**$1,917,300**	**3,547,500**

[1] Other Funds include the Transportation Capital Fund, and General Long-Term Planning Fund

Source: Economic & Planning Systems

Ongoing Revenue

Property Tax Revenues – Property tax revenues are allotted to the General Fund. The project has an overall development value of $165.0 million at full buildout. Applying the state's residential assessment rate of 7.15 percent multiplied by the Town mill levy of 1.139, Alexander Way is estimated to generate $13,437 in annual property tax revenue at full stabilization. Additionally, a regional improvement mill levy of 5 mills will be collected by the project's metro district and remitted to the Town to fund capital improvements associated with regional improvements. The regional improvement mill levy is anticipated to generate $58,988 in annual property tax revenue at full stabilization.

Sales Tax Revenues – Sales tax revenues are estimated based on the Point of Origin methodology only, which accounts for retail expenditures made in the town by new households in the project. After full buildout, new households from the project are estimated to spend $3.9 million annually on retail goods within the Town of Castle Rock. After applying the 4.0 percent sales tax rate retained by the Town, Alexander Way households generate $155,296 annually in additional sales tax revenue at full stabilization.

Of the total sales tax generated, $109,158 or 70.3 percent is allotted to the General Fund, $37,985 or 24.5 percent is allotted to the Transportation Fund, and $8,153 or 5.2 percent is allotted to the Community Center Fund. Additionally, the Town Transportation Fund is estimated to receive $11,647 in sales tax revenues via a transfer from Douglas County.

General Revenue – General revenue includes funding sources estimated using a residential or service population nexus to growth factor. At full stabilization, these sources total $19,143 annually in the General Fund, $6,450 in the Transportation Fund, and $1,167 in the Community Center Fund, totaling $26,760.

One-Time Revenue

Use Tax Revenues – Use tax revenues are allotted to the Transportation Fund, Community Center Fund, Transportation Capital Fund, and General Long-Term Planning Fund.

The total material value associated with new construction from Alexander Way averages $9.2 million and totals $82.5 million over the estimated 9-year buildout period from 2025 to 2033. After applying the 4.0 percent use tax rate retained by the Town, Alexander Way generates a total of $3.5 million in one-time use tax revenues.

Expenditures

Annual expenditures are estimated on a service population, residential, or per lane mile basis, depending on the fund, as shown in **Table 8**, **Table 9**, and **Table 10**. The Alexander Way development is estimated to generate a total annual service cost of $152,315 per year, which is comprised of $111,081 from General Fund services, $32,656 from Transportation Fund services, and $8,577 from Community Center Fund services, as shown in **Table 11**.

Ongoing Net Fiscal Impact

The average annual net fiscal impact of Alexander Way on the Town's General Fund, Transportation Fund, and Community Center Fund is estimated at a positive $89,645, $23,426, and $742 at full stabilization, respectively, as shown in **Table 11**. The total net fiscal impact at full stabilization is estimated at $113,813. These project returns can be characterized as close to revenue neutral, given the margin of error applicable to a fiscal impact analysis.

henry design group

Landscape Architecture • Planning • Entitlements

August 4, 2021

Patience Drake-Rosenbaum

[redacted]

Dear Patience,

This letter is provided in response to your email to the Town of Castle Rock requesting answers to a number of questions. Hopefully, these responses address your inquiry.

1. What variances are being requested? Please be specific.
   Response: No variances are being requested from the Town of Castle Rock's Code.
2. Are there any municipal, state or federal funds that will be expended for any phase of the project's infrastructure or development? If yes, please elucidate.
   Response: No public funds will be utilized in the development of this project. The development will be constructed with private funds.
3. Recently Castle Rock published a newsletter sharing per capita statistics on public safety workers, equipment, and capital investment, indicating that Castle Rock does not compare favorably with neighboring towns. How would this proposed development impact on those public resources?
   Response: This analysis needs to be provided to the Town. However, the Development will pay its fair share of Development Impact Fees and System Development Fees which are intended to help offset the impacts of new development as described below. The fees are itemized in the Town's Fee Schedule.

Development Impact

Development Impact Fees are incurred on all new construction in the Town of Castle Rock. These fees allow the Town to continue to provide needed infrastructure to maintain service levels as new construction occurs. They are based on each individual project's estimated incremental cost to expand the system to accommodate that individual project's growth.

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henry design group

Landscape Architecture • Planning • Entitlements

System Development Fees

System Development Fees are incurred on all new construction in the Town of Castle Rock. These fees go toward the cost for new development to tie into the Town's infrastructure systems such as water and sewer. They are based on each individual project's incremental cost to expand the system to accommodate that individual project's growth.

4. What will the lot sizes be; please specify the per cent of total development of each lot size. For example, 1 acre lots will comprise 75 per cent of the total development, etc.
   Response: Based on a very conceptual site plan the following is a summary of the lot sizes:
   .50 acres to .60 acre = 23 Lots (43.4%)
   .60 Acres to .75 Acres = 21 Lots 39.6%)
   .75 to 1+Acre + = 9 Lots (17%)

   Note: it is likely the Conceptual site plan will change during the review process, but the intent is to maintain similar lot sizes. The percent of required open space is 20% however, over 40% is provided.
5. What neighborhoods will be contiguous to the proposed development? What notice has been provided to contiguous owners and HOA's?
   Response: The contiguous existing neighborhoods are Silver Heights to the west and Diamond Ridge to the East. Please see the attached Context Plan for more information.

   Notice was provided for the Neighborhood Meeting on July 13, 2021, in accordance with Town of Castle Rock Neighborhood Meeting Regulations. A mailing went out to all residents within 500-feet of the property boundary and signs were posted adjacent to Brewer Court and near Collins Street.
6. Have there been any wildlife (flora and fauna) surveys conducted on the proposed parcel? At what times of year have they been done? What is the anticipated impact on wildlife?
   Response: As mentioned in the meeting additional studies including wildlife will be completed by a wildlife expert consultant with the next phase of the entitlement project in accordance with Town of Castle Rock requirements. Town Staff will review all studies and reports and determine what if anything more is needed. The impacts to wildlife will be addressed in the study.
7. Have traffic studies been conducted on new traffic generated?

Response: As mentioned in the meeting additional studies including traffic will be completed by a Traffic Engineer with the next phase of the entitlement project in accordance with Town of Castle Rock requirements. The traffic generated will be included in the Study. The Town's Traffic engineer review the study and make recommendations if necessary.

8. Have any environmental/climate impact studies been conducted or considered? Will the planned development contribute to microclimatic changes such as the heat island effect?
   Response: Environmental Studies are required by the Town of Castle Rock during the Site Development Plan and Platting processes. It is unlikely there will be microclimate changes given the low density of the development and limited building and pavement coverage.

Please feel free to contact me at 303-446-2368 or Lenn Haffeman if you need additional information.

Respectfully submitted by:

Karen Z. Henry, Principal
Henry Design Group, Inc.

Alexander Way

Castle Rock, Colorado

Context Plan

June 24, 2021

0 300' 600' 900'

Scale: 1" = 300'

Prepared by:
henry design group
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Town of Castle Rock

Agenda Memorandum

Agenda Date: 10/26/2023

Item #: **File #:** PC 2023-023

To: Members of the Planning Commission

From: BrieAnna Simon, Senior Planner, Development Services Department

Use by Special Review - Site Development Plan, Lot 3 Castle Park West, 1st Amendment [1.49 Acres Multi-Family Located South of Wolfensberger Road and East of Park Street]

Executive Summary

Wellspring Community is seeking approval of a Use by Special Review - Site Development Plan for a multifamily development. Wellspring Community has partnered with the DCHP on this project and, the project developer - Unity at Park Street LLLP for the renovation of the old La Quinta Inn in Castle Rock. The renovation will result in a 42-unit apartment complex with half of the units available to individuals with intellectual and developmental disabilities (I/DD) and the remaining units offered with attainable rents for residents earning between 30 - 80% of the Area Median Income (AMI).

The proposal is in conformance with the B - Business/Commercial Zoning Regulations of the Municipal Code, and with Town Municipal Code and technical criteria. All staff and external comments have been addressed through the review process.

Attachments

Attachment A: Vicinity Map
Attachment B: Site Development Plan

Meeting Date: October 26, 2023

AGENDA MEMORANDUM

To: Planning Commission

From: BrieAnna Simon, Senior Planner, Development Services Department

Title: **Use by Special Review - Site Development Plan, Lot 3 Castle Park West, 1st Amendment** [1.49 Acres Multi-Family Located South Wolfensberger Road and East of Park Street]

Executive Summary

Wellspring Community is seeking approval of a Use by Special Review - Site Development Plan for a multifamily development. Wellspring Community has partnered with the Douglas County Housing Partnership (DCHP) on this project and, the project developer – Unity at Park Street LLLP for the renovation of the old La Quinta Inn in Castle Rock. The renovation will result in a 42-unit apartment complex with half of the units available to individuals with intellectual and developmental disabilities (I/DD) and the remaining units offered with attainable rents for residents earning between 30 – 80% of the Area Median Income (AMI).

Figure 1: Vicinity Map

The proposal is in conformance with the B - Business/Commercial Zoning Regulations of the Municipal Code, and with Town Municipal Code and technical criteria. All staff and external comments have been addressed through the review process.

Background

Zoning Regulations

The proposed development is located in the central portion of the Town of Castle Rock and is zoned B - Business/Commercial Zoning Regulations of the Municipal Code. The B -

Business/Commercial Area is zoned for mixed-use development, where multi-family is a Use by Special Review.

Existing Conditions and Surrounding Uses

The subject lot is currently part of a developed area within the Town. The property is surrounded by B Business/Commercial development including to the north Nytech Heating and Cooling, to the east Quality Inn & Suites, to the south Castle Oaks Covenant Church and Wellspring Community and to the west McDonalds and a retail center.

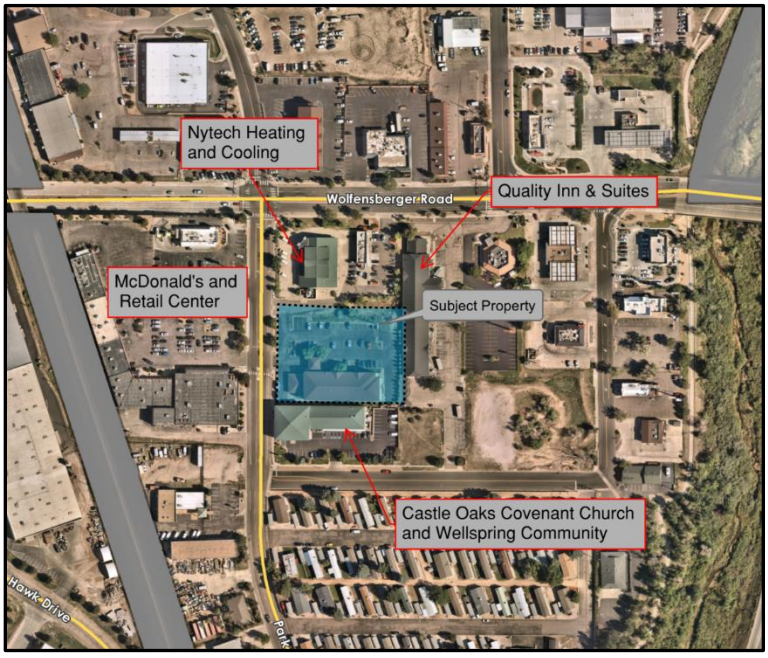


Figure 2: Surrounding Uses

Site Development Plan Discussion

Use

The subject lot is located in the B Business/Commercial Zoning Regulations of the Town's municipal code. A wide range of non-residential uses are permitted including restaurants, retail, office, hotel/motel and personal service. Use by Special Review (UBSR) uses also include multi-family, nursing homes, day care center, outdoor commercial amusement, and education facilities.

The proposed lot is located south of Wolfensberger Road and east of Park Street where an existing hotel is proposed to be converted into 42 multi-family living units in a single, 3-story building. The units will be a combination of studio and one bedrooms. Onsite amenities will include parking, pet relief area, outdoor patio area, and a community space for hosting classes and events. No commercial uses are proposed on this site. The existing pole sign for the La Quinta Inn will be removed with this development.

Development Standards

The proposed use complies with the B Business/Commercial Zoning Regulations of the Town's municipal code. Per the zoning, the maximum height allowed is 35 feet, the minimum front yard setback is 15 feet, minimum side yard setback is zero feet and minimum rear yard setback is zero feet. The zoning limits the maximum building coverage to 35 percent of the lot.

The site plan complies with the established development standards. The maximum height and setbacks of the existing building comply with the requirements outlined in the zoning.

The Zoning Comparison Table in Figure 3 lists the standards required by the Zoning and demonstrates that the plan complies with all of the standards. This table is also shown on the cover sheet of the Site Development Plan (Attachment B).

ZONING COMPARISON CHART				
ZONING	B- BUSINESS			
	ZONING REQUIREMENT		PROVIDED (SDP)	
PERMITTED USES	MULTI-FAMILY		MULTI-FAMILY	
MINIMUM LOT SIZE (SF)	--		1.49 ACRES (64,915 SF)	
MAXIMUM BUILDING SIZE (SF) (MAX. 35% OF LOT AREA)	.52 ACRES (22,720.25 SF)		.28 ACRES (12,267.5 SF)	
	MINIMUM SETBACK DISTANCE		BUILDING SETBACK (LF)	
FRONT YARD SETBACK	25 FEET		40 LF	
REAR YARD SETBACK	0 FEET		43.1 LF	
NORTH SIDE YARD SETBACK	0 FEET		144.8 LF	
SOUTH SIDE YARD SETBACK	0 FEET		9.7 LF	
MAXIMUM BUILDING HEIGHT	35 FEET		30 FEET	
MINIMUM PARKING PER UNIT	UNIT TYPE		CALCULATIONS	TOTALS
	STUDIO UNIT	1 SPACE PER UNIT	22 UNITS X 1 SPACE	22 REQUIRED
	ONE BEDROOM UNIT	1.5 SPACES PER UNIT	20 UNITS X 1.5 SPACES	30 REQUIRED
	VISITOR PARKING	1 SPACE PER 4 DWELLING UNITS (1SP/4 DU)	42 UNITS X (1SP /4 DU)	11 REQUIRED
MINIMUM ADA PARKING	TOTAL PARKING SPACE RANGE		REQUIRED ADA SPOTS	
	51-75			3 REQUIRED
TOTAL PARKING	REQUIRED: 63 SPACES (INCLUDING 3 ADA SPACES)		PROVIDED: 66 SPACES (INCLUDING 3 ADA SPACES & 9 COMPACT SPACES)	
MINIMUM BICYCLE PARKING	5% OF TOTAL PARKING		REQUIRED:	4
			PROVIDED:	12
SITE UTILIZATION				
		COVERAGE	% OF TOTAL AREA	
BUILDING COVERAGE		12,268 SF	18.90%	
PARKING COVERAGE		29,088 SF	44.90%	
LANDSCAPE/OPEN SPACE COVERAGE		23,559 SF	36.20%	
STREET COVERAGE		0 SF	0%	
OTHER COVERAGE		0 SF	0%	
TOTAL		64,915 SF	100 %	

Figure 3: Zoning Comparison Table

The multi-family parking regulations found in Section 17.54 of the Municipal Code requirements at the time this application was made required one parking space for all studio units, 1.5 parking spaces for all one bedroom units, along with one space per four dwelling unit for visitor parking. Using these standards, the site is required to have a total of 63 parking spaces. The proposed plan provides 66 parking spaces.

Lighting Plan

The site lighting will be comprised of parking lot pole fixtures, exterior building wall fixtures, and under-canopy balcony and porch fixtures. The lighting plan meets the Municipal Code requirements for full cut-off fixtures, lumen maximums, and photo-sensor controls for curfew hours.

Landscaping

Multifamily developments are required to landscape 20% of the site; parking lots must provide landscaping for 10% of the lot and streetscape is required along the street frontages. The proposed development meets the Town's landscape requirements.

Architectural Design

The existing building consists of a single, 3-story building. The building will be refreshed with updated paint colors and additional exterior amenities added to the site. These amenities include a pet relief area and an outdoor patio area. No additional exterior changes are being proposed to the existing building.

Interface Regulations

The Residential/Non-Residential Interface Regulations and the Dissimilar Residential Interface Regulations are not applicable to the development.

Skyline and Ridgeline Protections

The lot proposed for development in this site plan is not located within the Skyline/Ridgeline Protection Area.

Traffic Impact Analysis and Mitigation

Public Works has confirmed that the proposed use of multi-family will have no impact to public right-of-way infrastructure or traffic.

Utilities

Castle Rock Water has confirmed that the redevelopment of the existing building does not change water demands or sewer demands that were originally placed on the building. Therefore, water and sewer services remain the same and are adequate for this building. Castle Rock Water will continue to be the service provider.

Water Drainage

There are no major drainageways within the Wellspring Housing redevelopment. The site is in Zone X as noted on FIRM Panel 08035C0188G Revised March 16, 2016. There are no irrigation ditches or canals adjacent to or impacted by this project.

This property is located within the East Plum Creek watershed basin. If the site disturbs greater than or equal to one acre, the site will be required to provide water quality and full spectrum detention for the site. The developer will be required to evaluate impacts of the redevelopment on existing storm sewers, inlets, and extended detention basins for water quality and storage, in accordance with Town regulations. If redevelopment impacts existing storm infrastructure the development may be required to replace or upsize existing infrastructure to bring into compliance with Town standards.

Notification and Outreach

Public Notice

The public noticing requirements for this proposal have been satisfied. Public hearing notice signs for the Planning Commission public hearing were posted on the property on Wednesday, October 4, 2023. Written notice letters were sent to property owners and Homeowner Associations (HOA) within 500 feet of the property, at least 15 days prior to the Planning Commission public hearing. Town staff published notice of the Planning Commission public hearing on the Town's website and provided information about the proposal on the Town's *Development Activity* interactive map.

Neighborhood Meetings

The applicant held neighborhood meetings as required by the Municipal Code. The first neighborhood meeting was held on January 10, 2023, prior to the submittal of the USR-SDP land use application. The meeting was conducted in a hybrid format. Four members of the public attended the meeting in person and four attended virtually. General questions on traffic impacts and project timing were asked.

The second neighborhood meeting was held on May 17, 2023 in a hybrid format. No members of the public attended the meeting.

The third and final neighborhood meeting was held on October 19, 2023 in a virtual format only. This meeting is being held after the writing of this staff report, therefore staff will provide Planning Commission as update at the public hearing.

External Referrals

There are no outstanding external referral comments. External referrals were sent to local service providers and Douglas County agencies. Douglas County Planning and Addressing and CORE stated the proposed plan had no apparent conflicts or additional comments. The remainder of the agencies contacted for comments did not respond.

Analysis

This staff analysis takes into account the representations made in the application and attachments submitted to date.

Use by Special Review and Approval Criteria and Analysis 17.39.040

A. Demonstrates design compatibility with the scale, architectural character and other prominent design themes found within the surrounding neighborhood.

Analysis: The proposed site development plan (SDP) meets this criterion. The SDP meets all relevant site layout requirements outlined in the governing zoning and the Town's Municipal Code.

B. Demonstrates compatibility of the proposed use with existing and planned uses on adjacent properties.

Analysis: The proposed development meets this criterion. The SDP generally conforms to the Town's 2030 Vision and Comprehensive Master Plan by adding to the Town's diversified housing types. The proposed use meets the mixed use development uses outlined in the B – Business/Commercial Zoning Regulations of the Town's municipal code.

C. Mitigates adverse impacts or nuisance effects such as, but not limited to, visual impacts, noise, vibrations, light intensity, odors, loitering or level of outdoor activity, hours of operation or deliveries.

Analysis: The proposed development meets this criterion. The SDP proposes additional landscaping to soften the visual impacts of the site and outdoor amenities.

D. Will not result in undue traffic congestion or traffic hazards. Adequate off-street parking must be provided. Pedestrian access must be adequately addressed when this type of access is identified as a significant component or need of the proposed use.

Analysis: The proposed development meets this criterion. The SDP provides appropriate vehicular entrances into the property, with interior drive aisles and parking that meet Town standards. Existing sidewalks are located adjacent to the public right of way, private drive isles and interior walkways to provide additional pedestrian connections to the residential units and on site amenities.

E. Provides adequate landscaping, buffering and screening from adjacent and surrounding uses of potential impact.

Analysis: The proposed development meets this criterion. The SDP proposes additional landscaping to be added to the site in order to meet the Town's technical criteria. Landscaping will be located adjacent to outdoor amenities in order to provide adequate screening.

SDP Review and Approval Criteria and Analysis 17.38.040

A. **Community Vision/Land Use Entitlements.**
   1. Generally, conforms to the Town's guiding documents that include, but are not limited to, Town Vision, Comprehensive Master Plans, Sub Area Plans, Design Guidelines, Corridor Plans and any other guiding document so long as the application of such document does not restrict the project's entitle use(s) and density.
   2. Complies with existing Intergovernmental Agreements applicable to the development proposed.
   3. Complies with any applicable Zoning Overlay Regulations and, if applicable, Skyline/Ridgeline Regulations.
   4. Complies with the approved Planned Development Plan and Zoning Regulations.

5. Conforms to the Town's architectural goals by proposing architectural details that incorporate the use of high quality materials in a unique and varied design, while eliminating monolithic expanses of walls and rooflines through the use of varying planes and architectural projections to ensure a complete 360-degree architectural design.
6. Complies with all other relevant requirements of the CRMC.

Analysis: The proposed development meets this criterion. It generally conforms to the Town's 2030 Vision and Comprehensive Master Plan by adding to the Town's diversified housing types. As detailed in this report, the proposal complies with the use and development standards of the B – Business/Commercial Zoning Regulations of the Town's municipal code. The architectural design will enhance and refresh the existing building. This site plan is not subject to an intergovernmental agreement, the Skyline/Ridgeline Ordinance, the Residential/Non-Residential Interface Regulations or the Dissimilar Residential Regulations. The proposal does comply with all other relevant requirements of the Castle Rock Municipal and technical criteria, as summarized in this report and asserted in the following criteria.

B. **Site Layout.**
   1. Conforms to Chapter 17.50 Residential/Non-Residential Interface of the CRMC.
   2. Site design shall be designed to maintain pedestrian and vehicle safety, provide for adequate fire safety, and mitigate impacts upon adjacent properties by ensuring all vehicular, fire and mitigation regulations contained within the CRMC, including technical criteria, have been met.
   3. Provides adequate parking, on-site circulation and loading in accordance with Town regulations.
   4. Provides appropriate screening and/or enclosure of outdoor storage of merchandise/materials, loading areas, trash receptacles, mechanical units, site utility equipment and building mounted utility hardware.
   5. Provides adequate site design to protect major environmental characteristics that would include unique topographic features and significant vegetation where possible.

Analysis: The proposed development meets this criterion. The SDP meets all relevant site layout requirements outlined in the governing zoning and the Town's Municipal Code. Parking lots are designed for safe vehicle and pedestrian circulation. Castle Rock Fire has reviewed and approved the site design for access and fire safety. Proper screening has been provided for trash enclosures, rooftop mechanical units, and meter gangs.

C. **Circulation and Connectivity.**
   1. Complies with all CRMC and technical criteria associated with circulation and connectivity.
   2. Complies with all Fire regulations associated with land development.
   3. Provides for pedestrian and bicycle traffic in a safe and convenient manner.
   4. Provides for a high level of pedestrian connectivity between neighborhoods, schools, trails/open space and commercial areas.

Analysis: The proposed development meets this criterion. The SDP provides appropriate vehicular entrances into the property, with interior drive aisles and parking that meet Town standards. Existing sidewalks are located adjacent to the public right of way, private drive isles

and interior walkways to provide additional pedestrian connections to the residential units and on site amenities.

D. **Services Phasing and Off-site Impact.**
   1. Complies with any phasing requirements associated with the approved zoning for the property. Provides phased improvements in a logical and efficient manner.
   2. Adequate water resources have been conveyed or purchased. Existing or proposed water and wastewater systems can support the proposed development pattern, uses and density.
   3. Existing or proposed stormwater systems can support the development and comply with applicable regulations.
   4. Provides adequate consideration for the future extension of streets and utilities to adjacent properties.
   5. Identifies and appropriately provides on-site and off-site public improvements to mitigate traffic impacts as required by the CRMC and technical criteria.

Analysis: The proposed development meets this criterion. The SDP provides adequate and efficient utility plans for water, stormwater and wastewater, which considers existing conditions of the site and necessary ingress and egress improvements.

E. **Open Space, Public Lands and Recreation Amenities.**
   1. Provides adequate trail systems in terms of internal circulation and appropriate external connections deemed necessary by the Town to achieve connectivity goals.
   2. Ensures functional and accessible open space, consistent with the overall open space plan for development and preserves significant natural features.
   3. Ensures appropriate buffering, utilizing open space and/or setbacks to lessen any
   4. Identified negative impacts.

Analysis: The proposed development meets this criterion. No additional land dedications for open space, parks or trails are required with this site plan.

Budget Impact

Unity at Park Street LLLP has submitted a request for a fee waiver. Town code provides for development impact fee (§3.16.050) and system development fee (§13.12.080J) reductions of up to 100 percent for attainable housing projects. Per code, “A qualifying attainable housing project and unit shall be defined as a housing project or unit participating in an attainable or affordable housing program through the Douglas County Housing Partnership, Colorado Housing Finance Authority or other certified local, state or federal attainable housing program.” Waivers of this type require Town Council approval. The fee waiver request will be considered by Town Council on November 7, 2023.

Findings

All staff review comments and external referral comments have been addressed. Staff finds that the Use by Special Review - Site Development Plan, as proposed:

- Generally conforms with the objectives of the Town Vision and the Comprehensive Master Plan,

- Meets the requirements of the B - Business/Commercial Zoning Regulations, of the Municipal Code, and
- Meets the Site Development Plan review and approval criteria of the Municipal Code and the Town's technical criteria.
- Meets the Use by Special Review review and approval criteria of the Municipal Code and the Town's technical criteria.

Recommendation

Staff recommends that Planning Commission recommend approval of the Use by Special Review Site Development Plan, as proposed, to Town Council.

Proposed Motions

Option 1: Approval

"I move to recommend approval of Lot 3 Castle Park West, 1st Amendment Use by Special Review - Site Development Plan, as presented."

Option 2: Approval with Conditions

"I move to recommend approval of Lot 3 Castle Park West, 1st Amendment Use by Special Review - Site Development Plan, with the following conditions:" (list conditions)

Option 3: Continue item to next hearing (need more information to make decision)

"I move to continue this item to the Planning Commission meeting on [date certain], 2023, at 6 pm."

Attachments

Attachment A: Vicinity Map
Attachment B: Site Development Plan

SITE DEVELOPMENT PLAN

LOT 3, CASTLE ROCK PARK WEST 1ST AMENDMENT

WELLSPRING - PARK STREET HOTEL PROJECT

TOWN OF CASTLE ROCK, DOUGLAS COUNTY, COLORADO.
LOCATED IN A PORTION OF THE SOUTHWEST QUARTER OF SECTION 2,
TOWNSHIP 8 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN.

PURPOSE STATEMENT

IN OCTOBER 2022, THE DOUGLAS COUNTY BOARD OF COUNTY COMMISSIONERS USED FEDERAL ARPA FUNDS TO PURCHASE THE LA QUINTA HOTEL LOCATED AT 884 PARK STREET IN CASTLE ROCK, COLORADO. IN COLLABORATION WITH WELLSPRING COMMUNITY, THE COUNTY AND WELLSPRING HOUSING INTEND TO CONVERT THE 63-UNIT HOTEL INTO A 42-UNIT APARTMENT FACILITY. THE THREE STORY HOTEL WILL BE RENOVATED INTO 42 UNITS COMPRISED OF 20 STUDIOS AND 22 ONE-BEDROOM APARTMENTS.

SITE DEVELOPMENT PLAN GENERAL NOTES

1. THE TOWN OF CASTLE ROCK REQUIRES THAT MAINTENANCE ACCESS BE PROVIDED TO ALL STORM DRAINAGE FACILITIES TO ASSURE CONTINUOUS OPERATIONAL CAPABILITY OF THE SYSTEM.THE PROPERTY OWNER, SUBSEQUENT OWNERS, HEIRS, SUCCESSORS AND ASSIGNS SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL DRAINAGE FACILITIES INCLUDING, BUT NOT LIMITED TO, INLETS, PIPES, CULVERTS, CHANNELS, DITCHES, HYDRAULIC STRUCTURES, AND DETENTION BASINS LOCATED ON THIS PROPERTY, UNLESS MODIFIED BY THE SUBDIVISION IMPROVEMENTS AGREEMENT. SHOULD THE OWNER FAIL TO ADEQUATELY MAINTAIN SAID FACILITIES, THE TOWN SHALL HAVE THE RIGHT TO ENTER SAID PROPERTY FOR THE PURPOSES OF OPERATION AND MAINTENANCE. ALL SUCH MAINTENANCE COSTS WILL BE ASSESSED TO THE PROPERTY OWNER, SUBSEQUENT OWNERS, HEIRS, SUCCESSORS AND ASSIGNS. THE MAINTENANCE COSTS SHALL INCLUDE ALL ACTUAL COSTS FOR LABOR, EQUIPMENT AND MATERIALS AND A 25% FEE.
2. PURSUANT OF THE TOWN OF CASTLE ROCK LANDSCAPE REGULATIONS THE PROPERTY OWNER, SUBSEQUENT OWNERS, HEIRS, SUCCESSORS AND ASSIGNS SHALL BE RESPONSIBLE FOR THE PROPER MAINTENANCE OF THE AREA SUBJECT TO THE APPROVED SITE DEVELOPMENT PLAN. LANDSCAPING WITHIN PUBLIC RIGHTS-OF-WAY IS TO BE MAINTAINED BY THE ADJACENT PRIVATE PROPERTY OWNER OR THE HOMEOWNER/PROPERTY OWNER ASSOCIATION, AS APPLICABLE. LANDSCAPING SHALL BE CONTINUOUSLY MAINTAINED INCLUDING NECESSARY WATERING, WEEDING, PRUNING, MOWING, PEST CONTROL, AND REPLACEMENT OF DEAD OR DISEASED PLANT MATERIAL. UPON WRITTEN NOTICE BY THE TOWN, THE OWNER WILL HAVE 45 DAYS TO CURE OR REPLACE DAMAGED OR DEAD LANDSCAPE MATERIAL. IN THE CASE OF DISEASED LANDSCAPE MATERIAL, A SHORTER COMPLIANCE PERIOD MAY BE SPECIFIED IN SAID NOTICE. THE TOWN OF CASTLE ROCK WATER CONSERVATION ORDINANCE REGULATES TIMES OF SEASONAL IRRIGATION AND PROHIBITS THE WASTING OF POTABLE WATER THROUGH IMPROPER IRRIGATION.
3. THIS PROPERTY IS LOCATED WITHIN ZONE X AS PER FEMA FIRM PANEL NO. 08035C0188G DATED 03/16/2016.
4. ANY STREET SIGNS, STRIPING, STREET LIGHTS AND CURB RAMPS ARE CONCEPTUAL ONLY AND SUBJECT TO TOWN REVIEW WITH THE CONSTRUCTION DOCUMENTS. THESE ITEMS SHALL COMPLY WITH THE TOWN OF CASTLE ROCK'S REGULATIONS, STANDARDS AND REQUIREMENTS.
5. THE DEVELOPER SHALL CONFORM TO THE TOWN OF CASTLE ROCK "WATER USE MANAGEMENT PROGRAM IMPLEMENTATION POLICY", AS AMENDED FROM TIME TO TIME, FOR THIS PROJECT.
6. APPROVAL OF THIS SITE DEVELOPMENT PLAN DOES NOT CONSTITUTE APPROVAL OF ANY DEVIATIONS FROM TOWN OF CASTLE ROCK REGULATIONS AND STANDARDS. ALL DEVIATIONS FROM TOWN REGULATIONS AND STANDARDS ARE SUBJECT TO THE APPROPRIATE PROCEDURES FOR APPROVAL.
7. NO SOLID OBJECT (EXCLUDING FIRE HYDRANTS, TRAFFIC CONTROL DEVICES AND TRAFFIC SIGNS) EXCEEDING THIRTY (30) INCHES IN HEIGHT ABOVE THE FLOWLINE ELEVATIONS OF THE ADJACENT STREET, INCLUDING BUT NOT LIMITED TO BUILDINGS, UTILITY CABINETS, WALLS, FENCES, LANDSCAPE PLANTINGS, CROPS, CUT SLOPES, AND BERMS SHALL BE PLACED WITHIN SIGHT DISTANCE LINES AND SIGHT DISTANCE EASEMENTS.
8. THE ZONING RECORDATION INFORMATION, INCLUDING DATE AND RECEPTION NUMBER OR "THIS SITE IS ZONED B."
9. ALL EMERGENCY ACCESS ROADS, EMERGENCY ACCESS GATES AND SIGNAGE SHALL COMPLY WITH THE TOWN OF CASTLE ROCK FIRE DEPARTMENT REQUIREMENTS AND SHALL BE MAINTAINED BY METROPOLITAN DISTRICT, HOMEOWNERS ASSOCIATION, OR OTHER PROPERTY MANAGEMENT ENTITY.
10. UNLESS OTHERWISE NOTED, ALL LOTS SHALL HAVE A 10-FOOT UTILITY EASEMENT ALONG THE FRONT AND REAR LOT LINES AND ALONG ALL PUBLIC RIGHTS-OF-WAY AND SHALL HAVE 5-FOOT UTILITY EASEMENTS ALONG EACH SIDE LOT LINE. THESE UTILITY EASEMENTS ARE FOR THE INSTALLATION, MAINTENANCE AND OPERATION OF UTILITIES AND DRAINAGE FACILITIES INCLUDING, BUT NOT LIMITED TO STREET LIGHTS, ELECTRIC LINES, GAS LINES, CABLE TELEVISION LINES, FIBER OPTIC LINES AND TELEPHONE LINES, AS WELL AS PERPETUAL RIGHT FOR INGRESS AND EGRESS FOR INSTALLATION, MAINTENANCE AND REPLACEMENT OF SUCH LINES.
11. A SIGN PERMIT FOR EACH SIGN MUST BE OBTAINED FROM THE TOWN OF CASTLE ROCK BUILDING DIVISION PRIOR TO PLACING ANY SIGN ON THE PROPERTY. ALL SIGNS MUST COMPLY WITH THE PROVISIONS OF TITLE 19 (SIGN CODE REGULATIONS) OF THE MUNICIPAL CODE.
12. THE NUMBER OF PARKING SPACES HAS BEEN SET BASED ON THE PROPOSED USES ON THIS SITE DEVELOPMENT PLAN AND CHAPTER 17.54 OF THE CASTLE ROCK MUNICIPAL CODE. A CHANGE OF USE TO A MORE PARKING INTENSIVE USE AS IDENTIFIED IN CHAPTER 17.54 OF THE CASTLE ROCK MUNICIPAL CODE WILL REQUIRE AN AMENDMENT TO THIS SITE DEVELOPMENT PLAN.

FIRE NOTES

1. IF FIRE APPARATUS ACCESS ROADS OR WATER SUPPLY FOR FIRE PROTECTION IS REQUIRED TO BE INSTALLED, SUCH PROTECTION SHALL BE INSTALLED AND MADE SERVICEABLE PRIOR TO VERTICAL CONSTRUCTION.
2. FIRE HYDRANT(S) ARE REQUIRED TO BE INSTALLED AND MADE SERVICEABLE PRIOR TO AND DURING THE TIME OF CONSTRUCTION.
3. APPROVED FIRE APPARATUS ACCESS ROADS SHALL BE PROVIDED FOR EVERY FACILITY, BUILDING OR PORTION OF A BUILDING CONSTRUCTED OR MOVED INTO, OR WITHIN THE JURISDICTION. THE FIRE APPARATUS ACCESS ROAD SHALL EXTEND TO WITHIN 150 FEET OF ALL PORTIONS OF THE FACILITY AND ALL PORTIONS OF THE EXTERIOR WALLS OF THE FIRST STORY OF THE BUILDING AS MEASURED BY AN APPROVED ROUTE AROUND THE EXTERIOR OF THE BUILDING OR FACILITY.
4. DEAD-END FIRE ACCESS ROADS IN EXCESS OF 150 FEET SHALL PROVIDE AN APPROVED AREA FOR TURNING AROUND FIRE APPARATUS.
5. FIRE APPARATUS ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 20 FEET, EXCLUSIVE OF SHOULDERS, EXCEPT FOR APPROVED SECURITY GATES AND AN UNOBSTRUCTED VERTICAL CLEARANCE OF NOT LESS THAN 13 FEET, 6 INCHES.
6. FIRE APPARATUS ACCESS ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS WEIGHING AT LEAST 75,000 POUNDS, AND SHALL BE SURFACED SO AS TO PROVIDE ALL-WEATHER DRIVING CAPABILITIES. THE TERM "ALL-WEATHER DRIVING CAPABILITIES" HAS BEEN INTERPRETED TO MEAN EITHER CONCRETE OR ASPHALT, OR OTHER APPROVED DRIVING SURFACE DESIGNED BY AN ENGINEER AND APPROVED BY THE FIRE DEPARTMENT.
7. "NO PARKING FIRE LANE" SIGNS ARE REQUIRED IN AREAS THAT MEET THE FOLLOWING CRITERIA AND IN AREAS DESIGNATED BY THE FIRE PREVENTION BUREAU. SIGNS SHALL BE POSTED ON BOTH SIDES OF FIRE ACCESS ROADWAYS, PUBLIC OR PRIVATE ROADWAYS AND DRIVEWAYS LESS THAN 26 FEET WIDE. SIGNS SHALL BE POSTED ON ONE SIDE ONLY OF FIRE ACCESS ROADWAYS, PUBLIC OR PRIVATE ROADWAYS OR DRIVEWAYS BETWEEN 26 FEET WIDE AND 32 FEET WIDE. NO SIGNAGE IS REQUIRED FOR FIRE ACCESS ROADWAYS, PUBLIC OR PRIVATE ROADWAYS OR DRIVEWAYS GREATER THAN OR EQUAL TO32 FEET WIDE.
8. IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER TO MAINTAIN DRIVE LANES FOR EMERGENCY VEHICLE INGRESS AND EGRESS, INCLUDING SNOW REMOVAL.
9. THE DEVELOPER UNDERSTANDS THAT AS THE PROJECT DEVELOPS THERE MAY BE FIRE AND LIFE SAFETY PROVISIONS OF THE TOWN OF CASTLE ROCK ADOPTED INTERNATIONAL FIRE CODE (IFC) THAT MAY ARISE, AND WERE NOT CLEARLY VISIBLE DURING THE INITIAL REVIEWS, BUT MAY REQUIRE CORRECTIVE ACTION. THESE ITEMS MAY INCLUDE, BUT ARE NOT LIMITED TO: FIRE FLOW REQUIREMENTS, FIRE HYDRANT PLACEMENT, ACCESS, ETC.

LAND USE:

CURRENT ZONING:	(B)	BUSINESS / COMMERCIAL
PROPOSED ZONING:	(B)	BUSINESS / COMMERCIAL
CURRENT LAND USE:	HOTEL	
PROPOSED LAND USE:	MULTI-FAMILY RESIDENTIAL	

SITE DATA TABLE:

TYPE OF USE	# ACRES PROVIDED	% OF PROPERTY
BUILDING	0.282 AC	18.9%
PAVEMENT/ SIDEWALK	0.861 AC	57.7%
OPEN SPACE/ LANDSCAPE	.348 AC	23.4%
TOTAL	1.491 AC	100.0%

LEGAL DESCRIPTION:

LOT 3, CASTLE PARK WEST FIRST AMENDMENT, COUNTY OF DOUGLAS, STATE OF COLORADO

(PER FIRST AMERICAN TITLE INSURANCE COMPANY COMMITMENT # 5506-3973594

DOUGLAS COUNTY CLERK AND RECORDER'S CERTIFICATE

THIS SITE DEVELOPMENT PLAN WAS FILED FOR RECORD IN THE OFFICE OF THE COUNTY CLERK AND RECORDER OF DOUGLAS COUNTY AT _____ ON THE _____ DAY OF _____, 20_____ AT RECEPTION NO. _____.

DOUGLAS COUNTY CLERK AND RECORDER

BY: _____

DEPUTY

OWNERSHIP CERTIFICATION

THE UNDERSIGNED ARE ALL THE OWNERS OF CERTAIN LANDS IN THE TOWN OF CASTLE ROCK, COUNTY OF DOUGLAS AND STATE OF COLORADO DESCRIBED HEREIN.

_____

UNITY ON PARK STREET LLLP

SIGNED THIS _____ DAY OF _____, 20_____

NOTARY BLOCK

SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ DAY OF _____, 20_____ BY _____.

WITNESS MY HAND AND OFFICIAL SEAL.

_____

NOTARY PUBLIC

MY COMMISSION EXPIRES: _____.

TOWN COUNCIL APPROVAL

THIS SITE DEVELOPMENT PLAN WAS APPROVED BY THE TOWN COUNCIL OF THE TOWN OF CASTLE ROCK, COLORADO, ON THE _____ DAY OF _____, 20_____.

_____ _____ _____ _____

MAYOR DATE

ATTEST:

_____ _____ _____ _____

TOWN CLERK DATE

TITLE CERTIFICATION

I, _____, AN AUTHORIZED REPRESENTATIVE OF _____, A TITLE INSURANCE COMPANY LICENSED TO DO BUSINESS IN THE STATE OF COLORADO, HAVE MADE AN EXAMINATION OF THE PUBLIC RECORDS AND STATE THAT ALL OWNERS, MORTGAGEES AND LIENHOLDERS OF THE PROPERTY ARE LISTED IN THE CERTIFICATE OF OWNERSHIP AND LIENHOLDER SUBORDINATION CERTIFICATE.

_____

AUTHORIZED REPRESENTATIVE

_____

TITLE COMPANY

SIGNED THIS _____ DAY OF _____, 20_____.

NOTARY BLOCK

SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ DAY OF _____, 20_____ BY _____ AS AUTHORIZED REPRESENTATIVE OF _____.

WITNESS MY HAND AND OFFICIAL SEAL.

_____

NOTARY PUBLIC

MY COMMISSION EXPIRES: _____.

PLANNING COMMISSION RECOMMENDATION

THIS SITE DEVELOPMENT PLAN WAS RECOMMENDED FOR APPROVAL BY THE PLANNING COMMISSION OF THE TOWN OF CASTLE ROCK, COLORADO ON THE _____ DAY OF _____, 20_____.

_____ _____

CHAIR DATE

ATTEST:

_____ _____

DIRECTOR OF DEVELOPMENT SERVICES DATE

LIENHOLDER SUBORDINATION CERTIFICATE

THE UNDERSIGNED ARE ALL THE MORTGAGEES AND LIENHOLDERS OF CERTAIN LANDS IN THE TOWN OF CASTLE ROCK, COUNTY OF DOUGLAS AND STATE OF COLORADO DESCRIBED HEREON. THE UNDERSIGNED BENEFICIARY OF THE LIEN CREATED BY THE INSTRUMENT RECORDED MAY 26, 2023 AT RECEPTION NO. 2023022581, DOUGLAS COUNTY, COLORADO, SUBORDINATES THE SUBJECT LIEN TO THE TERMS, CONDITIONS AND RESTRICTIONS OF THIS DOCUMENT.

_____

MIDWESTONE BANK

SIGNED THIS _____ DAY OF _____, 20_____.

NOTARY BLOCK

SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ DAY OF _____, 20_____ BY _____ AS _____OF_____.

WITNESS MY HAND AND OFFICIAL SEAL.

_____

NOTARY PUBLIC

MY COMMISSION EXPIRES: _____.

ZONING COMPARISON CHART

ZONING	B- BUSINESS		
	ZONING REQUIREMENT		PROVIDED (SDP)
PERMITTED USES	MULTI-FAMILY		MULTI-FAMILY
MINIMUM LOT SIZE (SF)	--		1.49 ACRES (64,915 SF)
MAXIMUM BUILDING SIZE (SF) (MAX. 35% OF LOT AREA)	.52 ACRES (22,720.25 SF)		.28 ACRES (12,267.5 SF)
	MINIMUM SETBACK DISTANCE		BUILDING SETBACK (LF)
FRONT YARD SETBACK	25 FEET		40 LF
REAR YARD SETBACK	0 FEET		43.1 LF
NORTH SIDE YARD SETBACK	0 FEET		144.8 LF
SOUTH SIDE YARD SETBACK	0 FEET		9.7 LF
MAXIMUM BUILDING HEIGHT	35 FEET		30 FEET
MINIMUM PARKING PER UNIT	UNIT TYPE		CALCULATIONS / TOTALS
	STUDIO UNIT	1 SPACE PER UNIT	22 UNITS X 1 SPACE / 22 REQUIRED
	ONE BEDROOM UNIT	1.5 SPACES PER UNIT	20 UNITS X 1.5 SPACES / 30 REQUIRED
	VISITOR PARKING	1 SPACE PER 4 DWELLING UNITS (1SP/4 DU)	42 UNITS X (1SP /4 DU) / 11 REQUIRED
MINIMUM ADA PARKING	TOTAL PARKING SPACE RANGE		REQUIRED ADA SPOTS
	51-75		3 REQUIRED
TOTAL PARKING	REQUIRED: 63 SPACES (INCLUDING 3 ADA SPACES)		PROVIDED: 66 SPACES (INCLUDING 3 ADA SPACES & 9 COMPACT SPACES)
MINIMUM BICYCLE PARKING	5% OF TOTAL PARKING		REQUIRED: 4 / PROVIDED: 12

SITE UTILIZATION

	COVERAGE	% OF TOTAL AREA
BUILDING COVERAGE	12,268 SF	18.90%
PARKING COVERAGE	29,088 SF	44.90%
LANDSCAPE/OPEN SPACE COVERAGE	23,559 SF	36.20%
STREET COVERAGE	0 SF	0%
OTHER COVERAGE	0 SF	0%
TOTAL	64,915 SF	100 %

SHEET INDEX:

CONSULTANTS:

PLANNER/ LANDSCAPE ARCHITECT/ CIVIL ENGINEER:

Matrix

2435 RESEARCH PARKWAY, SUITE 300
COLORADO SPRINGS, CO 80920
PHONE: (719) 575-0100
FAX : (719) 575-0208

OWNER/DEVELOPER:

WELLSPRING COMMUNITY

826 PARK STREET #200
COLORADO SPRINGS, CO 80109
(303) 660-1935

APPROVAL:

VICINITY MAP:

PROJECT:

WELLSPRING PARK STREET HOTEL
SITE DEVELOPMENT PLAN

TOWN OF CASTLE ROCK
SEPETEMBER 2023

REVISION HISTORY:

NO.	DATE	DESCRIPTION	BY

DRAWING INFORMATION:

PROJECT NO:	22.1310.002
DRAWN BY:	BP
CHECKED BY:	JA
APPROVED BY:	

SHEET TITLE:

TITLE SHEET

GN01

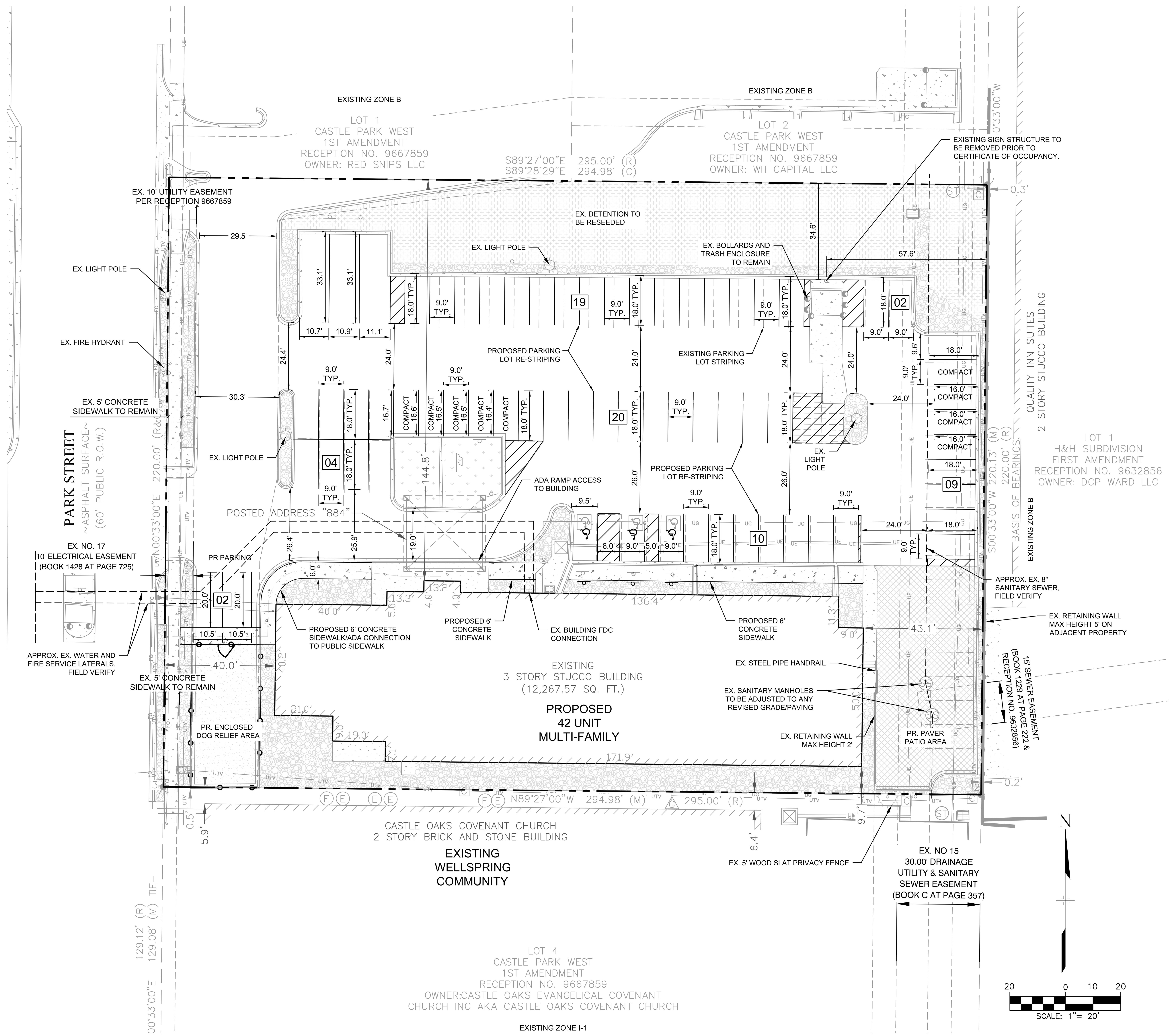
SHEET 01 OF 06

SITE DEVELOPMENT PLAN, WELLSPRING PARK STREET HOTEL PROJECT USR23-0003

FILE LOCATION: S:\22.1310.002 WELLSPRING COMMUNITY CENTER\500 CAD\SDM PLAN SET\SP\PARK ST HOTEL PD PLAN\PD01.DWG

SITE DEVELOPMENT PLAN
LOT 3, CASTLE ROCK PARK WEST 1ST AMENDMENT

WELLSPRING - PARK STREET HOTEL PROJECT
TOWN OF CASTLE ROCK, DOUGLAS COUNTY, COLORADO.
LOCATED IN A PORTION OF THE SOUTHWEST QUARTER OF SECTION 2,
TOWNSHIP 8 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN.



FILE LOCATION: S:\22.1310.002 WELLSPRING COMMUNITY CENTER\500 CADD\504 PLAN SETS\PARK ST HOTEL PD PLAN\PD01.DWG

LEGEND

2023-08-28 10:53

2-4" COBBLE TYPE: SUPPLIER: DEPTH: OR APPROVED EQUAL -	6,899 SF
NATIVE SEED- DETENTION MIX NAME: SUPPLIER: OR APPROVED EQUAL -	6,791 SF
NATIVE SEED-LOW MIX NAME: N/A SUPPLIER: EXISTING -	908 SF
ARTIFICIAL TURF -	1,287 SF
PATIO TILES SIZE: COLOR: SUPPLIER: OR APPROVED EQUAL -	2,787 SF

CONSULTANTS:

PLANNER/ LANDSCAPE ARCHITECT/ CIVIL ENGINEER:

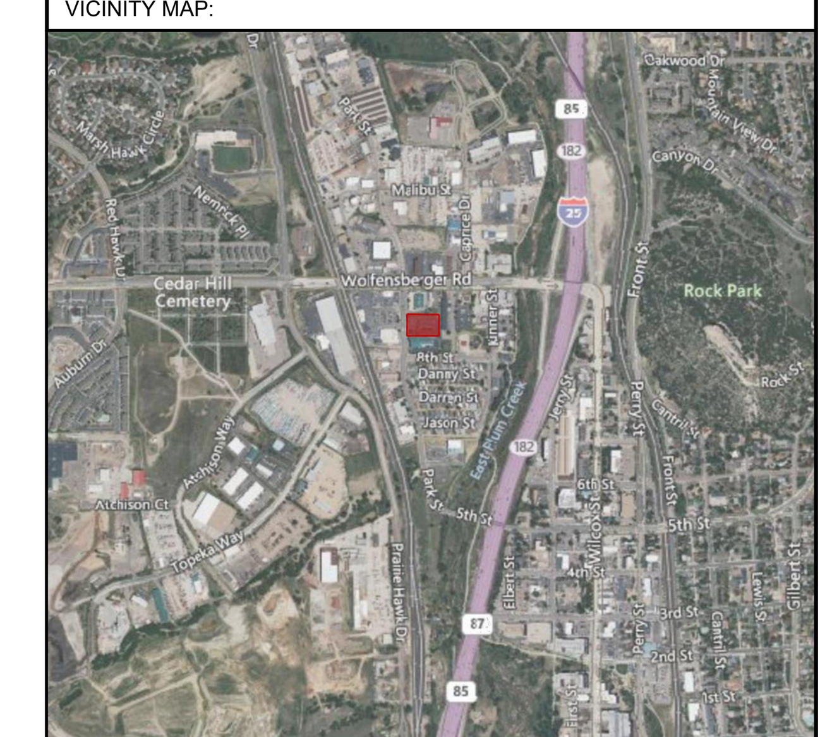
Matrix
2435 RESEARCH PARKWAY, SUITE 300
COLORADO SPRINGS, CO 80920
PHONE: (719) 575-0100
FAX : (719) 575-0208

OWNER/DEVELOPER:

WELLSPRING COMMUNITY
826 PARK STREET #200
COLORADO SPRINGS, CO 80109
(303) 660-1935

APPROVAL:

VICINITY MAP:



PROJECT:

WELLSPRING PARK STREET HOTEL
SITE DEVELOPMENT PLAN

TOWN OF CASTLE ROCK
SEPETEMBER 2023

REVISION HISTORY:

NO.	DATE	DESCRIPTION	BY

DRAWING INFORMATION:

PROJECT NO: 22.1310.002
DRAWN BY: BP
CHECKED BY: JA
APPROVED BY:
SHEET TITLE:

PD PLAN

SP01

SHEET 02 OF 06

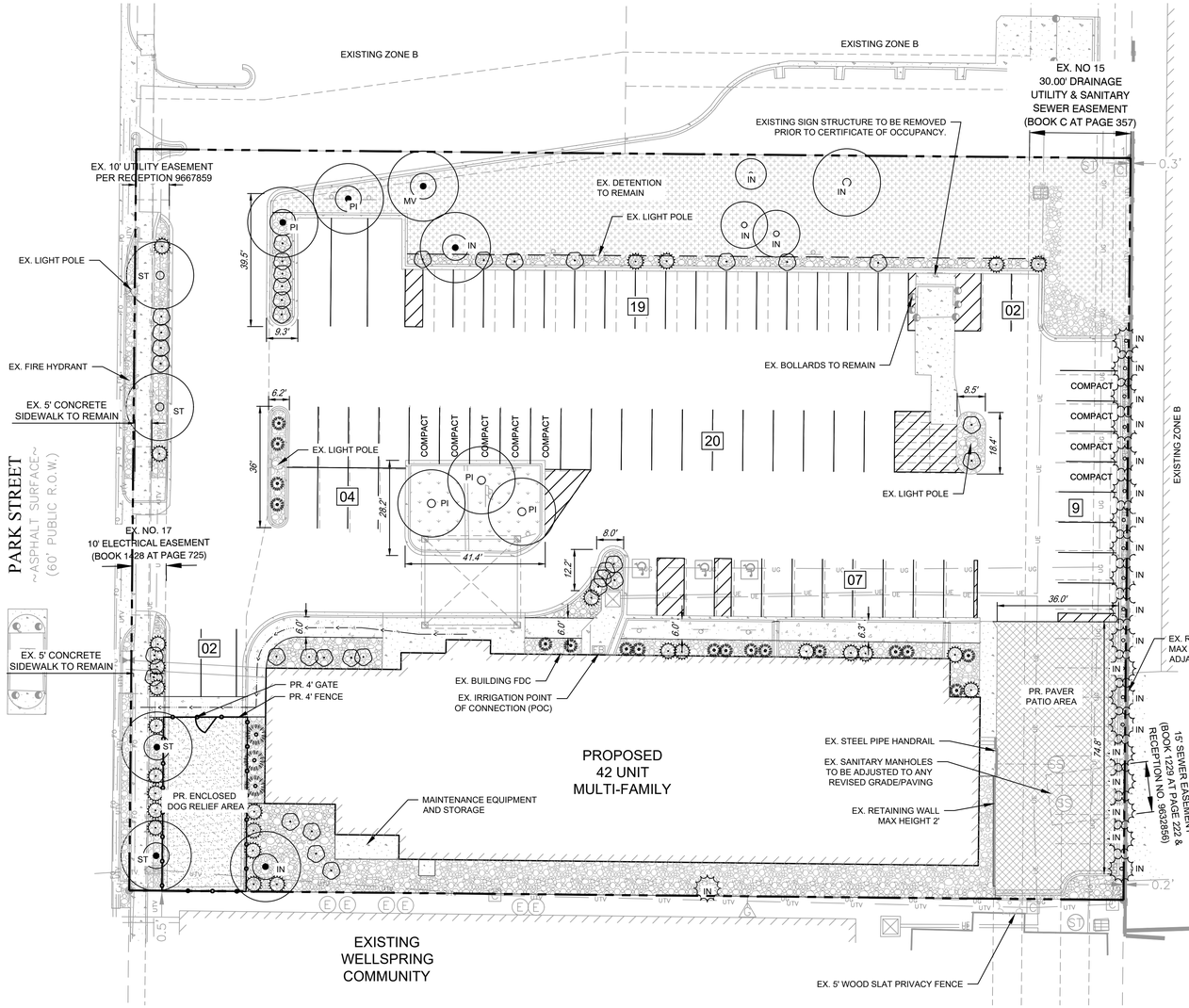
SITE DEVELOPMENT PLAN, WELLSPRING PARK STREET HOTEL PROJECT USR23-0003

SITE DEVELOPMENT PLAN

LOT 3, CASTLE ROCK PARK WEST 1ST AMENDMENT

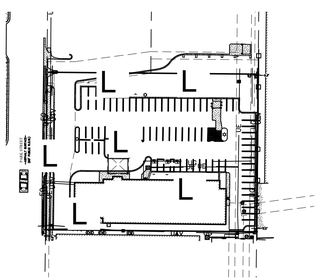
WELLSPRING - PARK STREET HOTEL PROJECT

TOWN OF CASTLE ROCK, DOUGLAS COUNTY, COLORADO.
LOCATED IN A PORTION OF THE SOUTHWEST QUARTER OF SECTION 2,
TOWNSHIP 8 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN.



SCHEMATIC LANDSCAPE DIAGRAM

HYDROZONES
V - VERY LOW
(0 TO 7 INCHES PER YEAR)
L - LOW
(7 TO 15 INCHES PER YEAR)
M - MODERATE
(15 TO 25 INCHES PER YEAR)
H - HIGH
(25+ INCHES PER YEAR)



*THIS SDP IS SUBJECT TO TCV23-0043 WHICH ALLOWS VARIANCE FROM THE MOST CURRENT TOCR LICM PARKING LOT ISLAND REQUIREMENT, MINIMUM PLANTING WIDTH FOR EXISTING LANDSCAPE ISLANDS AND PLANT DIVERSITY REQUIREMENTS DUE TO THE EXISTING PARKING LOT ISLANDS AND ESTABLISHED MATURE LANDSCAPE ON SITE.

LEGEND

2023-08-28 12:45

- EXISTING DECIDUOUS SHADE TREE
- EXISTING EVERGREEN SHRUB
- 2-4" COBBLE — 6,899 SF
  TYPE:
  SUPPLIER:
  DEPTH:
  OR APPROVED EQUAL
- NATIVE SEED- DETENTION — 6,791 SF
  MIX NAME: DOUGLAS COUNTY AND CASTLE ROCK PERMANENT DRILL SEED MIX
  OR APPROVED EQUAL
- NATIVE SEED-LOW — 908 SF
  MIX NAME: CASTLE ROCK RECOMMENDED LOW GROW MIX
  OR APPROVED EQUAL
- ARTIFICIAL TURF — 1,287 SF
- PATIO TILES — 2,787 SF
  SIZE:
  COLOR:
  SUPPLIER:
  OR APPROVED EQUAL
- CONCRETE WALK — 1,228 SF
  SIZE:
  COLOR:
  SUPPLIER:
  OR APPROVED EQUAL
- STEEL EDGING

SITE DEVELOPMENT PLAN PLANT SCHEDULE

DECIDUOUS SHADE TREES — HYDROZONE **LOW** — QUANTITY **17**

LARGE CANOPY DECIDUOUS SHADE TREES SHALL BE A MINIMUM OF 2" INCHES IN CALIPER MEASURED SIX (6) INCHES ABOVE GROUND

LARGE CANOPY DECIDUOUS SHADE TREES SHALL BE A MINIMUM OF 3" INCHES IN CALIPER WHEN IN A GRATE OR PLANTED IN AREAS LESS THAN EIGHT (8) FEET IN WIDTH

EVERGREEN TREES — HYDROZONE **LOW** — QUANTITY **20**

EVERGREEN TREES SHALL BE A MINIMUM OF 6 FEET IN HEIGHT, MEASURED TO THE MID-POINT OF THE MOST RECENT YEAR'S GROWTH

DECIDUOUS SHRUBS — HYDROZONE **LOW** — QUANTITY **35**

SHRUBS SHALL BE A MINIMUM OF FIVE (5) GALLON CONTAINER IN SIZE

EVERGREEN SHRUBS — HYDROZONE **LOW** — QUANTITY **47**

SHRUBS SHALL BE A MINIMUM OF FIVE (5) GALLON CONTAINER IN SIZE

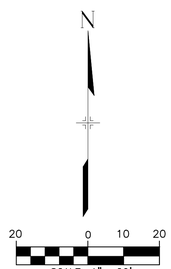
NATIVE SEED — HYDROZONE **LOW** — COMBINED AREA **7699**

GRASS SEED PLANTING QUALITY AND QUANTITY IN IRRIGATED AREAS SHALL BE IN COMPLIANCE WITH NURSERY STANDARDS AND SHALL PROVIDE A MINIMUM GROUND COVER OF EIGHTY (80) PERCENT WITHIN THE FIRST GROWING SEASON

APPROVED NATIVE GRASS SEED MIXES: [Low Grow Mix/Foothills Mix/Colorado Native Mix]

SEED MIX SCHEDULE

MIX NAME	SUPPLIER	SPECIES	WATER USE	APPLICATION METHOD	APPLICATION RATE
CASTLE ROCK RECOMMENDED LOW GROW MIX	--	30% ECHRAIM CRESTED WHEATGRASS 25% DWARF PERENNIAL RYEGRASS 20% SR3200 BLUE FESCUE 15% REUBENS CANADA BLUEGRASS 10%CHEWING FESCUE	VERY LOW	BROADCAST	PER SUPPLIER RECOMMEND ATION
DOUGLAS COUNTY AND CASTLE ROCK PERMANENT DRILL SEED MIX	--	10% BIG BLUESTEM 10% YELLOW INDIANGRASS 10% SWITCHGRASS 10% SIDEOATS GRAMA 10%WESTERN WHEATGRASS 10%BLUE GRAMA 10% THICKSPIKE WHEATGRASS 10% PRAIRIE SANDREED 10% GREEN NEEDLEGRASS 5% SLENDER WHEATGRASS 5% STEAMBANK WHEATGRASS	VERY LOW	BROADCAST	PER SUPPLIER RECOMMEND ATION



LANDSCAPE ARCHITECT CERTIFICATION

I hereby affirm that these final site development plans were prepared under my direct supervision, in accordance with all applicable Town of Castle Rock and State of Colorado standards and statutes, respectively; and that I am fully responsible for all design and revisions to said plans.

(Landscape Architect signature and seal here) Date JASON ALWINE - PLA CO-248

TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL
APPROVED BY:

DEVELOPMENT SERVICES *DATE*

CONSULTANTS:

PLANNER/ LANDSCAPE ARCHITECT/ CIVIL ENGINEER:

Matrix

2435 RESEARCH PARKWAY, SUITE 300
COLORADO SPRINGS, CO 80920
PHONE: (719) 575-0100
FAX : (719) 575-0208

OWNER/DEVELOPER:

WELLSPRING COMMUNITY

826 PARK STREET #200
COLORADO SPRINGS, CO 80109
(303) 660-1935

APPROVAL:

VICINITY MAP:

PROJECT:

WELLSPRING PARK STREET HOTEL
SITE DEVELOPMENT PLAN

TOWN OF CASTLE ROCK
SEPETEMBER 2023

REVISION HISTORY:

NO.	DATE	DESCRIPTION	BY

DRAWING INFORMATION:

PROJECT NO:	22.1310.002
DRAWN BY:	BP
CHECKED BY:	JA
APPROVED BY:	
SHEET TITLE:	

LANDSCAPE PLAN

LS01

SHEET 03 OF 06

SITE DEVELOPMENT PLAN, WELLSPRING PARK STREET HOTEL PROJECT USR23-0003

FILE LOCATION: S:\22.1310.002 WELLSPRING COMMUNITY CENTER\500 CAD\504 PLAN SET\SPARK ST HOTEL PD PLAN\LS01.DWG

SITE DEVELOPMENT PLAN

LOT 3, CASTLE ROCK PARK WEST 1ST AMENDMENT

WELLSPRING - PARK STREET HOTEL PROJECT

TOWN OF CASTLE ROCK, DOUGLAS COUNTY, COLORADO.
LOCATED IN A PORTION OF THE SOUTHWEST QUARTER OF SECTION 2,
TOWNSHIP 8 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN.

TOCR - COMPOSITE LANDSCAPE WATER USE RATING (CLWUR)

Irrigation Spray or Drip?	Plant Name (Common)	Appl. Rate (inches/month)	Zone (VL,L,Mod,HW)	% of Total Area	IA Irrigated area (in sq. ft. for each zone)	LWUR Landscape Water Use Rating	TA Total Area of all Irrigated Landscape Zones	CLWUR (LWUR x IA) /TA
Spray	Low Grow Native Seed	**1"**	**VL**	**100%**	7662	**2**	**10993**	**1.393977986**
Drip	Shrub Bed	**2"**	**VL**	**50%**	**3331**	**2**	**10993**	**0.606022014**
						Total of the CLWUR		2

TOCR - MULTI-FAMILY RESIDENTIAL SITE INVENTORY

Gross Site Area	Required Landscape (20% of the gross site area)	Existing Landscape (If Applicable)	Provided Landscape Area	Required Trees (2 trees / 1,000 sqft)	Provided Trees	Required Shrubs (4 shrubs / 1,000 sqft)	Provided Shrubs	Soil Prep Amounts (cu.yds. Per 1000 SF)
64,915	12983	14958	15441	26	37 (IN)	52	82	4 cu. Yds. (For New Planting Areas)
Turf Grass Square Footage (SF)	Landscape Coverage at Maturity (SF)	**Existing Landscape (If Applicable)**	**Landscape Coverage Percentage (75% minimum)**	Nonliving Ornamental Area in Landscape (SF)	**Nonliving Ornamental Percentage (25% maximum)**	Number of Large Canopy Deciduous Shade Tree	**Percentage (50% Large Canopy Deciduous Shade Tree)**	Separate Irrigation Service Connections
0 SF	9749	500	9737.25	1287	3245.75	13	13	Yes __X__ No ____

PARKING LOTS

Parking Lot Area	Landscaping Area Required (10% of square footage)	Existing Landscape (If Applicable)	Landscaped Area Provided	Required Trees** (2 large canopy deciduous shade trees / 1,000 sqft)	Provided Trees	Required Shrubs** (4 shrubs / 1,000 sqft)	Provided Shrubs
25,647	2564.7	2584	2584	6	6 (MV)	11	11

PARKING LOT ISLANDS

Number of Parking Spaces	Number of landscaped islands/peninsulas Required (1 island per 15 spaces)		Number of Landscaped islands/peninsulas provided	Required Trees*** (Minimum of 1 large canopy deciduous shade tree per island/peninsula)	Provided Trees	Required Shrubs (Minimum of 4 shrubs per island/peninsula)	Provided Shrubs
66	5		5	5	5 (PI)	18	18

* PARKING LOT LANDSCAPING OUTSIDE OF LANDSCAPED ISLANDS/ PENINSULA SHOULD BE LOCATED WITHIN 3 FEET OF THE PARKING LOT PERIMETER
** EVERGREENS ARE NOT PERMITTED IN LANDSCAPED ISLANDS OR PENINSULAS

TOCR - STREETSCAPE REQUIREMENTS

Street Name/Tract	Linear Feet (LF)**	Required Street Trees (1 tree per 40 LF)	Existing Street Trees (If applicable)	Provided Street Trees	Required Street Shrubs (4 shrubs per required tree)	Provided Street Shrubs
PARK STREET	160	4	2	2 (ST)	16	16

*STREETSCAPE REQUIREMENTS CANNOT BE COUNTED TOWARDS GROSS SITE REQUIREMENTS

TOWN OF CASTLE ROCK GENERAL NOTES:

1. FINAL LANDSCAPE AREA, COVERAGE AND PLANT QUANTITIES, SHALL MEET OR EXCEED QUANTITIES REPRESENTED IN THIS DRAWING AND SHALL CONFORM TO SUBSEQUENT SUBMITTAL REQUIREMENTS.
2. LOCATION OF PLANT MATERIALS ARE APPROXIMATED AND MAY CHANGE SLIGHTLY DUE TO UNFORESEEN FIELD CONSTRAINTS.
3. ALL PLANTS ARE TO BE PROPERLY HYDROZONED PER TOWN OF CASTLE ROCK PLANT LIST.
4. DISTANCE OF TREES TO WET UTILITY LINES SHOULD BE A MINIMUM OF 10 FEET.
5. PERMANENT IRRIGATION IS REQUIRED FOR ALL LANDSCAPED AREAS GREATER THAN 500 SQUARE FEET, PER SECTION 4.2.3 OF THE LANDSCAPE AND IRRIGATION MANUAL.
6. DESIGN MUST ACCOMMODATE THE WATERING RESTRICTIONS AS OUTLINED IN THE TOWN OF CASTLE ROCK WATER USE MANAGEMENT PLAN (WUMP).
7. IRRIGATION SYSTEMS ARE TO BE DESIGNED TO OPERATE WITHIN THE TOWN OF CASTLE ROCK WATER USE MANAGEMENT PLAN.
8. TURF AREAS TO BE WATERED WITH OVERHEAD SPRAYS, ROTORS OR SUBSURFACE DRIP, PERENNIAL BEDS TO BE WATERED WITH DRIPLINE OR POINT SOURCE DRIP[EMITTERS, TREES WATERED WITH BUBBLERS.
9. IRRIGATION SYSTEMS ARE TO BE DESIGNED PER THE TOWN OF CASTLE ROCK LANDSCAPE AND IRRIGATION REGULATIONS SECTION 4.2.3 AND TO CORRELATE WITH THE USE TYPE ON THE PROPERTY.
10. IF ANY TRANSFORMERS, GROUND-MOUNTED HVAC UNITS, UTILITY PEDESTALS, OR SIMILAR FEATURES EXISTING ON SITE, BUT NOT SHOWN ON THE SITE DEVELOPMENT PLAN, ADDITIONAL LANDSCAPING AND SCREENING MAY BE REQUIRED BASED UPON FIELD CONDITIONS DETERMINED DURING THE SITE INSPECTION. INSTALLATION WILL BE REQUIRED PRIOR TO THE FINAL INSPECTION AND THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY, AS APPLICABLE.
11. NO SOLID OBJECT EXCEEDING 30" IN HEIGHT ABOVE THE FLOWLINE ELEVATION OF THE ADJACENT STREET, INCLUDING, BUT NOT LIMITED TO BUILDING, UTILITY CABINETS, WALLS, FENCES, TREES, LANDSCAPE PLANTINGS, CUT SLOPES AND BERMS SHALL BE PLACED IN SIGHT DISTANCE TRIANGLES OR EASEMENTS AS SHOWN ON THE PLAN.
12. NO TREES, LARGE SHRUBS, OR PERMANENT STRUCTURES ARE ALLOWED IN WET UTILITY AND DRAINAGE EASEMENTS.
13. AN IRRIGATION PLAN IS REQUIRED WITH THE FIRST SUBMITTAL OF THE CONSTRUCTION DOCUMENTS. PLEASE SEE SECTIONS 3.1.2B AND 4.2.3 OF THE TOWN OF CASTLE ROCK LANDSCAPE AND IRRIGATION PERFORMANCE STANDARDS AND CRITERIA MANUAL FOR IRRIGATION SUBMITTAL AND DESIGN REQUIREMENTS. CHANGES TO THE LANDSCAPE PLAN MAY BE NECESSARY DUE TO CONSTRUCTION DOCUMENTS IRRIGATION PLAN REVIEW COMMENTS.
14. LANDSCAPE AND IRRIGATION SHALL BE INSTALLED BY A TOWN OF CASTLE ROCK REGISTERED LANDSCAPE CONTRACT PROFESSIONAL.
15. DEAD PLANT MATERIALS SHALL BE REMOVED AND REPLACED WITH HEALTHY PLANTING MATERIALS OF COMPARABLE SIZE AND SPECIES THAT MEET THE ORIGINAL INTENT OF THE APPROVED LANDSCAPE DESIGN WITHIN FORTY-FIVE(45) DAYS OR SOONER IN THE EVENT OF A CONTAGIOUS DISEASE OR INVASIVE INSECT SPECIES. TOWN OF CASTLE ROCK IS NOT RESPONSIBLE FOR PLANT REPLACEMENTS.
16. SLOPES STEEPER THAN 3:1 ARE NOT PERMITTED ON LANDSCAPE PLANS IN THE TOWN OF CASTLE ROCK.
17. TREES WITHIN SIGHT DISTANCE LINES SHALL BE MAINTAINED TO PROVIDE CLEARANCE FOR VEHICULAR SIGHT DISTANCE. TREES SHALL BE LIMBED & MAINTAINED SO THAT NO BRANCHES FALL BELOW THE HEIGHT OF 8 FEET MEASURED FROM THE FLOWLINE ELEVATION OF THE ADJACENT STREET PER TRANSPORTATION DESIGN CRITERIA MANUAL SEC 2.4.8-2.
18. NO VEGETATION SHALL BE ALLOWED WITHIN INTERSECTION SAFETY TRIANGLES THAT EXCEED 2.5 FEET HEIGHT ABOVE THE FLOWLINE ELEVATION OF THE ADJACENT STREET PER TRANSPORTATION DESIGN CRITERIA MANUAL SEC 2.4.9.
19. IRRIGATION IS TO BE DESIGN-BUILD PLEASE SEE SECTIONS 3.12B AND 4.2.3 OF THE TOWN OF CASTLE ROCK LANDSCAPE AND IRRIGATION PERFORMANCE STANDARDS AND CRITERIA MANUAL FOR IRRIGATION SUBMITTAL AND DESIGN REQUIREMENTS.
20. MINIMUM TREE PLANTING WIDTH IS 6 FEET. LARGE CANOPY DECIDUOUS TREE PLANTED IN AREAS LESS THAN 8 FEET IN WIDTH ARE REQUIRED TO USE CU STRUCTURAL SOIL. LARGE DECIDUOUS CANOPY TREES PLANTED IN AREAS. LESS THAN 8 FEET IN WIDTH ARE REQUIRED TO BE PLANTED WITH A MINIMUM CALIPER OF 3".

LANDSCAPE ARCHITECT CERTIFICATION

I hereby affirm that these final site development plans were prepared under my direct supervision, in accordance with all applicable Town of Castle Rock and State of Colorado standards and statutes, respectively; and that I am fully responsible for all design and revisions to said plans.

(Landscape Architect signature and seal here) Date JASON ALWINE - PLA CO-248

TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL
APPROVED BY:

DEVELOPMENT SERVICES *DATE*

FILE LOCATION: S:\22.1310.002 WELLSPRING COMMUNITY CENTER\300 CAD\SD\04 PLAN SETS\PARK ST HOTEL PD PLAN\LS01.DWG

CONSULTANTS:

PLANNER/ LANDSCAPE ARCHITECT/ CIVIL ENGINEER:

Matrix

2435 RESEARCH PARKWAY, SUITE 300
COLORADO SPRINGS, CO 80920
PHONE: (719) 575-0100
FAX : (719) 575-0208

OWNER/DEVELOPER:

WELLSPRING COMMUNITY

826 PARK STREET #200
COLORADO SPRINGS, CO 80109
(303) 660-1935

APPROVAL:

VICINITY MAP:

PROJECT:

WELLSPRING PARK STREET HOTEL
SITE DEVELOPMENT PLAN

TOWN OF CASTLE ROCK
SEPETEMBER 2023

REVISION HISTORY:

NO.	DATE	DESCRIPTION	BY

DRAWING INFORMATION:

PROJECT NO:	22.1310.002
DRAWN BY:	BP
CHECKED BY:	JA
APPROVED BY:	
SHEET TITLE:	

LANDSCAPE NOTES

LD01

SHEET 04 OF 06

SITE DEVELOPMENT PLAN, WELLSPRING PARK STREET HOTEL PROJECT USR23-0003

SITE DEVELOPMENT PLAN

LOT 3, CASTLE ROCK PARK WEST 1ST AMENDMENT

WELLSPRING - PARK STREET HOTEL PROJECT

TOWN OF CASTLE ROCK, DOUGLAS COUNTY, COLORADO.
LOCATED IN A PORTION OF THE SOUTHWEST QUARTER OF SECTION 2,
TOWNSHIP 8 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN.

EXTERIOR PAINT COLORS

- Primary Color - Modern Gray, SW 7632
- Base Color - Homestead Brown, SW 7515
- Accent Color - Carnelian, SW 7580

LEGEND

xx" ——— Change in surface plane

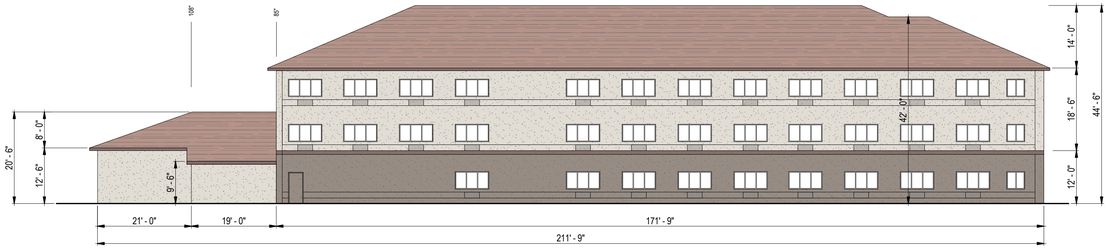
Homestead Brown

Modern Gray

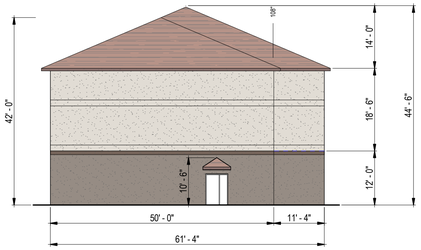
Carnelian

RECENT PHOTO SHOWING REMOVAL OF SIGN FACING PARK ST.

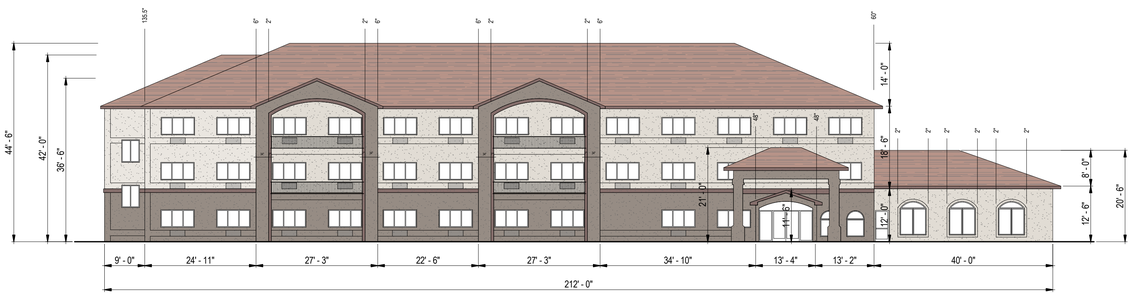
EXISTING SIGN STRUCTURE TO BE REMOVED PRIOR TO CERTIFICATE OF OCCUPANCY



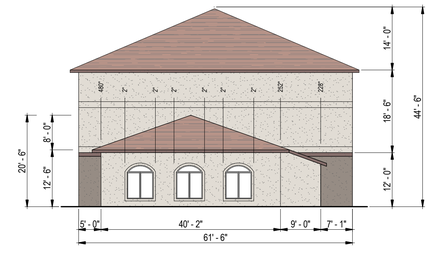
3 SOUTH ELEVATION
1/16" = 1'-0"



4 EAST ELEVATION
1/16" = 1'-0"



1 NORTH ELEVATION
1/16" = 1'-0"



2 WEST ELEVATION
1/16" = 1'-0"

CONSULTANTS:

enlight10 architecture

OWNER/DEVELOPER:

WELLSPRING COMMUNITY
826 PARK STREET #200
COLORADO SPRINGS, CO 80109
(303) 660-1935

APPROVAL:

VICINITY MAP:

PROJECT:

WELLSPRING PARK STREET HOTEL
SITE DEVELOPMENT PLAN

TOWN OF CASTLE ROCK
SEPETEMBER 2023

REVISION HISTORY:

NO.	DATE	DESCRIPTION	BY

DRAWING INFORMATION:

PROJECT NO:	2225WC
DRAWN BY:	SG
CHECKED BY:	
APPROVED BY:	
SHEET TITLE:	

EXTERIOR ELEVATIONS

A4.1

SHEET 05 OF 06

SITE DEVELOPMENT PLAN, WELLSPRING PARK STREET HOTEL PROJECT USR23-0003

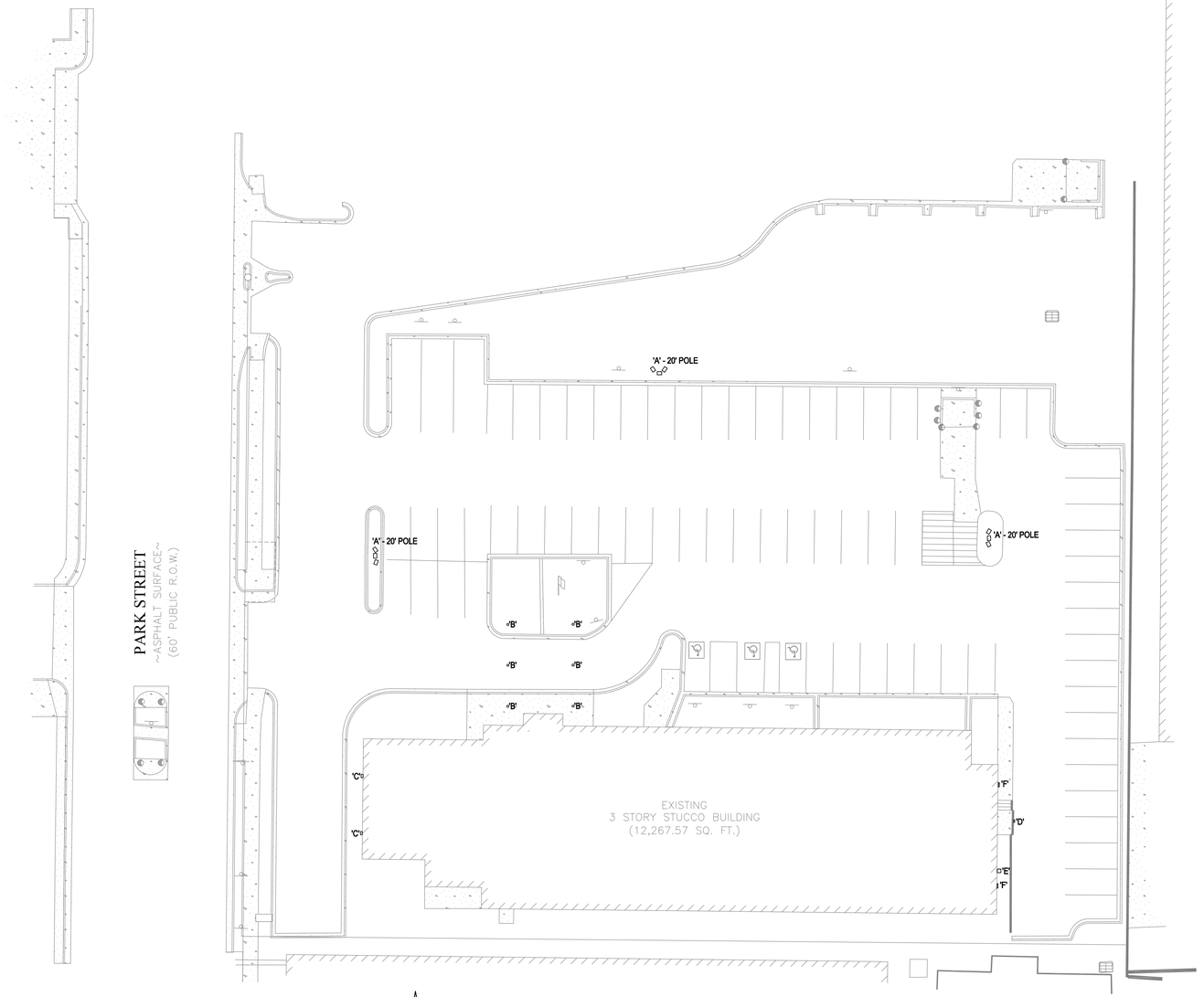
FILE LOCATION: S:\22.1310.002 WELLSPRING COMMUNITY CENTER\500 CAD\504 PLAN SETS\PARK ST HOTEL PD PLANS\01.DWG

SITE DEVELOPMENT PLAN

LOT 3, CASTLE ROCK PARK WEST 1ST AMENDMENT

WELLSPRING - PARK STREET HOTEL PROJECT

TOWN OF CASTLE ROCK, DOUGLAS COUNTY, COLORADO.
LOCATED IN A PORTION OF THE SOUTHWEST QUARTER OF SECTION 2,
TOWNSHIP 8 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN.



SITE LIGHTING PLAN
SCALE: 1/16" = 1'-0"

GENERAL NOTES:

1. ALL LUMINAIRES ARE EXISTING TO REMAIN.
2. THE OBJECTIVE OF THE SITE LIGHTING IS TO PROVIDE ADEQUATE ILLUMINATION OF THE PARKING LOT, MAIN ENTRANCE, AND SIDE WALK WAYS.
3. IT IS ASSUMED THAT THE LUMINAIRES SHALL BE CONTROLLED BY A PHOTOCELL TO TURN THE LIGHTS 'OFF' FROM SUN UP TO SUN DOWN.
4. IN ORDER TO MITIGATE LIGHT SPILLAGE TO ADJACENT SITES, ALL POLE-MOUNTED AND WALL-MOUNTED LIGHTS ARE FULL CUT-OFF.
5. NO TYPE IV LUMINAIRE DISTRIBUTIONS OR UNSHIELDED WALLPACKS ARE USED. POLE LIGHTING IS NOT AIMED AT THE BUILDING FACADE.

Site Lighting Fixture Schedule

Luminaire												Lamps						
ID/ Symbol	Manufacturer	Model	Catolog Number	Description	Full Cut Off (Y/N)	Distribution	Voltage	Dimming	Quantity	Mounting	Mounting Height	Quantity	Type	Watts	Lumens	Color Temp/CRI	Light loss factor	Fixture Finish
'A'	N/A	N/A	N/A	LED	Y	TYPE III	N/A	N	3	POLE	20 FT	3	TYPE III	56	7000	5000K	1	BRZ
'B'	N/A	N/A	N/A	LED	N	TYPE V	N/A	N	6	RECESSED	15 FT	1	TYPE V	16	1000	3000K	1	WHT
'C'	N/A	N/A	N/A	METAL HALLIDE	Y	TYPE III	N/A	N	2	WALL	15 FT	1	TYPE III	16	1000	3000K	1	WHT
'D'	N/A	N/A	N/A	METAL HALLIDE	Y	TYPE III	N/A	N	1	WALL	10 FT	1	TYPE III	16	1000	3000K	1	BLK
'E'	N/A	N/A	N/A	LED	Y	TYPE III	N/A	N	1	WALL	20 FT	1	TYPE III	22	2000	3000K	1	WHT
'F'	N/A	N/A	N/A	METAL HALLIDE	Y	TYPE III	N/A	N	2	WALL	15 FT	1	TYPE III	16	1000	3000K	1	WHT

EXISTING LUMINAIRE TYPE 'A'

EXISTING LUMINAIRE TYPE 'B'

EXISTING LUMINAIRE TYPE 'C'

EXISTING LUMINAIRE TYPES 'D', 'E', 'F'

CONSULTANTS:

Columbine Engineering
7175 W Jefferson Ave. Suite 1000
Lakewood, CO 80235
720-536-5150

OWNER/DEVELOPER:

WELLSPRING COMMUNITY
826 PARK STREET #200
COLORADO SPRINGS, CO 80109
(303) 660-1935

APPROVAL:

VICINITY MAP:

PROJECT:

WELLSPRING PARK STREET HOTEL
SITE DEVELOPMENT PLAN

TOWN OF CASTLE ROCK
SEPETEMBER 2023

REVISION HISTORY:

NO.	DATE	DESCRIPTION	BY

DRAWING INFORMATION:

PROJECT NO: 2225WC
DRAWN BY: CEI
CHECKED BY:
APPROVED BY:
SHEET TITLE:

SITE LIGHTING PLAN

ES.1

SHEET 06 OF 06

SITE DEVELOPMENT PLAN, WELLSPRING PARK STREET HOTEL PROJECT USR23-0003

FILE LOCATION: S:\22\1310.002 WELLSPRING COMMUNITY CENTER\500 CADD\504 PLAN SETS\PARK ST HOTEL PD PLAN\LS01.DWG

Town of Castle Rock

Agenda Memorandum

Agenda Date: 10/26/2023

Item #: **File #:** PC 2023-024

To: Members of the Planning Commission

From: Sandy Vossler, Senior Planner, Development Services Department

Crowfoot Valley Road Annexation and Public Land District - 1 [5.31 acres, located within the Crowfoot Valley Road Right-of-Way between Tower Road and Macanta Boulevard]

Executive Summary

The Town of Castle Rock (Town), as property owner and applicant, has submitted an application proposing to annex and zone four Town-owned parcels totaling 5.31 acres, known as the Crowfoot Valley Road Annexation (Attachment B and C). The property is located within the Crowfoot Valley Road right-of-way adjacent to the Sapphire Point Planned Development (PD) and Town Fire Station No. 155 to the north, and the Macanta neighborhood, being developed in Douglas County, to the south (Figure 1 and Attachment A).

This proposed annexation and zoning is part of a larger initiative to bring Town-owned properties into the municipal boundaries. If annexed, the property will be straight-zoned as Public Land - 1 (PL-1), and the property will continue to be used as right-of-way for Crowfoot Valley Road. PL-1 is a public use district with permitted uses and development standards established in the Town's Municipal Code, Section 17.30.020 (Attachment D).

Based on the staff analyses detailed in this report, staff recommends that Planning Commission recommend to Town Council the annexation of the Crowfoot Valley Road Annexation, and its zoning as Public Land - 1, as proposed.

Attachments

Attachment A: Vicinity Map
Attachment B: Annexation Petition
Attachment C: Annexation Map
Attachment D: Municipal Code Section 17.30.20: Public Land - 1

Meeting Date: October 26, 2023

AGENDA MEMORANDUM

To: Planning Commission

From: Sandy Vossler, Senior Planner, Development Services Department

Title: **Crowfoot Valley Road Annexation and Public Land District – 1 Zoning** [5.31 acres, located within the Crowfoot Valley Road Right-of-Way between Tower Road and Macanta Boulevard]

Executive Summary

The Town of Castle Rock (Town), as property owner and applicant, has submitted an application proposing to annex and zone four Town-owned parcels totaling 5.31 acres, known as the Crowfoot Valley Road Annexation (Attachment B and C). The property is located within the Crowfoot Valley Road right-of-way adjacent to the Sapphire Point Planned Development (PD) and Town Fire Station No. 155 to the north, and the Macanta neighborhood, being developed in Douglas County, to the south (Figure 1 and Attachment A).

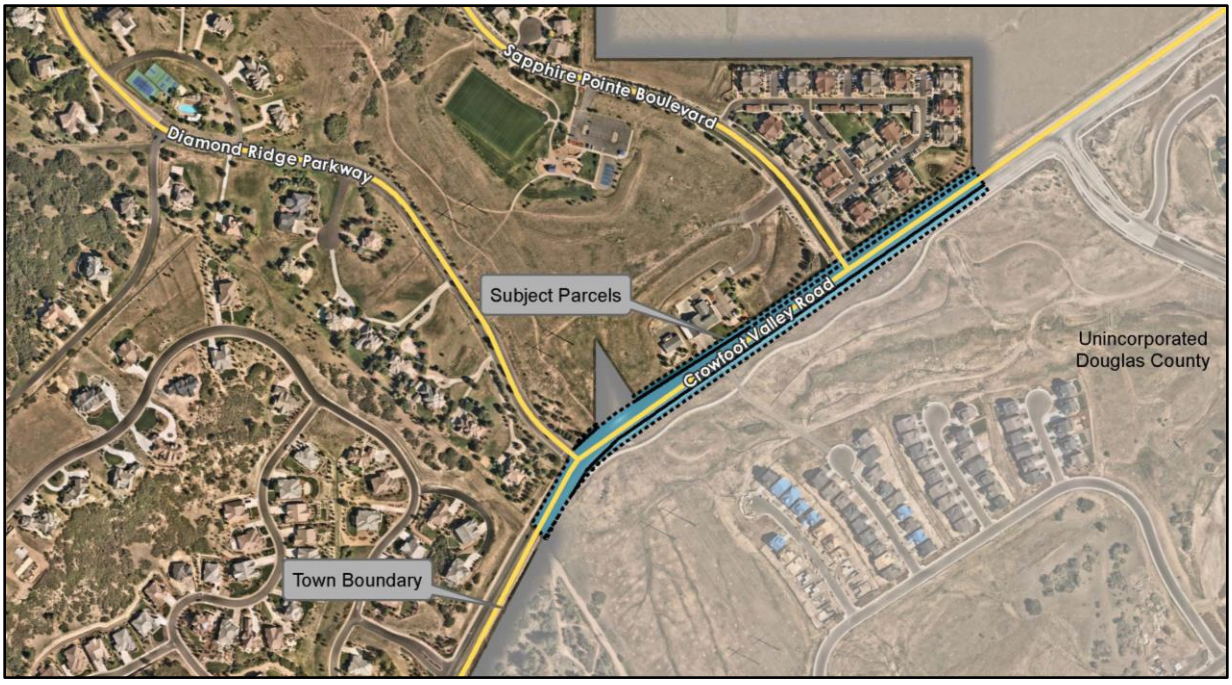


Figure 1: Vicinity Map

This proposed annexation and zoning is part of a larger initiative to bring Town-owned properties into the municipal boundaries. If annexed, the property will be straight-zoned as Public Land – 1 (PL-1), and the property will continue to be used as right-of-way for Crowfoot Valley Road. PL-1 is a public use district with permitted uses, including the use of public right-

of-way, and development standards established in the Town's Municipal Code, Section 17.30.020 (Attachment D).

Based on the staff analyses detailed in this report, staff recommends that Planning Commission recommend to Town Council the annexation of the Crowfoot Valley Road Annexation, and its zoning as Public Land – 1, as proposed.

Background

There are numerous Town-owned parcels that are currently outside of the Town boundaries. The majority of these parcels are small; less than one acre in size. The Town is in the process of annexing the qualified parcels. Gateway Mesa Open Space was the first such Town-owned property to be annexed and zoned under this initiative. Gateway Mesa Open Space consists of approximately 199-acres, was annexed in 2020, and was zoned Public Land – 2 (PL-2).

The purpose of annexing Town-owned property is to allow for consistent application of the Town's zoning regulations and other Municipal Code provisions, as well as law enforcement and code compliance. Annexation also avoids emergency service conflicts and jurisdictional redundancy. Future annexation proposals will include parcels located near the intersection Fifth Street and Founders Parkway, along Ridge Road, along the East Frontage Road, and within the Crystal Valley interchange area of construction.

Discussion

The Property

The four parcels proposed for annexation are currently under the jurisdiction of Douglas County. The property is located east of the intersection of Crowfoot Valley Road and Tower Road and west of the intersection of Crowfoot Valley Road and Macanta Boulevard. The 5.31-acre property is located within the Crowfoot Valley Road right-of-way (ROW) and will remain ROW, if annexed. This proposed annexation is part of a larger effort to incorporate eligible Town-owned property into the Town boundaries. If the property is annexed, it will be zoned as Public Land – 1 (PL-1), as established in the Municipal Code. Permitted uses include public improvements and public right-of-way (Attachment D).

Use and Surrounding Zoning

The subject parcels are being used as right-of-way for Crowfoot Valley Road, and will continue to be used as right-of-way. A west-bound, right turn, deceleration lane from Crowfoot Valley Road to Sapphire Point Boulevard is existing on the property, as is a west-bound acceleration lane from Sapphire Point Boulevard on to Crowfoot Valley Road. The Town is responsible for maintenance of this right-of-way, and the Town's responsibility for maintenance of the parcels will not change with annexation.

Zoning on the parcels is varied. All four parcels are zoned under the Douglas County zoning regulations. The northern two parcels are zoned Agricultural One (A1) and the southern two parcels are zoned as Planned Development (PD).

Annexation and Zoning Proposal

The Crowfoot Valley Road Annexation contains four parcels of land that are owned by the Town, but that lie outside of the Town boundaries. The parcels are identified as B, C, D, and E on the Annexation Map and combined total 5.31 acres. Per the State Statutes, properties proposed for annexation must be contiguous with the municipal boundary for at least 1/6th of the property's perimeter. The Crowfoot Valley Road Annexation exceeds the minimum 1/6th requirement. The property's total perimeter is 4,250.67 feet and it is contiguous with the Town boundary for 1,923.92 feet, or 45.26% of its perimeter.

As previously stated, the parcels are within the Crowfoot Valley Road right-of-way. Two of the parcels are zoned Agricultural 1 and two are zoned Planned Development. The zoning proposed with the annexation is Public Land – 1, a straight zoned district that allows public right-of-way as a use by right.

Annexation and Zoning Analysis

Annexation is a three-step process. In the first two steps, Substantial Compliance and Eligibility, Town Council determines whether an annexation request meets the statutory requirements for annexation, as established in the Colorado Revised Statutes, specifically the Municipal Annexation Act of 1965 (Act). In the third step, Planning Commission holds a public hearing to consider the proposed annexation and zoning, and makes a recommendation to Town Council. In a public hearing before Town Council, the Council determines whether an annexation request complies with the Town's guiding documents and the Municipal Code, and if the property should be annexed into the Town.

Staff has completed an analysis of the proposed annexation and proposed PL-1 zoning. The remainder of this report focuses on how the annexation and zoning proposal complies with the State of Colorado statutory requirements, the goals and principles of the Town's 2023 Vision and Comprehensive Master Plan, and the criterion in the Town's Municipal Code.

Colorado Revised Statutes – Municipal Annexation Act of 1965 (Act)

The Town has complied with the process prescribed by the Municipal Annexation Act of 1965 (the Act). In a public hearing held on September 5, 2023, Town Council found the Crowfoot Valley Road Annexation Petition to be in substantial compliance with the prescribed form and content required by the Act, and set the date of the Eligibility Hearing for October 17, 2023.

After proper public noticing, Town Council held the Eligibility Hearing as scheduled, reviewed the statutory statements (referred to as "allegations" in the statute) in the annexation petition and found that the allegations are accurate, supportable and that the property is eligible for annexation under the Act.

The third phase of the process is the Annexation Hearing, the purpose of which is to determine whether the property should be annexed to the Town. Section 20.02.040 of the Municipal Code states that Town Council shall consider the policies, guidelines and criteria in the Town [Comprehensive] Master Plan, as amended, along with any other relevant information in determining whether it is in the best interests of the Town to grant or deny the petition for

annexation. The following section identifies the applicable principles of the Comprehensive Master Plan and summarizes how the proposed Crowfoot Valley Road Annexation achieves those principles.

2030 Vision and Comprehensive Master Plan

The principles set forth in the Town's Comprehensive Master Plan are based on four cornerstones identified through a Town-wide visioning effort as the characteristics most important to the community. The following is an analysis of the specific annexation principles found in the Responsible Growth section of the Comprehensive Master Plan.

- *RG-2.1a: Is a logical extension or infill of the Town boundaries*

  The proposed annexation complies with this principle.

- *RG-2.1b: Has demonstrated a significant benefit to the Town.*

  As previously discussed, annexing these right-of-way parcels and zoning them within the Town will provide for consistent zoning standards, allow for enforcement of Town Code, eliminate conflicts between Town and County law enforcement and emergency services, and will reduce jurisdictional redundancy.

- *2.1c: Will be provided with adequate urban services.*

  Provision of urban services in terms of transportation and public safety will be clarified with this annexation.

- *2.1d: Is fiscally responsible.*

  The Town is currently responsible for maintenance of this portion of Crowfoot Valley Road. Annexation will not create additional financial obligations for the Town.

- *2.1e: Conveys to the Town all water right appurtenant to the ground at the time of annexation.*

  The Town already owns the property and water rights not severed from the property.

- *2.1f: Secures renewable water to 100 percent of the expected development on the annexed area.*

  This principle is not applicable, as no development requiring water resources exists on the property and none is proposed with the annexation and zoning.

Zoning: Public Land District – (PL-1)

The current right-of-way use on the property is not proposed to change. The PL-1 straight zoned district is established in the Town Municipal Code, Section 17.30.20 is a zoning that is applied to public lands with active uses. Public right-of-way is specifically called out as a

permitted use. This is the most appropriate zoning classification for these parcels upon annexation.

Public Notification and Outreach

Public Hearing Notice

The notice of public hearing for the proposed Crowfoot Valley Road annexation and zoning was published in the Douglas County News Press on October 5, 2023, in compliance with the Colorado Revised Statutes. In addition, public hearing notice signs were posted on the property on October 10, 2023 and monitored throughout the public noticing period. A written notice of the public hearing was sent to property owners and Homeowner Associations (HOA) within 500 feet of the property, at least 15 days prior to the date of the Planning Commission public hearing. Town staff published notice of the Planning Commission public hearing on the Town's website and provided information about the proposal on the Town's *Development Activity* interactive map.

Neighborhood Meetings

The Town held two neighborhood meetings and the third neighborhood meeting was waived by the Town Manager. The neighborhood meetings were held in a hybrid format. The first neighborhood meeting was held on December 15, 2022. No members of the public attended the meeting. The second neighborhood meeting was held on July 10, 2023. No members of the public attended in-person. One person attended the meeting via WebEx. The resident had a question about the timing for the roundabout planned at Crowfoot Valley Road and Sapphire Point Boulevard intersection. He also indicated his understanding of the reason for the annexation proposal and appreciated the Town’s efforts to incorporate Town-owned property.

External Referrals

External referrals were sent to local service providers and Douglas County agencies, as well as the Colorado Department of Transportation (CDOT). Of the responding agencies, no substantive comments were received from CDOT, Cherry Creek Basin Authority, or Douglas County GIS.

Douglas County Engineering recommended that the annexation include the 20-foot wide strip of land currently owned by Douglas County adjacent to the Macanta development. The Town has requested and received conveyance of the subject Douglas County owned strip of land. This parcel is included within the Crowfoot Valley Road annexation and is identified as parcel E on the Annexation Map.

Public Service Company of Colorado (PSCC) indicated they have no objection to the proposed annexation and zoning, contingent upon PSCC’s ability to maintain all existing rights and to expand in the future.

There are no unresolved external referral comments.

Budget Impact

Annexation and zoning of the property within the Town will not add new budget impacts since the Town already owns and maintains this portion of Crowfoot Valley Road.

Findings

All staff review comments and external referral comments have been addressed. The proposed annexation and zoning of Crowfoot Valley Road Town-owned parcels

- Complies with the requirements of the Colorado Revised Statutes, Municipal Annexation Act of 1965, and
- Advances the principles of the Town Vision and the Comprehensive Master Plan for Responsible Growth and Annexation.

Recommendation

Staff recommends that Planning Commission recommend to Town Council approval of the Crowfoot Valley Road Annexation and zoning as Public Land – 1, as proposed.

Proposed Motions

Planning Commission is being asked to vote on the annexation and the zoning separately. The proposed motions are as follows:

Annexation

Option 1: Approval

"I move to recommend approval of the Crowfoot Valley Road Annexation to Town Council."

Option 2: Approval with Conditions

"I move to recommend approval of the Crowfoot Valley Road Annexation, to Town Council, with the following conditions:" [list conditions]

Option 3: Continue item to next hearing (need more information to make decision)

"I move to continue this item to the Planning Commission meeting on [date], at [time]."

Zoning

Option 1: Approval

"I move to recommend approval of the Crowfoot Valley Road Zoning to Town Council."

Option 2: Approval with Conditions

"I move to recommend approval of the Crowfoot Valley Road Zoning, to Town Council, with the following conditions:" [list conditions]

Option 3: Continue item to next hearing (need more information to make decision)

"I move to continue this item to the Planning Commission meeting on [date], at [time]."

Attachments

Attachment A: Vicinity Map
Attachment B: Annexation Petition
Attachment C: Annexation Map
Attachment D: Municipal Code Section 17.30.20: Public Land – 1


Attachment A
Unincorporated
Douglas County
Sapphire Pointe Boulevard
Diamond Ridge Parkway
Subject Parcels
Crowfoot Valley Road
Unincorporated
Douglas County
Town Boundary
Crowfoot Valley Annexation
Subject Parcels
0 125 250 500
Feet
N
Town of Castle Rock
Colorado

PETITION FOR ANNEXATION TO THE TOWN OF CASTLE ROCK, COLORADO

The undersigned, being a "Landowner" as defined in C.R.S. § 31-12-103(6), hereby petitions the Town of Castle Rock (the "Town") for annexation of the following described property located in the County of Douglas, State of Colorado, and further state:

1. The legal description of the land which Landowners request to be annexed to the municipality is attached hereto as ***Exhibit A*** (the "Property").

2. It is desirable and necessary that the above-described Property be annexed to the Town.

3. The requirements of Article II, Section 30 of the Colorado Constitution have been met.

4. The following requirements of C.R.S. § 31-12-104 exist or have been met:

    a. Not less than one-sixth (1/6) of the perimeter of the Property is contiguous with the Town.

    b. A community of interest exists between the Property and the Town. The Property is urban or will be urbanized in the near future. Further, the Property is integrated with the Town.

5. None of the limitations provided in C.R.S. § 31-12-105 are applicable and the requirements of that statute have been met because of the following:

    a. The annexation of the Property will not result in the Property being divided into separate parts or parcels under identical ownership.

    b. No land area within the Property held in identical ownership, whether consisting of one tract or parcel of real estate or two or more contiguous tracts or parcels of real estate comprising 20 acres or more, which together with the buildings and improvements situated thereon, has an assessed value in excess of $200,000 for an ad valorem tax purpose for the year preceding the annexation is included within the Property proposed to be annexed, without the written consent of the landowner or landowners thereof.

    c. No annexation proceedings have been commenced for annexation of any part of the Property by any other municipality.

    d. The entire width of all streets or alleys within the area to be annexed are included in the annexation.

    e. The annexation of the Property will not result in the detachment of any area from any school district or the attachment of same to another school district.

f. Annexation by the Town of the Property will not have the effect of, and will not result in, the denial of reasonable access to landowners, owners of an easement, or owners of a franchise adjoining a platted street or alley in the unincorporated area adjacent to the Property.

g. The annexation of the Property will not have the effect of extending a boundary of the Town more than three miles in any direction from any point of the Town boundary in the past 12 months.

6. The Property is solely owned by the Town, as the annexing municipality.

7. The Town, as landowner, requests that the Town Council approve the annexation of the property.

8. This Petition is accompanied by four (4) copies of an annexation boundary map in the form required by C.R.S. 31-12-101(1)(d), which map is attached as ***Exhibit B***.

9. This instrument may be executed in one or more counterparts, all of which taken together shall constitute the same document.

ATTEST:

DocuSigned by:
Lisa Anderson
Lisa Anderson, Town Clerk

TOWN OF CASTLE ROCK, as Landowner

DocuSigned by:
David L. Corliss
David L. Corliss, Town Manager

Approved as to form:

DocuSigned by:
Michael J. Hyman
Michael J. Hyman, Town Attorney

STATE OF COLORADO)
) ss.
COUNTY OF DOUGLAS)

The foregoing instrument was subscribed and sworn before me this 5.00 day of September, 2023, by David L. Corliss as Town Manager and Lisa Anderson as Town Clerk for the Town of Castle Rock, Colorado.

Witness my official hand and seal.
My commission expires: 9/30/2024 20084033388-390878.

SHANNON EKLUND
NOTARY PUBLIC
STATE OF COLORADO
Notary ID: 20084033388
My commission expires 9/30/2024

(SEAL)

DocuSigned by:
Notary Public

AFFIDAVIT OF CIRCULATOR IN SUPPORT OF PETITION

STATE OF COLORADO)
) ss.
COUNTY OF DOUGLAS)

Matt Gohl, being first duly sworn, states as follows:

1. I have circulated the Petition for Annexation to the Town of Castle Rock as set forth herein.

2. I know the persons whose names are subscribed to the foregoing petition on behalf of the Landowner.

3. The signatures on the foregoing Petition were affixed in my presence and each signature is a true, genuine, and correct signature of the person it purports to be.

4. To the best of my knowledge and belief, the person whose names are affixed to the foregoing Petition are authorized to sign such document on behalf of the Landowner.

CIRCULATOR

DocuSigned by:
MGohl
E59B8A0D2B304ED...

STATE OF COLORADO)
) ss.
COUNTY OF DOUGLAS)

DS

The foregoing instrument was subscribed and sworn before me this 30.00 day of August, 2023, by Matt Gohl.

Witness my official hand and seal.
My commission expires: 9/30/2024. DAN#20084033388-376747

SHANNON EKLUND
NOTARY PUBLIC
STATE OF COLORADO
Notary ID: 20084033388
My commission expires 9/30/2024

(SEAL)

DocuSigned by:
Shannon Eklund
2291...A3...

Notary Public

CROWFOOT VALLEY ROAD ANNEXATION MAP

METES AND BOUND PARCELS OF LAND
LOCATED IN THE NORTH HALF OF SECTION 25, T 7 S, R 67 W OF THE 6TH P.M.,
COUNTY OF DOUGLAS, STATE OF COLORADO

Attachment C

LEGAL DESCRIPTION FOR CROWFOOT VALLEY ROAD ANNEXATION MAP

THREE PARCELS OF LAND, BEING A UN-DEFINED PARCEL ALONG WITH PORTIONS OF RECEPTION NO. 2004088310 AND RECEPTION NO. 2008047805 ALL IN THE DOUGLAS COUNTY CLERK AND RECORDERS OFFICE, LOCATED IN THE NORTH HALF OF SECTION 25, T 7 S, R 67 W OF THE 6TH P.M., MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BASIS OF BEARINGS FOR THIS DESCRIPTION IS THE BEARING ON THE NORTH LINE OF THE NORTHEAST QUARTER SECTION 25, BEING MONUMENTED AT THE NORTH QUARTER CORNER WITH A 3.25" ALUMINUM CAP STAMPED PLS 10717 AND AT THE NORTHEAST CORNER WITH A 3.25" ALUMINUM CAP STAMPED PLS 17666 WHICH IS ASSUMED TO BEAR N 89°57'35" E, A DISTANCE OF 2644.79 FEET.

COMMENCING AT SAID NORTH QUARTER CORNER OF SECTION 25, THENCE ALONG THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 25, N 89°57'35" E, A DISTANCE OF 1323.99 FEET; THENCE DEPARTING SAID NORTH LINE, S 00°02'25" E, A DISTANCE OF 383.41 FEET TO THE NORTH CORNER OF SAID RECEPTION NO. 2004088310, SAID CORNER BEING ON THE NORTH LINE OF CROWFOOT VALLEY ROAD, SAID CORNER ALSO BEING THE COMMON CORNER OF PARCEL 3, THE CANYONS SUPERBLOCK PLAT NO.1 AS DESCRIBED IN RECEPTION NO. 2015090038 WITH THE SOUTHEAST CORNER OF TRACT T, MAHER RANCH - FILING NO.1 AS DESCRIBED UNDER RECEPTION NO. 2002092550 ALL IN SAID CLERK'S OFFICE, SAID CORNER BEING THE POINT OF BEGINNING;

THENCE S 34°37'48" E, A DISTANCE OF 100.00 FEET TO THE EASTERLY CORNER OF SAID RECEPTION NO. 2004088310, ALSO BEING ON THE NORTHWESTERLY LINE OF 20.00 FOOT RIGHT OF WAY AS DESCRIBED UNDER SAID RECEPTION NO. 2008047805 OF SAID CLERK'S OFFICE;

THENCE S 34°37'48" E, A DISTANCE OF 20.00 FEET TO THE COMMON LINE OF SAID 20.00 FOOT RIGHT OF WAY AT SAID RECEPTION NO. 2008047805 WITH TRACT D AS DESCRIBED UNDER RECEPTION NO. 2021021687 OF SAID CLERK'S OFFICE.

THENCE ALONG SAID COMMON LINE THE FOLLOWING THREE (3) COURSES:

1). S 55°22'12" W, A DISTANCE OF 1554.19 FEET;

2). ALONG A CURVE TO THE LEFT WITH A RADIUS OF 730.00 FEET, A CENTRAL ANGLE OF 27°22'19", AN ARC LENGTH OF 348.74 FEET, WHOSE CHORD BEARS S 41°41'03" W, A DISTANCE OF 345.44 FEET;

3). S 27°59'53" W, A DISTANCE OF 96.66 FEET TO THE MOST SOUTHERLY CORNER OF SAID RECEPTION NO. 2008047805, ALSO BEING A CORNER OF SAID TRACT D, ALSO BEING ON THE NORTHEASTERLY RIGHT OF WAY LINE OF TOWER ROAD AS DESCRIBED UNDER RECEPTION NO. 2008079259 OF SAID CLERK'S OFFICE;

THENCE ALONG SAID NORTHEASTERLY RIGHT OF WAY LINE, ALSO BEING THE SOUTHWESTERLY LINE OF SAID RECEPTION NO. 2008047805, N 32°05'40" W, A DISTANCE OF 22.92 FEET TO THE MOST WESTERLY CORNER OF SAID RECEPTION NO. 2008047805 ALSO BEING THE MOST SOUTHERLY CORNER OF SAID RECEPTION NO. 2004088310;

THENCE N 20°38'27" W, A DISTANCE OF 24.95 FEET;

THENCE ALONG A PORTION OF THE BROOKWOOD ANNEXATION PLAT AS DESCRIBED UNDER RECEPTION NO. 2003150876 OF SAID CLERK'S OFFICE, N 49°31'54" W, A DISTANCE OF 61.09 FEET TO THE SOUTHERLY CORNER OF TRACT C, DIAMOND RIDGE ESTATES FILING NO.1 AS DESCRIBED UNDER RECEPTION NO. DC9561707 OF SAID CLERK'S OFFICE;

THENCE ALONG THE NORTH LINE OF SAID RECEPTION NO. 2004088310, BEING THE NORTH LINE OF CROWFOOT VALLEY ROAD, ALSO BEING A PORTION OF THE SOUTH LINE OF SAID TRACT C, ALSO BEING THE SOUTHERLY LINE OF THE ACCESS PARCEL ANNEXATION PLAT AS DESCRIBED UNDER RECEPTION NO. DC00052250 OF SAID CLERK'S OFFICE THE FOLLOWING FOUR (4) COURSES:

1) N 29°17'18" E, A DISTANCE OF 154.76 FEET;

2) ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 581.37 FEET, A CENTRAL ANGLE OF 24°01'28", AN ARC LENGTH OF 243.77 FEET, WHOSE CHORD BEARS N 41°18'02" E, A DISTANCE OF 241.99 FEET TO A POINT ON THE EASTERLY LINE OF THE NORTHEAST QUARTER OF SAID SECTION 25, SAID POINT ALSO BEING THE MOST SOUTHERLY CORNER OF A PARCEL OF LAND DESCRIBED UNDER BOOK 158 AT PAGE 490 OF SAID CLERK'S OFFICE;

3) THENCE ALONG THE SOUTHEASTERLY LINE OF SAID BOOK 158 AT PAGE 490, N 55°22'12" E, A DISTANCE OF 171.04 FEET TO THE MOST EASTERLY CORNER OF SAID BOOK 158 AT PAGE 490;

4). THENCE ALONG THE NORTHEASTERLY LINE OF SAID BOOK 158 AT PAGE 490, N 33°43'57" W, A DISTANCE OF 13.20 FEET TO A CORNER OF TRACT Q OF SAID MAHER RANCH - FILING NO.1, ALL IN SAID CLERK'S OFFICE;

THENCE ALONG SAID NORTH LINE OF SAID RECEPTION NO. 2004088310, ALSO BEING THE BEING THE SOUTH LINES OF TRACT Q, TRACT V, TRACT U, TRACT T, ALL OF SAID MAHER RANCH - FILING NO.1, SAPPHIRE POINTE BLVD AS DESCRIBED UNDER RECEPTION NO. 2002092550 AND CUTTERS RIDGE AT SAPPHIRE POINTE CONDOMINIUMS AS DESCRIBED UNDER RECEPTION NO. 2008003608, SAID SOUTH LINE ALSO BEING A PORTION OF THE SOUTH LINE OF THE ANNEXATION OF THE MAHER RANCH P.U.D TO THE TOWN OF CASTLE ROCK PHASE 3 AS RECORDED UNDER RECEPTION NO. 8728960 ALL OF SAID CLERK'S OFFICE N 55°22'15" E, A DISTANCE OF 1439.35 FEET TO THE POINT OF BEGINNING;

THE ABOVE DESCRIPTION CONTAINS 231,175 SQUARE FEET OR 5.31 ACRES MORE OR LESS.

CONTIGUITY

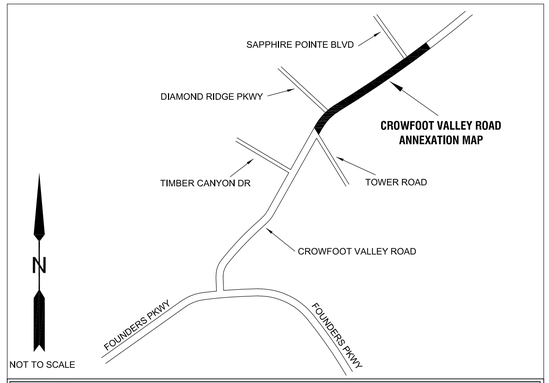
TOTAL PERIMETER	4,250.67 FEET
1/6 TOTAL PERIMETER	708.44 FEET
CONTIGUOUS PERIMETER	1,923.92 FEET
PERCENT CONTIGUITY	45.26%
TOTAL AREA	5.31 +/- ACRES

NOTE

THIS ANNEXATION MAP HAS BEEN PREPARED FROM RECORDED INFORMATION AND DOES NOT REPRESENT A MONUMENTED LAND SURVEY.

BASIS OF BEARINGS

ALL BEARINGS ARE ASSUMED. THE BEARING ON THE NORTH LINE OF THE NORTHEAST QUARTER SECTION 25, BEING MONUMENTED AT THE NORTH QUARTER CORNER WITH A 3.25" ALUMINUM CAP STAMPED PLS 10717 AND AT THE NORTHEAST CORNER WITH A 3.25" ALUMINUM CAP STAMPED PLS 17666 IS ASSUMED TO BEAR N 89°57'35" E, A DISTANCE OF 2644.79 FEET.



VICINITY MAP

CONTACT LIST

OWNER: TOWN OF CASTLE ROCK
100 WILCOX STREET
CASTLE ROCK, CO 80104

SURVEYOR: TRUE NORTH SURVEYING AND MAPPING, LLC
WILLIAM G. BUNTROCK, PLS
9623 MALLARD POND WAY
LITTLETON, CO 80125
BILLB@TRUENORTHSURVEY.COM

SHEET LIST

COVER PAGE	PAGE 1 OF 2
ANNEXATION PAGE	PAGE 2 OF 2

GENERAL NOTES

1. NOTICE - ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.
2. ANY PERSON WHO KNOWINGLY REMOVES, ALTERS OR DEFACES ANY PUBLIC LAND SURVEY MONUMENT OR LAND MONUMENT OR ACCESSORY, COMMITS A CLASS TWO (2) MISDEMEANOR PURSUANT TO STATE STATUTE 18-4-508, C.R.S.
3. ALL DIMENSIONS SHOWN ARE IN U.S. SURVEY FEET. BEARINGS ARE SHOWN AS DEGREE, MINUTES AND SECONDS.
4. ALL REFERENCES HEREON TO BOOKS, PAGES, MAPS AND RECEPTION NUMBERS ARE PUBLIC DOCUMENTS FILED IN THE RECORDS OF THE COUNTY OF DOUGLAS, COLORADO.
5. EASEMENTS ARE NOT SHOWN.
6. SURVEY IS VALID ONLY IF PRINT HAS ORIGINAL SEAL AND SIGNATURE OF SURVEYOR.

SURVEYOR'S CERTIFICATE

I, WILLIAM G. BUNTROCK, A LICENSED LAND SURVEYOR IN THE STATE OF COLORADO, CERTIFY FOR AND ON BEHALF OF TRUE NORTH SURVEYING AND MAPPING, LLC, THAT MORE THAN ONE SIXTH (1/6) OF THE EXTERNAL BOUNDARY OF THE AREA PROPOSED TO BE ANNEXED TO THE TOWN OF CASTLE ROCK, COLORADO, IS CONTIGUOUS WITH THE BOUNDARIES OF THE ANNEXING MUNICIPALITY, AND THAT THIS ANNEXATION PLAT COMPLIES WITH THE COLORADO STATE STATUTES AND THE TOWN OF CASTLE ROCK, COLORADO CODES PERTAINING THERETO.

WILLIAM G. BUNTROCK, PLS 35585 DATE

TOWN OF CASTLE ROCK OWNERSHIP

THE UNDERSIGNED ARE ALL THE OWNERS OF CERTAIN LANDS IN THE TOWN OF CASTLE ROCK, COUNTY OF DOUGLAS AND STATE OF COLORADO DESCRIBED HEREIN.

TOWN OF CASTLE ROCK, A MUNICIPAL CORPORATION

BY:_____
MAYOR

ATTEST:

_____
TOWN CLERK

SIGNED THIS _____ DAY OF _____, 2023.

NOTARY BLOCK

SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ DAY OF _____, 2023

BY _____ AS MAYOR AND

BY _____ AS TOWN CLERK.

WITNESS MY HAND AND OFFICIAL SEAL.

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES: _____.

TOWN COUNCIL APPROVAL

THIS ANNEXATION PLAT WAS APPROVED BY THE TOWN COUNCIL OF THE TOWN OF CASTLE ROCK, COLORADO ON THE _____ DAY OF _____, 2023.

_____ _____ _____
MAYOR DATE

ATTEST:

_____ _____
TOWN CLERK DATE

PLANNING COMMISSION RECOMMENDATION

THIS CROWFOOT VALLEY ROAD ANNEXATION MAP WAS RECOMMENDED FOR APPROVAL BY THE PLANNING COMMISSION OF THE TOWN OF CASTLE ROCK, COLORADO ON THE _____ DAY OF_____, 2023.

_____ _____
CHAIR DATE

ATTEST:

_____ _____
DIRECTOR OF DEVELOPMENT SERVICES DATE

DOUGLAS COUNTY CLERK AND RECORDER'S CERTIFICATE

THIS ANNEXATION MAP WAS FILED FOR RECORD IN THE OFFICE OF THE COUNTY CLERK AND RECORDER OF DOUGLAS COUNTY AT _____, ____.M., ON THE _____ DAY OF _____, 2023 AT RECEPTION NO. _____

DOUGLAS COUNTY CLERK AND RECORDER

BY:

_____
DEPUTY

State Board of Licensure Rule 6.1.2 Seal Application - Board Bylaws and Rules 2.2 Signature (B) - AES Rules 6.1.3 Signature and Date - Electronic

HORZ. SCALE:	1" = 100'	PROJECT NO:	TN 22031
VERT. SCALE:	N/A	DATE:	10/18/2023
FIELD CREW: N/A	FIELD DATE: N/A	DRAFTED BY: BB	APPROVED BY: BB

REV	DATE	DESCRIPTION
1	02/17/2023	TOWN OF CASTLE ROCK REV #1
2	05/18/2023	TOWN OF CASTLE ROCK REV #2
3	10/18/2023	TOWN OF CASTLE ROCK REV #3

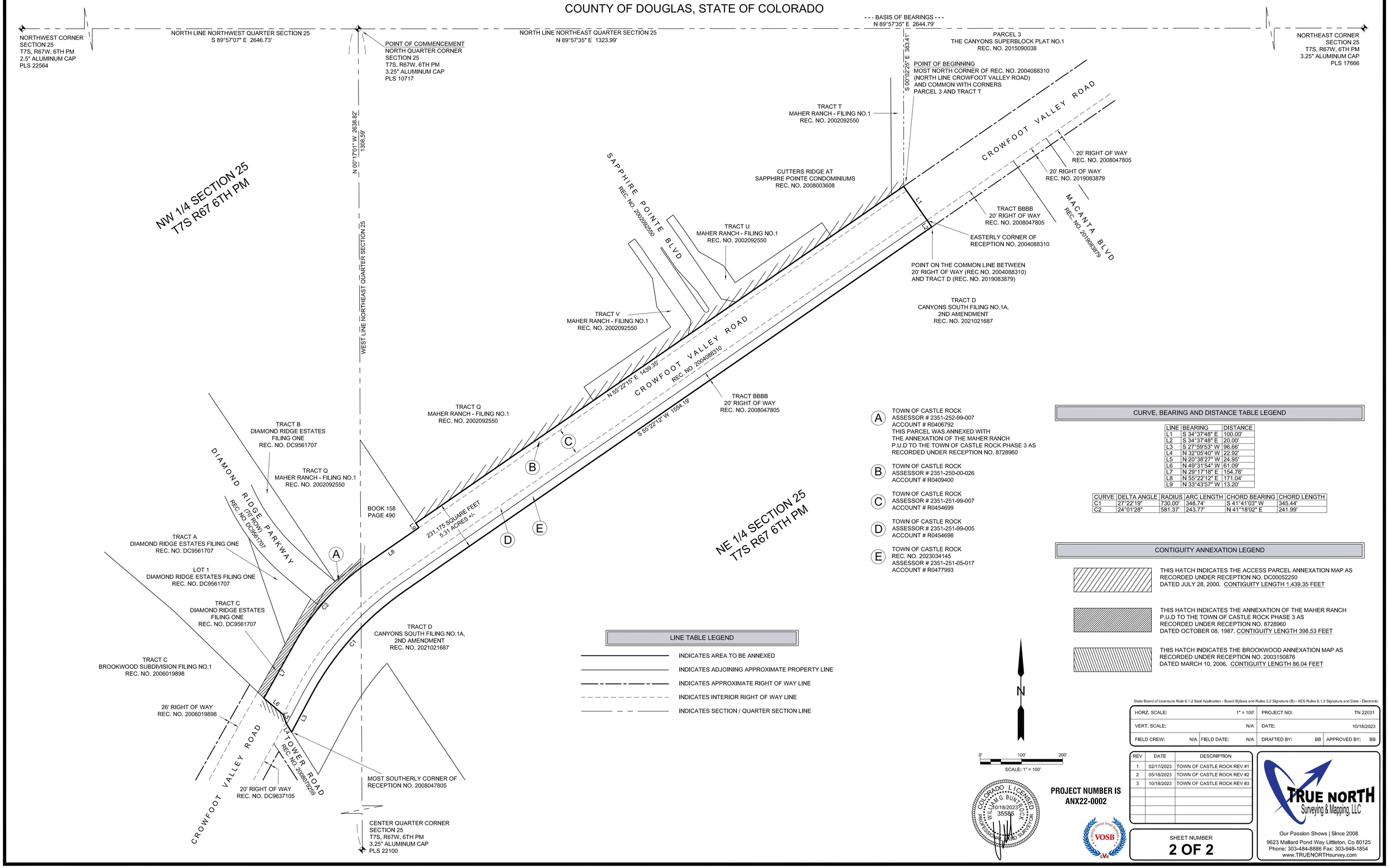
PROJECT NUMBER IS ANX22-0002

SHEET NUMBER
1 OF 2

TRUE NORTH Surveying & Mapping, LLC
Our Passion Shows | SInce 2008
9623 Mallard Pond Way Littleton, Co 80125
Phone: 303-484-8886 Fax: 303-948-1854
www.TRUENORTHsurvey.com

CROWFOOT VALLEY ROAD ANNEXATION MAP

METES AND BOUND PARCELS OF LAND
LOCATED IN THE NORTH HALF OF SECTION 25, T 7 S, R 67 W OF THE 6TH P.M.,
COUNTY OF DOUGLAS, STATE OF COLORADO



(A) TOWN OF CASTLE ROCK
ASSESSOR # 2351-252-99-007
ACCOUNT # R0406792
THIS PARCEL WAS ANNEXED WITH THE ANNEXATION OF THE MAHER RANCH P.U.D TO THE TOWN OF CASTLE ROCK PHASE 3 AS RECORDED UNDER RECEPTION NO. 8728960

(B) TOWN OF CASTLE ROCK
ASSESSOR # 2351-250-00-026
ACCOUNT # R0409400

(C) TOWN OF CASTLE ROCK
ASSESSOR # 2351-251-99-007
ACCOUNT # R0454699

(D) TOWN OF CASTLE ROCK
ASSESSOR # 2351-251-99-005
ACCOUNT # R0454698

(E) TOWN OF CASTLE ROCK
REC. NO. 2023034145
ASSESSOR # 2351-251-05-017
ACCOUNT # R0477993

CURVE, BEARING AND DISTANCE TABLE LEGEND

LINE	BEARING	DISTANCE
L1	S 34°37'48" E	100.00'
L2	S 34°37'48" E	20.00'
L3	S 27°59'53" W	96.66'
L4	N 32°05'40" W	22.92'
L5	N 20°38'27" W	24.95'
L6	N 49°31'54" W	61.09'
L7	N 29°17'18" E	154.76'
L8	N 55°22'12" E	171.04'
L9	N 33°43'57" W	13.20'

CURVE	DELTA ANGLE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD LENGTH
C1	27°22'19"	730.00'	348.74'	S 41°41'03" W	345.44'
C2	24°01'28"	581.37'	243.77'	N 41°18'02" E	241.99'

LINE TABLE LEGEND

- INDICATES AREA TO BE ANNEXED
- INDICATES ADJOINING APPROXIMATE PROPERTY LINE
- INDICATES APPROXIMATE RIGHT OF WAY LINE
- INDICATES INTERIOR RIGHT OF WAY LINE
- INDICATES SECTION / QUARTER SECTION LINE

CONTIGUITY ANNEXATION LEGEND

THIS HATCH INDICATES THE ACCESS PARCEL ANNEXATION MAP AS RECORDED UNDER RECEPTION NO. DC00052250 DATED JULY 28, 2000. CONTIGUITY LENGTH 1,439.35 FEET

THIS HATCH INDICATES THE ANNEXATION OF THE MAHER RANCH P.U.D TO THE TOWN OF CASTLE ROCK PHASE 3 AS RECORDED UNDER RECEPTION NO. 8728960 DATED OCTOBER 08, 1987. CONTIGUITY LENGTH 398.53 FEET

THIS HATCH INDICATES THE BROOKWOOD ANNEXATION MAP AS RECORDED UNDER RECEPTION NO. 2003150876 DATED MARCH 10, 2006. CONTIGUITY LENGTH 86.04 FEET

N

0' 100' 200'
SCALE: 1" = 100'

COLORADO LICENSED WILLIAM G. BUM ROCK 10/18/2023 35585 PROFESSIONAL LAND SURVEYOR

PROJECT NUMBER IS ANX22-0002

VOSB Veteran Owned Small Business

State Board of Licensure Rule 6.1.2 Seal Application - Board Bylaws and Rules 2.2 Signature (B) - AES Rules 6.1.3 Signature and Date - Electronic

HORZ. SCALE:	1" = 100'	PROJECT NO:	TN 22031
VERT. SCALE:	N/A	DATE:	10/18/2023
FIELD CREW: N/A	FIELD DATE: N/A	DRAFTED BY: BB	APPROVED BY: BB

REV	DATE	DESCRIPTION
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SHEET NUMBER
2 OF 2

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Phone: 303-484-8886 Fax: 303-948-1854
www.TRUENORTHsurvey.com

17.30.020 - PL-1 District.

A. Permitted Uses. Uses permitted by right in the PL-1 District are:

1. Active and developed parks, recreation center and facilities and related uses including, but not limited to, restrooms, parking and drives, information kiosks and maintenance and storage buildings;
2. Facilities for cultural/art uses, community events and other civic uses;
3 All municipal and/or quasi-municipal facilities or utilities;
4. Educational facilities; and
5. Public improvements and public right-of-way.

B. Development Standards. Development standards for the PL-1 District are as follows:

1. Maximum Height: Fifty (50) feet;
2. Minimum Front Yard Setback: A minimum of fifteen (15) feet from the property line; twenty-five (25) feet if abutting an arterial street. However, for property within the Downtown Overlay District (see Chapter 17.42), setbacks shall be governed exclusively by the standards set forth in Section 17.42.060.

C. Use by Special Review. Applications for use by special review shall be evaluated under Section 17.39.010 of the Code, provided that Section 17.38.040 shall have no application. Uses permitted by special review in the PL-1 District are as follows:

1. Buildings, structures or other permanent improvements privately owned and operated, which must be open for public use;
2. Special district buildings and structures (C.R.S. Title 32); and
3. Any building or structure more than fifty (50) feet in height, but not to exceed seventy-five (75) feet in height.

(Ord. No. 2023-007 , § 14, 4-4-2023; Ord. No. 2019-028 , § 2, 9-17-2019)

PETITION FOR ANNEXATION TO THE TOWN OF CASTLE ROCK, COLORADO

The undersigned, being a "Landowner" as defined in C.R.S. § 31-12-103(6), hereby petitions the Town of Castle Rock (the "Town") for annexation of the following described property located in the County of Douglas, State of Colorado, and further state:

1. The legal description of the land which Landowners request to be annexed to the municipality is attached hereto as ***Exhibit A*** (the "Property").

2. It is desirable and necessary that the above-described Property be annexed to the Town.

3. The requirements of Article II, Section 30 of the Colorado Constitution have been met.

4. The following requirements of C.R.S. § 31-12-104 exist or have been met:

    a. Not less than one-sixth (1/6) of the perimeter of the Property is contiguous with the Town.

    b. A community of interest exists between the Property and the Town. The Property is urban or will be urbanized in the near future. Further, the Property is integrated with the Town.

5. None of the limitations provided in C.R.S. § 31-12-105 are applicable and the requirements of that statute have been met because of the following:

    a. The annexation of the Property will not result in the Property being divided into separate parts or parcels under identical ownership.

    b. No land area within the Property held in identical ownership, whether consisting of one tract or parcel of real estate or two or more contiguous tracts or parcels of real estate comprising 20 acres or more, which together with the buildings and improvements situated thereon, has an assessed value in excess of $200,000 for an ad valorem tax purpose for the year preceding the annexation is included within the Property proposed to be annexed, without the written consent of the landowner or landowners thereof.

    c. No annexation proceedings have been commenced for annexation of any part of the Property by any other municipality.

    d. The entire width of all streets or alleys within the area to be annexed are included in the annexation.

    e. The annexation of the Property will not result in the detachment of any area from any school district or the attachment of same to another school district.

f. Annexation by the Town of the Property will not have the effect of, and will not result in, the denial of reasonable access to landowners, owners of an easement, or owners of a franchise adjoining a platted street or alley in the unincorporated area adjacent to the Property.

g. The annexation of the Property will not have the effect of extending a boundary of the Town more than three miles in any direction from any point of the Town boundary in the past 12 months.

6. The Property is solely owned by the Town, as the annexing municipality.

7. The Town, as landowner, requests that the Town Council approve the annexation of the property.

8. This Petition is accompanied by four (4) copies of an annexation boundary map in the form required by C.R.S. 31-12-101(1)(d), which map is attached as ***Exhibit B***.

9. This instrument may be executed in one or more counterparts, all of which taken together shall constitute the same document.

ATTEST:

DocuSigned by:
Lisa Anderson
Lisa Anderson, Town Clerk

TOWN OF CASTLE ROCK, as Landowner

DocuSigned by:
David L. Corliss
David L. Corliss, Town Manager

Approved as to form:

DocuSigned by:
Michael J. Hyman
Michael J. Hyman, Town Attorney

STATE OF COLORADO)
) ss.
COUNTY OF DOUGLAS)

The foregoing instrument was subscribed and sworn before me this 5.00 day of September, 2023, by David L. Corliss as Town Manager and Lisa Anderson as Town Clerk for the Town of Castle Rock, Colorado.

Witness my official hand and seal.
My commission expires: 9/30/2024 20084033388-390878.

SHANNON EKLUND
NOTARY PUBLIC
STATE OF COLORADO
Notary ID: 20084033388
My commission expires 9/30/2024

(SEAL)

DocuSigned by:
Notary Public

AFFIDAVIT OF CIRCULATOR IN SUPPORT OF PETITION

STATE OF COLORADO)
) ss.
COUNTY OF DOUGLAS)

Matt Gohl, being first duly sworn, states as follows:

1. I have circulated the Petition for Annexation to the Town of Castle Rock as set forth herein.

2. I know the persons whose names are subscribed to the foregoing petition on behalf of the Landowner.

3. The signatures on the foregoing Petition were affixed in my presence and each signature is a true, genuine, and correct signature of the person it purports to be.

4. To the best of my knowledge and belief, the person whose names are affixed to the foregoing Petition are authorized to sign such document on behalf of the Landowner.

CIRCULATOR

DocuSigned by:
MGohl
E59B8A0D2B304ED...

STATE OF COLORADO)
) ss.
COUNTY OF DOUGLAS)

DS

The foregoing instrument was subscribed and sworn before me this 30.00 day of August, 2023, by Matt Gohl.

Witness my official hand and seal.
My commission expires: 9/30/2024. DAN#20084033388-376747

SHANNON EKLUND
NOTARY PUBLIC
STATE OF COLORADO
Notary ID: 20084033388
My commission expires 9/30/2024

(SEAL)

DocuSigned by:
Shannon Eklund
2291...A3...

Notary Public