NOTICE OF THE SPECIAL MEETING OF THE

PLANNING & ZONING COMMISSION

February 25, 2026 at 6:00 PM

Argyle Town Hall, 308 Denton Street, Argyle, TX 76226

AGENDA

Notice is hereby given of the Special Meeting of the Planning & Zoning Commission beginning at 6:00 PM, Wednesday, February 25, 2026, at Argyle Town Hall, 308 Denton Street, Argyle, TX 76226. The Items listed below are placed on the agenda for discussion and/or action.

COMMISSION MEMBERS AND TOWN MANAGEMENT

Paul Kula, Chairperson, Place 1
David Snell, Vice-Chair, Place 5
Jody Johnson, Place 2
Matt Nelson, Place 3
Marilyn Lewis, Place 4
Kenton Miersma, Place 6
Michael Udovic, Place 7

Harrison Wicks, Community Development Director
Brenda McDonald, Town Attorney

CALL TO ORDER

PLEDGE OF ALLEGIANCE

American Flag

Texas Flag: "Honor the Texas Flag; I pledge allegiance to thee Texas, one state under God, one and indivisible."

OPEN FORUM

This is an opportunity for the public to address the Commission on any matter of public business, except public hearings. Any Comments related to public hearings will be heard when the specific hearing begins. Each speaker is limited to five (5) minutes; however, time limits can be adjusted by the Chairperson. Any response from a member of the Commission is limited to a statement of specific factual information, a recitation of existing policy, or direction to staff to place the subject on the agenda for a future Planning and Zoning Commission meeting.

WORKSHOP ITEMS
(Workshop items are for discussion only. No action may be taken on items listed under this portion of the agenda, other than to provide general direction to staff or to direct staff to place such items on a future agenda for action.)

1. Discuss Heath Tract Planned Development application

2. Discuss Town Center District Plan

ADJOURN

Note: As authorized by Section 551.071 of the Texas Government Code (Consultation with Town Attorney), this meeting may be convened into closed Executive Session for the purpose of seeking confidential legal advice from the Town Attorney on any agenda item herein.

CERTIFICATION

I hereby certify the above Notice of Meeting was posted on the bulletin board at Argyle Town Hall, a place convenient and readily accessible to the general public at all times, and to the Town's website in compliance with Chapter 551, Texas Government Code, on **February 19, 2026, by 5:00 p.m.** and remained posted for at least three (3) business days preceding the scheduled time of said meeting.

Harrison Wicks

Harrison Wicks, MPA

Director of Community Development

Persons with disabilities who plan to attend this public meeting and who may need auxiliary aid or services are requested to contact the Argyle Town Hall 48 hours in advance, at 940-464-7273, and reasonable accommodations will be made for assistance.

PLANNING AND ZONING COMMISSION
STAFF REPORT

Meeting Date: February 25, 2026

To: Chairman and Members of the Planning and Zoning Commission

From: Harrison Wicks, Director of Community Development

Subject: Workshop – Heath Tract Planned Development (No Action)

Purpose:
Discuss Zoning Change Request (Z-25-003) from Community Retail (CR) to a Planned Development with a base zoning of Community Retail (CR) for the Heath Tract Planned Development District on a 141.67-acre tract of land, known as James P Heath Addition, Block A, Lot 1, located on the northeast corner of I-35W and FM 407 W in the Patrick Rock Survey, Abstract 1063, Town of Argyle, Denton County, Texas.

Existing Condition of Property:
The property is zoned Community Retail (CR), and fronts on FM 407 and Gateway Blvd. The site is currently an unimproved open pasture.

Adjacent Existing Land Uses and Zoning:

North: Sam Davis Road Right-of-Way
South: FM 407 Right-of-Way
East: AISD Elementary and Middle Schools
West: TXDOT Right-of-Way, Sam Davis Road Right-of-Way

Background:
The current property owner, Argyle Commercial 94 Land LLC, has owned the property since March 2022. A previous meeting includes a Program for Argyle Community Engagement (PACE) meeting with the property owner back in August 2022. This is their first formal zoning application submittal.

Development Review Analysis:
The applicant, Spiars Engineering, on behalf of the owner, Argyle Commercial 94 Land LLC, has requested a zoning change for the creation of a Planned Development zoning district, known as the Heath Tract Planned Development, on approximately 142 acres of the northeast corner of I35W and FM 407.

The plans depict a retail, hotel, and office development with no residential uses proposed. The base zoning district for the PD is Community Retail (CR) with specific deviations/enhancements provided by the

applicant.

Consistency with the Future Land Use Plan and Comprehensive Plan:

Town staff have reviewed the Zoning Change Application and have determined that the applicant has demonstrated compliance with the Future Land Use Plan (FLUP). This area is identified as a commercial district on the FLUP, which is characterized by high intensity commercial with large retail anchors, smaller in-fill commercial, and ample parking to accommodate regionally generated traffic. No residential uses are permitted within this district. These uses require high visibility locations and should only be located on major roadways and corridors.

Area Regulations:

The PD proposes to use the area regulations of the CR Zoning District. The CR Zoning District has a minimum front yard setback of twenty-five feet (25'), side yard setbacks of twenty feet (20') and rear yard setbacks of twenty feet (20'). There is no minimum lot area requirement.

Parking:

For purposes of the PD, minimum parking spaces shall adhere to Sec. 14.3.66, - Off Street Parking and Loading Requirements in the Town of Argyle Development Standards. Alternative standards in the PD include, that the Community Development Director may authorize a reduction in parking up to 12% of the requirement where requested by the applicant, and required parking for a General Retail Large Scale use shall be one (1) space per 400 square feet of floor area, where previously the requirement in Sec. 14.3.66 is one (1) space per 250 square feet of floor area.

Landscaping:

Site Landscaping shall comply with the provisions of Sec. 14.3.67-6 – Minimum Landscaping Requirements For Nonresidential and Multifamily Developments. Landscape coverage required for individual sites in the PD is 25%. The project is required to provide a Type D landscape buffer along the front property line along FM 407. The buffer width is 10 feet. The applicant has proposed to increase the width of the buffer along FM 407 to a Type E bufferyard with 50 feet, and 4 canopy and 8 understory trees every 100 linear feet.

Along the entire east side property line, adjacent to the Grove Church and AISD property, the applicant has proposed no change to the Town standard of a Type F bufferyard with 50 feet, and 4 canopy, 8 understory trees, and 12 shrubs every 100 linear feet. This also includes an 8-foot-high masonry wall.

Along the entire north side property line, adjacent to Sam Davis Rd, the applicant has proposed a Type E bufferyard with 50 feet, and 4 canopy and 8 understory trees every 100 linear feet. The requirement of 12 shrubs per 100 linear feet was not included.

Along the entire west side property line, adjacent to Sam Davis Rd and I35W, the applicant has proposed a Type B bufferyard with 10 feet, and 2 canopy and 3 understory trees, and 10 shrubs every 100 linear feet. The Town standard originally called for a Type D bufferyard in this area with 10 feet, and 4 canopy and 5 understory trees, and 18 shrubs every 100 linear feet.

Design Standards:

The applicant has submitted an exhibit showing character imagery for the PD. The building elevations show 80-90% masonry materials, with flat roofs and parapets, and multiple articulation techniques to

break up the building façade. The CR Zoning district requires for every 80 feet (80') of a wall visible from a public street or a residentially zoned property, there be a change in the building footprint measuring a minimum of three feet (3'). The applicant has provided the appropriate footprint offsets.

Signage:

The applicant intends to comply with the provisions of Article IV. — Sign Regulations of the Town of Argyle Development Standards for design, construction, and maintenance, with the exception of wayfinding signage and district or neighborhood signs.

Uses:

The following uses were added to the PD in order to allow them as permitted in select areas. These areas are identified as along FM 407 only:

Hotel (**Permitted in Areas A, B**) - A Full-Service Hotel use is a facility providing temporary lodging or guest rooms to the general public on a daily-rate basis, which must include no fewer than 90 rooms accessible by interior corridors, indoor pool, and must also include a bar and full-service menu-based breakfast. Accessory services such as meeting or conference rooms, housekeeping, and recreational amenities may be included. Hotel shall not exceed a maximum height of sixty (60) feet or four (4) stories.

Warehouse Club (**Permitted in Area C**) - A Warehouse Club use is a membership-based warehouse retail use that sells a limited variety of general merchandise and food in bulk quantities to the general public. Products may include foodstuffs, apparel, furniture, appliances, home furnishings, toiletries, cosmetics, photographic equipment, electronics, toys, and other general merchandise. This use requires customers to pay a membership fee to access the exclusive, discounted, bulk-packaged goods. This use is exempt from the Development, Large Scale use definition and requirement of a specific use permit if the building is larger than 40,000 square feet. There is no minimum or maximum square footage for this use.

Traffic Impact Analysis:

The Development is proposed to consist of restaurant, hotel, and other retail uses and is expected to be ready for occupancy by 2035. The development proposes to have access along the future I-35W Northbound Frontage Road, FM 407 and the future extension of Gateway Blvd.

Based on the Town of Argyle's Development Standards Section 14.2.90.C.6 stating that the minimum acceptable congestion level of Level of Service (LOS) C, the following principal findings were found as part of Spiars' analyses of projected operational conditions at the "Build" condition.

Project Background Findings

• Roadway Improvements to I-35W and FM 407 within the project buildout were made known to Spiars at the onset of the traffic study. I-35W will be reconfigured from a 4-lane rural interstate to a six-lane urban freeway with an off-ramp connection to the northbound frontage road just north of FM 407. The interchange with FM 407 will also include a U-turn lane for the southbound frontage road in connection with the northbound frontage road.

Additionally, FM 407 will be reconstructed from a 2-lane highway to a four-lane median-divided highway from I-35W to Gateway Blvd. These assumptions have been applied to the analysis in the year 2030 and 2035 scenarios.

• In addition to the above improvements, the Town will install traffic signals at the intersections of FM 407 at Avalon Boulevard and FM 407 at Gateway Drive. For purposes of this study, traffic signals have been assumed at these intersections for the No-Build and Build Conditions.

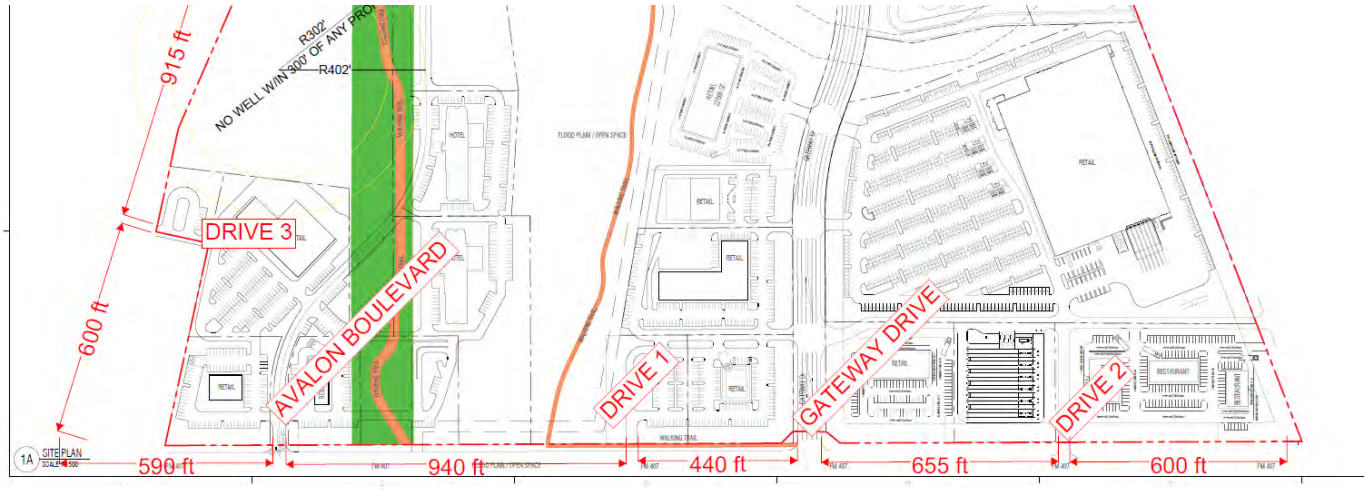
Level of Service Findings

• All intersections and roadways (FM 407) within the study area operate at "acceptable" overall intersection Levels of Services during the Existing Conditions. With the addition of estimated background traffic growth and estimated site development traffic, the overall intersection Levels of Service are projected to continue to operate at "acceptable" Levels of Service with slight increases to the delays except for the following intersections.

• The intersection of I-35W and the Southbound Frontage Road operates at an "acceptable" over intersection Level of Service in the Build Peak Hour Conditions however it is recommended the Town and TxDOT evaluate the traffic signal timings for the intersection to optimize traffic operations. Mitigations for the degrading conditions are listed in the table below.

• The intersection of I-35W and the Northbound Frontage Road operates at an "acceptable" over intersection Level of Service in the Build Peak Hour Conditions however it is recommended the Town and TxDOT evaluate the traffic signal timings for the intersection to optimize traffic operations. Mitigations for the degrading conditions are listed in the table below. Mitigations for the degrading conditions are listed in the table below.

• The exiting southbound maneuvers at Drive 2 along FM 407 are projected to operate at "unacceptable" Levels of Service in the project Build Conditions in both the AM and PM Peak Hours. These "unacceptable" conditions are typical of other similar unsignalized intersections and driveways along major high-volume roadways such as FM 407 and can only be mitigated with the installation of a traffic signal. However, with the anticipated low traffic volumes exiting the minor approach at the driveway from the development, the warrants for a traffic signal are estimated to not be met. Therefore, no mitigations for the "unacceptable" Levels of Service are recommended.



Traffic Impact Analysis Mitigations Table

Scenario	Year	Intersection/Approach/Peak	Recommendation	Responsible Party	Pro-Rata
Build	2035	FM 407 and I-35W Southbound Frontage Road	Traffic Signal Timing Adjustments	City/TxDOT	100%
Build	2035	FM 407 and I-35W Northbound Frontage Road	Traffic Signal Timing Adjustments	City/TxDOT	100%
Build	2028	FM 407 and Avalon Boulevard	Installation of Eastbound Left-Turn Lane	Development	100%
Build	2028	FM 407 and Gateway Drive	Installation of Eastbound Left-Turn Lane	Development	100%
Build	2028	FM 407 and Drive 2	Installation of Eastbound Left-Turn Lane	Development	100%
Build	2028	FM 407 and Gateway Drive	Installation of Westbound Right-Turn Lane	Development	100%

Attachments:

Exhibit A – District Standards
Exhibit C – Concept Plan
Exhibit D – Illustrative Plan
Exhibit E – Phasing Plan
Exhibit F – Open Space Exhibit
Exhibit G – Paving Sections
Exhibit H – Trail Exhibit
Exhibit J – Landscape and Screening
Character Images
Traffic Impact Analysis

EXHIBIT A

HEATH TRACT PLANNED DEVELOPMENT DISTRICT

TABLE OF CONTENTS

SECTION 1. ADMINISTRATION

1.1. Title

This Planned Development Zoning District is known as the “Heath Tract Planned Development District”. This area and the ordinance establishing applicable regulations and may be cited as the “District".

1.2. Purpose

The Purpose of this Planned Development Zoning District is to establish minimum requirements of development standards for a mix of uses. Following approval of this ordinance the developer shall prepare, or have prepared on their behalf, in a phased manner where applicable a Site Plan for each area to be developed and conforming to the criteria established herein.

1.3. Applicability

1.3.1. Planned Development ZoningDistrict Applicability

The provisions of this District shall only apply to properties as indicated on Exhibit A: Legal Description as further identified in Exhibit B: Zoning Exhibit. This Planned Development Zoning District provides regulations including zoning, subdivision, signage, and design standards for land designated as “Heath Tract Planned Development District”.

1.3.2. Relationship to the Town of Argyle Code of Ordinances

1.3.2.1. In the event of a conflict between the provisions of this District and any other codes, ordinances, regulations, and standards of the Town of Argyle, the provisions of this District shall control.

1.3.2.2. Provisions of any other codes, ordinances, regulations, and standards of the Town of Argyle that are not in conflict with the provisions of this District shall continue to apply to the property designated as the District.

1.3.2.3. The definitions set forth herein contain terms that are integral to this District. Those terms not defined in Section 9 or in Sec. 14.1.5 - Definitions of the Town of Argyle Development Standards; shall be accorded their commonly accepted meanings. In the event of a conflict between a definition in this District and a definition in any other codes, ordinances, regulations, and standards of the Town of Argyle, the definition in this District shall control.

1.3.3. Interpretation

1.3.3.1. In the event of a conflict between the provisions of this District and the numerical metrics of its tables and the diagrams and illustrations, the provisions of this District shall control.

1.3.3.2. Provisions of this District are activated by “SHALL" or “ARE” when required and “MAY" when optional.

SECTION 2. DEVELOPMENT APPROVALS PROCESSES

2.1. Development Procedure

The development procedure shall conform to the standards and progression as set forth in “Sec. 14.3.25. —Concept Plan and Site Plan Review Processes." in the Town of Argyle Development Standards, unless amended herein. The specific process shall depend upon the type of application as described below.

2.1.1. Concept Plan

The Concept Plan (included as Exhibit C: Concept Plan) for the PD shall satisfy the requirements for the Concept Plan as described in Sec. 14.3.25.5 and the requirements for a Phase One Concept Plan as described in Sec. 14.3.51-5. — “Large Commercial/Mixed-Use Development PD" in the Town of Argyle Development Standards and as modified herein. Council approval of this Planned Development District by Ordinance shall constitute approval of the

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Concept Plan allowing for an Applicant to proceed to a Site Plan. Revisions to the Concept Plan, either in whole or in part, shall be subject to the Major and Minor Amendments in Section 2.2.1.

The concept plan is provided for preliminary planning purposes only and is not an official or submitted document. All aerial imagery and mapping are based on the best available information at the time of preparation. The plan is subject to revision.

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2.1.2. Site Plan

A Site Plan that is in general conformance with an approved Concept Plan shall be reviewed in accordance with the process described in "Sec. 14.3.25.-2" in the Town of Argyle Development Standards. A Site Plan that is in general conformance with the Concept Plan and all other applicable requirements of the Development Standards shall be approved or approved with conditions.

The site plan is provided for preliminary planning purposes only and is not an official or submitted document. All aerial imagery and mapping are based on the best available information at the time of preparation. The plan is subject to revision.

2.2. Flexibility

The phasing and complexity inherent to mixed-use developments and the necessary extended timeframe to complete the development require that flexibility be incorporated in the entitlements for the District. There shall be two types of flexibility from the requirements of this District: Major Amendments and Minor Amendments.

2.2.1. Major and Minor Amendments

Major and Minor Amendments to the approved Concept Plan shall follow the criteria and procedures below and shall be determined by the Community Development Director.

Table 2.2.1: Major and Minor Amendments

Minor Amendment	Major Amendment
Modification up to 10% to the numerical standards of the district	Modification greater than 10% to the numerical standards of the district
Throughfares and Blocks on a Concept Plan may be modified to while maintaining general throughfare connectivity and spacing requirements. Resulting changes in blocks due to the shifting of throughfares shall not cause more than a 25% change in the size of the block.	Any change to a Concept Plan in excess of the Minor Amendment threshold of modifications.
Modification of the anticipated order of development for the overall property	

Modifications to approved, Street Cross Sections, and Intersection Assemblies to accommodate specific considerations regarding traffic calming, emergency vehicle access, accommodate pedestrian	

and bike traffic, and modify on-street parking configuration	

2.2.2. Administrative Modification

Minor Amendments shall be approved administratively by the Town Administrator or his / her designee. Major Amendments shall require the recommendation of the Planning and Zoning Commission and approval of Town Council.

SECTION 3. SITE DEVELOPMENT STANDARDS

3.1. Areas

The District is comprised of five primary Areas: A, B, C, D, and E. Areas are to be located as depicted on the Concept Plan. Areas within this District shall comply with their corresponding base zoning districts and permissible use standards, as set forth in Argyle's Development Standards, except as provided herein.

Areas and their base zoning district designations are the following:

Table 3.1.1: Area Base Zoning

Area	Base Zoning District
A	Community Retail (CR)
B	Community Retail (CR)
C	Community Retail (CR)
D	Community Retail (CR)
E	Community Retail (CR)

3.2. Thoroughfare Standards

All Thoroughfares shall be constructed in accordance with the standards as shown in Exhibit D: Thoroughfare Plan and Exhibit E: Street Sections.

3.2.1. Thoroughfare Modifications

Modifications to approved Thoroughfares, Street Cross Sections, and Intersection Assemblies to accommodate specific considerations regarding traffic calming, accommodate pedestrian and bike traffic, and modify on-street parking configuration may be approved by Minor Amendment by the Community Development Director. The Boulevard Street Section as depicted in Exhibit E: Street Sections may be built in phases — allowing just one side of the boulevard to serve as an access street.

3.2.2. Traffic Calming

3.2.2.1. Medians

Medians are permitted to be constructed in Gateway Drive.

3.2.2.2. Bulb-outs

Bulb-outs or similar type curb extensions may be used along key

intersections and programmed open space where feasible to support pedestrian safety and where vehicular movement and emergency access will not be unnecessarily hindered.

3.2.2.3. Speed Tables
Speed Tables may be permitted with administrative approval. Speed Tables may be integrated into pedestrian crossings at intersections and may be used to integrate Open Spaces across a street.

3.3. Open Space Standards

3.3.1 Open Space Requirements – An 8′ trail shall be provided along the east side of the floodplain.

3.3.2 All open space shall be owned and maintained by the Property Owners' s Association (POA).

3.3.3 All trails within the area designated as open space shall be open to the public and constructed of decomposed crushed granite or concrete.

3.3.4 The development shall provide a minimum of 26(as shown per the exhibit) acres of open space located along the floodplain corridor, enhanced with amenities such as landscaping, seating areas, picnic tables, and pedestrian trails. The planned trail system will be designed to connect with the Town of Argyle's comprehensive trail network south of FM 407. The proposed open space exceeds the Town's minimum open space requirements. One (1) amenity item for every acre of open space shall be provided. Amenity items may include the following:

- Fountains
- Water features
- Outdoor seating
- Public art
- Educational signage
- Bike racks
- Exercise equipment (parcourse);
- Shade structure;
- Gazebo;
- Signature lighting;
- Sport courts/ fields;
- Open air picnic lawn;
- Playground;
- Dog Park facilities;
- Other amenities approved by the Community Development Director.
-
- Other amenities approved by the Community Development Director.

3.3.5 The Open Space standards of this planned development shall satisfy all Town of Argyle Parks dedication requirements, and all Open Space requirements current or in the future.

3.3.6 Open Space shown on the **Open Space Plan** shall count towards the required landscaping percentage on the lot on which it is located.

3.3.7 The Open Space standards contained in this planned development shall be the sole standards for Open Space for development within the Property, including the standards for Large-Scale Projects / Developments.

3.4. Site Design

3.4.1. Commercial Shared Access

- Shared access and / or access easements across commercial parcels are permitted. The locations of shared access shall be indicated on the Site Plan.
- Commercial development shall be designed to provide shared access to contiguous commercial parcels provided the contiguous parcel has provided for the extension of the shared access.
- Provisions shall be made for the connection of pedestrian and vehicle circulation systems with contiguous parcels.
- Vehicular access easements from one lot to contiguous lots and for private driveways within a lot may be provided on the final plat or by separate recorded instrument.

SECTION 4. LOT AND BUILDING STANDARDS

4.1 Building Standards

4.1.1 Building Height

4.1.1.1 Masts, water towers, belfries, clock towers, chimney flues, mechanical equipment, cooling towers, air conditioning equipment, visual screens which surround roof mounted mechanical equipment, parapet walls limited to four feet in height, cupolas, spires, steeples, turrets, elevator bulkheads and similar building elements shall not count towards maximum building height.

4.1.1.2 Communication antennas and support structures *may* exceed building height by 12 feet.

4.1.1.3 Building wall shall extend to parapets that enclose the roof area for flat roofs. Said parapets shall be of a sufficient height to fully screen the roof and any mechanical equipment located on the roof.

4.1.2 Building Standards

4.1.2.1 Buildings that are open to the public and are within 30 feet of the street right-of-way shall have a pedestrian walkway shall consist of a sidewalk meeting ADA criteria. The sidewalk shall be level with the pavement.

4.1.2.2 Loading docks or loading areas are permitted to be visible from the street and may be accessed directly from the street.

4.1.2.3 Outside display and sales of merchandise is allowed.

4.1.2.4 Outside storage of merchandise may remain on a lot for more than 24 hours.

4.2 Lot Standards

4.2.1 Frontage Lot widths

4.2.1.1 All lots abutting or fronting a designated major thoroughfare with shared access shall maintain a minimum lot width of one hundred twenty-five (125) feet.

SECTION 5. PARKING STANDARDS

5.1 General

The parking requirements shall be determined by the use, as provided below. The parking provided shall include the parking spaces provided within the lot and the parking spaces that are along the parking lane corresponding to lot frontages.

5.2 Parking Requirements

For purposes of the District, minimum parking spaces shall adhere to Sec. 14.3.66, - Off-Street Parking and Loading Requirements in the Town of Argyle Development Standards. The Community Development Director may authorize a reduction in parking up to 12% of the requirement where requested by the applicant.

- Required parking may be provided with shared parking agreements among property owners, tenants, or users.
- Required parking for a General Retail Large Scale shall be one (1) space per 400 square feet of floor area

5.3 Parking Lot Landscaping

- Parking lots shall comply with the "Minimum Requirements for Off-Street Parking and Vehicular Use Areas" found in Sec.14.3.67-6. K— "Minimum Landscaping Requirements for Nonresidential and Multifamily Developments".
- Parking lots shall be accessed by a minimum six-foot-wide sidewalk.
- Trees shall not be required to be planted in landscape islands being within 300 feet of a grocery store front entrance(s)

SECTION 6. LANDSCAPE STANDARDS

6.1 Landscape Standards

All landscaping shall comply with the provisions set forth herein. Developers shall select from Sec. 14.5.50. - Approved Plant List of the Town of Argyle Development Standards

6.2 Street Trees

6.2.1 Street Tree Requirement

Street Trees (minimum 4-inch caliper) shall be planted on-center, approximately every 30 feet in the planting strip of throughfares.

6.2.2 Tree Species

Street Tree species shall be indicated on a Site Plan at time of Development, that demonstrates a variety of street tree species across the site to maintain a mix of tree species to ensure structural and aesthetic variety, and resistance to disease and pests over a monoculture.

6.2.3 Planting Location

Flexibility on planting is permitted to accommodate public and private infrastructure. Street Trees do not require root barrier (if planted at least three feet from the back of curb) or structural soil.

6.3 Site Landscaping

6.3.1 Minimum Site Landscaping

Site Landscaping shall comply with the provisions of Sec. 14.3.67-6, "minimum Landscaping Requirements For Nonresidential and Multifamily Developments" of the Town of Argyle Development Standards with the following exceptions:

SECTION 7. SIGNAGE STANDARDS

7.1 General Standards

- Signage may only be externally lit with full-spectrum source. unless otherwise indicated herein or with administrative approval, subject to review by the Director of Community Development
- Direct lighting, back lighting, and halo lighting is permitted
- One address number will be attached to the building in proximity to the principal entrance, and one address number shall be installed over the garage or the rear entrance of a building. Placement and size shall comply with the local fire code.
- All signs shall comply with the provisions of Article IV. — Sign Regulations of the Town of Argyle Development Standards for design, construction, and maintenance, except as provided below.
- The Development may include a pylon sign up to 35 feet in height along Interstate 35 , located within the approved sign area. . A coordinated sign package for the development will accompany the Site Plan submission.

7.2 Sign Types

7.2.1 Wayfinding Signs

- Wayfinding signs will be uniform in material and color to create a sense of place in the development.
- Wayfinding signs are permitted in the right-of-way.
- Wayfinding signs may be freestanding or attached to building watts or structures.
- They may be illuminated and/or non-illuminated.
- Wayfinding signs may allow a business logo.

7.2.2 Sales, Leasing and Construction Related Signs

Offsite sales, leasing and construction related signs are permitted by right during a construction period. All other sales, leasing and construction-related signs shall be approved with administrative approval, subject to review by the Community Development Director. Offsite sales, leasing and construction-related signs shall be removed no later than 14 days following the completion of construction or fulfillment of the advertised sale or lease.

7.2.3 Temporary Signs

Temporary signs are allowed by right during the construction period. In all other cases they shall comply with all the applicable regulations and restrictions found in the Town of Argyle Development Standards.

7.2.4 District or Neighborhood Signs

These signs will be uniform in material and color to create a sense of place in the district and shall be installed with administrative approval, subject to review by the Community Development Director.

SECTION 8. PERMITTED USES

8.1 General

Permitted uses in Areas shall be in accordance with uses and activities listed for their

corresponding base zoning districts in Sec. 14.3.62 - Use Chart Matrix in the Town of Argyle Development Standards.

Legend for Use Modifications		Area A Base Zoning: CR	Area B Base Zoning: CR	Area C Base Zoning: CR	Area D Base Zoning: CR	Area E Base Zoning: CR
p	Permitted in Area					
No.	**Use**					
	Carwash, Self-Service (only as an accessory use to a grocery	P		P		
33	Clinic (Medical)	P	P	P	P	P
42	Concrete or Asphalt Batching Plant (Temporary)				P	P
45	Convenience Store with Gas Sales	P				
50	Data Center				S	
54	Development, Large Scale	~~P~~SUP	PSUP	PSUP	~~P~~	
174	Urgent Care Clinic	P	P	P	P	P
	Restaurant with Drive Thru, not stacked next to each other	P	P	P		
	Hotel :	P	P	S	S	
	Office	P	P	P	P	P
			P		P	
	Motor Vehicle Repair and Services, Minor	P	P	P		
	Special Event Venue	P	P		P	
	Warehouse Club			P		

Prohibited Uses in this planned development from the base Community Retail (CR) zoning district include the following:

- Antennas
- Check Cashing Service
- Consignment Shop
- General Machine Repair
- Motel
- Group Day Care Home

- Helistop
- Kiosk
- Laundry Mat
- Recycling Kiosk
- Sign Manufacturing
- Tattoo Studio
- Veterinarian (Outdoor Kennels)
- Wind Energy Systems

SECTION 9. DEFINITIONS

This District provides definitions for terms in this District that are technical in nature or that otherwise may not reflect a common usage of the term. If a term is not defined in this District, then the Development Standards definitions shall control.

ADMINISTRATIVE APPROVAL: An approval by a City Staff member of a matter permitted in this District that complies with the intent and purposes of this District.

ALLOWED ENCROACHMENTS: Any structural element that encroaches into a Frontage, setback or easements. Allowed encroachments include eves, gutters, chimneys, utility meters, planter boxes, porches, stoops, bay windows, balconies, terraces, oriels, and colonnades.

AMBULANCE SERVICE: Service that provides emergency medical care and transports patients to hospitals or other treatment facilities

ANMBULATORY SURGERY CENTER: facility that provides surgical care to patients who do not require hospitalization

AMENITIZED RETENTION AREA: Retention or detention that is programmed with amenities and designed such that its storm management function is not the dominant design characteristic

BLOCK FACE: The aggregate of all the building facades on one side of a block.

BUILDING CONFIGURATION: The form of a building, based on its massing, on its private frontage, and on its height.

BUILDING DISPOSITION: The placement of a building on its lot.

BUILDING HEIGHT: The vertical extent of a building measured in stories.

BUILDING TYPE: A structure category determined by function, position on the lot, and configuration, including frontage and height.

BY RIGHT: A use or development that complies with this District and is permitted administratively without special review or approval by the Town Council or any board or commission. (SEE MINOR ~~ADMENDI1ENT~~AMENDMENT).

COMMERCIAL: The term collectively defines lodging, office, restaurant, and retail uses.

CONCEPT PLAN: For purposes of this zoning district, provisions which reference the Concept Plan shall be construed as meaning Exhibit B (labelled "Concept Plan"). For all clauses which refer to a concept plan, such provisions ~~*sha*~~*shall* be deemed to refer to all those materials (as may be amended), in addition to any other approved documents which constitute a required part of a concept plan under the Development Standards.

ELEVATION: An exterior wall of a building that is not along a frontage line (SEE FAÇADE).

ENCROACH: To break the plane of either a vertical or horizontal regulatory limit with a structural element, so that it extends into a setback, into the public frontage,

or above a height limit.

FACADE: The exterior walt of a building set along a frontage line.

FRONT SETBACK: The distance as measured from the frontage line to the point where a building may be constructed. This area shall be maintained clear of permanent structures with the exception of Allowed Encroachments.

FRONTAGE: The area between a building facade and the vehicular lanes and is inclusive of its built and its planted components. A frontage is divided into the private frontage and the public frontage.

FRONTAGE LINE: A tot line bordering a public frontage.

FULL SERVICE GENERAL ACUTE HOSPITAL: a facility that offers services, facilities, *and* beds for use for more than 24 hours for individuals requiring care; and regularly maintains, at a minimum, clinical laboratory services, diagnostic Xray services, treatment facilities including surgery or obstetrical care or both, and other definitive medical or surgical treatment of similar extent.

GREEN: An open space Tor unstructured recreation, and that is spatially defined by landscaping rather than building frontages.

HOTEL: ~~A facility providing temporary lodging or guest rooms to the general public on a daily rate basis, which must include no fewer than 90 rooms , indoor pool, may also include accessory services such as restaurants, meeting or conference rooms, housekeeping, and recreational amenities. Hotel shall have direct pedestrian access to the trail system if the trail system is on west side of the creek. Hotels shall not exceed a maximum height of sixty (60) feet or four (4) stories."~~

A Full Service Hotel use is a facility providing temporary lodging or guest rooms to the general public on a daily-rate basis, which must include no fewer than 90 rooms accessible by interior corridors, indoor pool, and must also include a bar and full-service menu-based breakfast. Accessory services such as meeting or conference rooms, housekeeping, and recreational amenities may be included. Hotel shall not exceed a maximum height of sixty (60) feet or four (4) stories.

LABORATORY, MEDICAL OR DENTAL: facility that tests clinical specimens to help diagnose or treat patients and/or a facility that designs, fabricates, or repairs dental appliances.

LANE MARKER SIGN: Identification signage that includes designated parking or curbside pickup signs

DEVELOPMENT, LARGE SCALE: a building, regardless of use, that is 40,000 square feet or larger.

MURAL: Any piece of artwork that is painted, tiled, or otherwise applied directly to an exterior wall.

ORDER CANOPY: Structure that covers drive-thru signage

PRINCIPAL BUILDING: The main building on a tot, and usually located toward the frontage.

PRINCIPAL ENTRANCE: The main point of access for pedestrians into a building.

REAR YARD: A disposition where the building occupies the full frontage, leaving the rear of the tot as the sole yard.

REAR SETBACK: The distance as measured from the rear tot line to the point where a building may be constructed. This area shall be maintained clear of permanent structures with the exception of encroachments.

SIDE YARD: A disposition where the building occupies one side of the tot with the setback to the other side. If the adjacent building is similar, with a blank side wall, the yard is quite private. May include exclusive-use and maintenance easements.

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THOROUGHFARE: A public way for use by vehicular and pedestrian traffic and intended to provide access to lots and open spaces, consisting of vehicular lanes and the public frontage.

TRAFFIC CALMING: A method for using either horizontal deflection methods such as bump outs or chicanes or vertical deflection such as speed tables to slow traffic.

TRANSITIONAL OR OCCUPATIONAL THERAPY LICENSED AS ASSISTED LIVING: Facility that offers beds for use for more than 24 hours for individuals requiring treatment, or care for injury, to help residents maintain or improve their ability to perform daily activity, limited to 12 beds.

WAREHOUSE CLUB:

A Warehouse Club use is a membership-based warehouse retail use that sells a limited variety of general merchandise and food in bulk quantities to the general public. Products may include foodstuffs, apparel, furniture, appliances, home furnishings, toiletries, cosmetics, photographic equipment, electronics, toys, and other general merchandise. This use requires customers to pay a membership fee to access the exclusive, discounted, bulk-packaged goods. This use is exempt from the Development, Large Scale use definition and requirement of a specific use permit if the building is larger than 40,000 square feet. There is no minimum or maximum square footage for this use.

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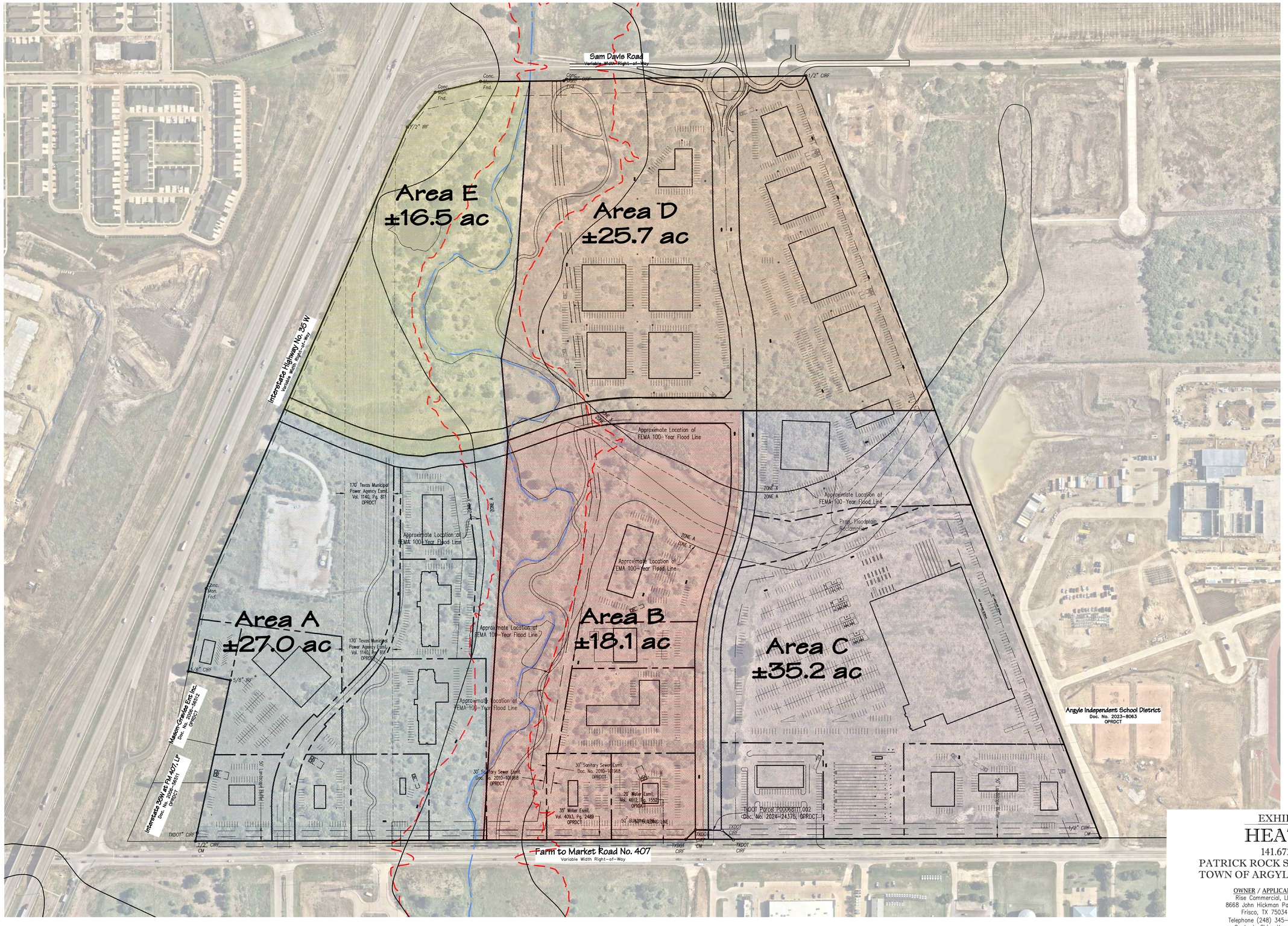


This concept plan is provided for preliminary planning purposes only and is not an official or submitted document. All aerial imagery and mapping are based on the best available information at the time of preparation. The plan is subject to revision.

EXHIBIT C: Concept Plan

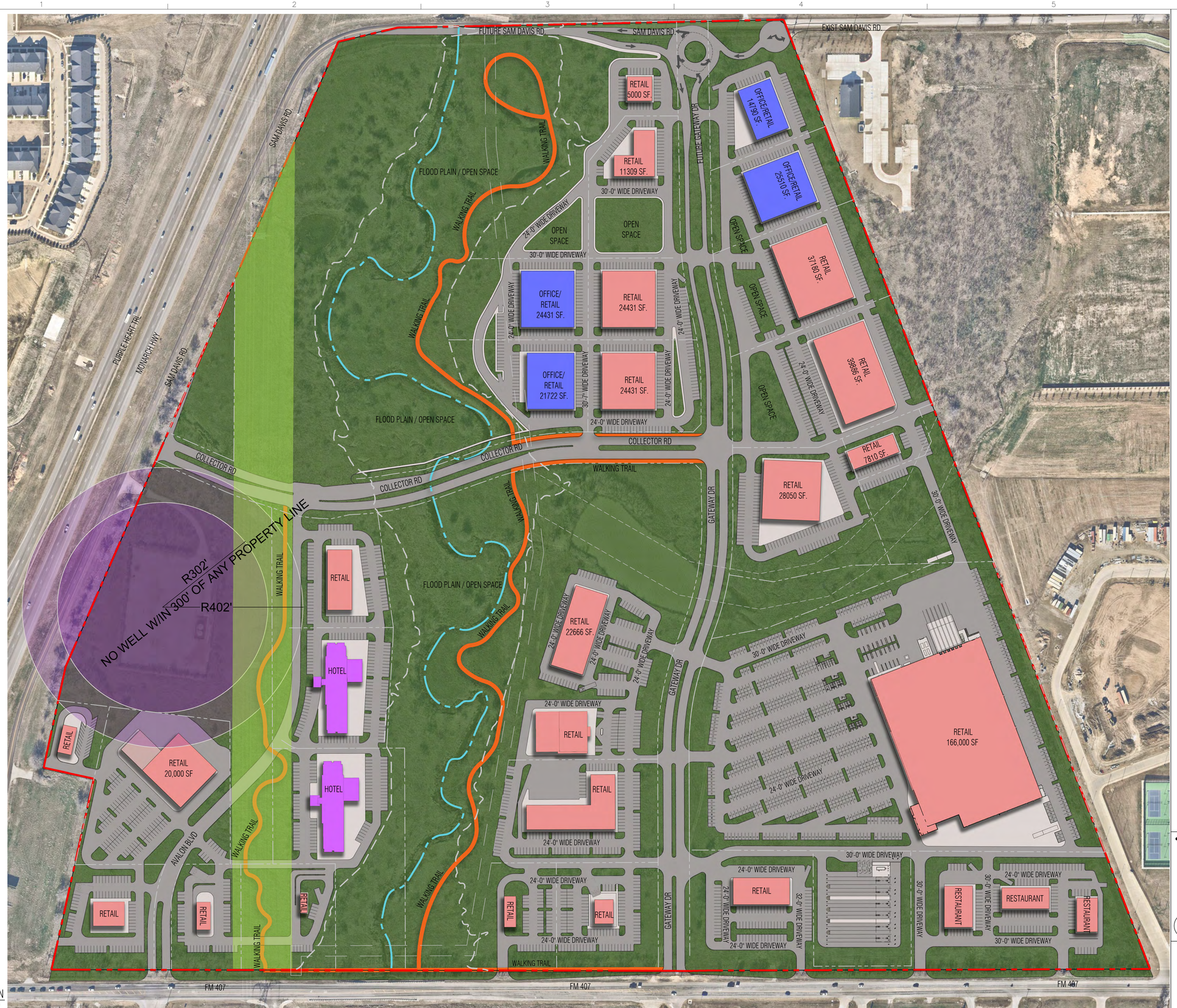
HEATH TRACT

141.672 AC / 6,171,248 SF
PATRICK ROCK SURVEY ~ ABSTRACT NO. 1063
TOWN OF ARGYLE, DENTON COUNTY, TEXAS

OWNER / APPLICANT
Rise Commercial, LLC
8668 John Hickman Parkway
Frisco, TX 75034
Telephone (248) 345-3818
Contact: Shiva Kondru

ENGINEER / SURVEYOR
Spiars Engineering, Inc.
3575 Lone Star Circle, Suite 434
Fort Worth, TX 76177
Telephone: (972) 422-0077
TBPELS No. F-2121 and No. F-10043100
Contact: Tyler Barnett

Scale: 1" = 150' February, 2026 SEI Job No. 25-028



1A SITE PLAN
SCALE 1:1500

NORTH

- THIS SITE PLAN IS PROVIDED FOR PRELIMINARY PLANNING PURPOSES ONLY AND IS NOT AN OFFICIAL OR SUBMITTED DOCUMENT. ALL AERIAL IMAGERY AND MAPPING ARE BASED ON THE BEST AVAILABLE INFORMATION AT THE TIME OF PREPARATION. THE PLAN IS SUBJECT TO REVISION.

5A NOTES
SCALE: N.T.S.

DESIGN GROUP LLC
2494 BUNNELS FORK ROAD
Frisco,TX 75036
Telephone: 901.603.8765
E-Mail: nkumar@designgroupmemphis.com

OWNER NAME AND ADDRESS

ARGYLE
COMMERCIAL 94LP

FM 407
ARGYLE, TEXAS

SEAL

CONSULTANTS NAME:

CONCEPTUAL DRAWINGS

NO.	DATE	ISSUE \ REVISION
1.	02/23/2026	CONCEPTUAL DRAWINGS

DRAWING NAME
SITE PLAN

DRAWN BY: KRINA
CHECKED BY:
APPROVED BY:
DRAWING NUMBER:

A100

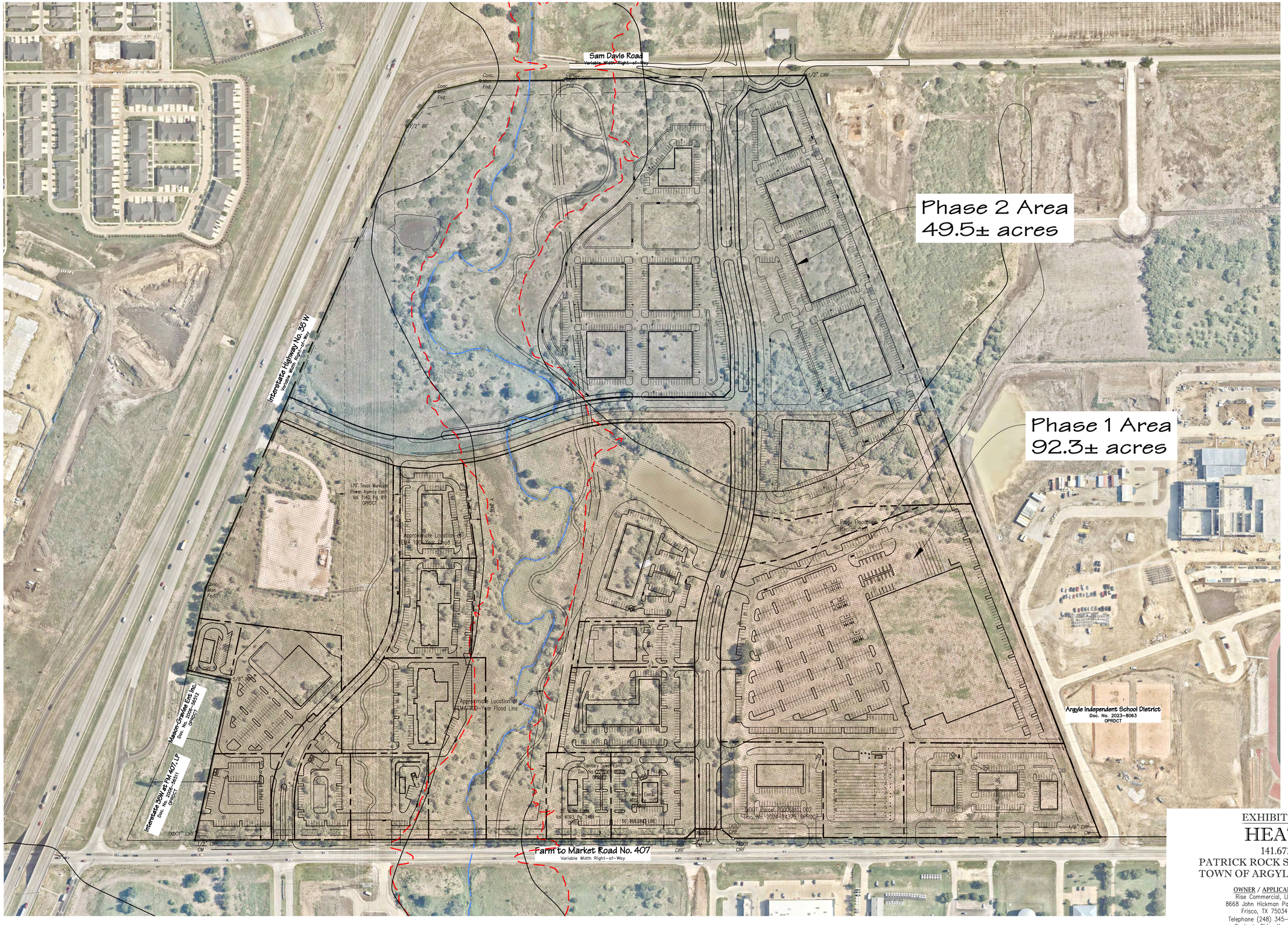


EXHIBIT E: Phasing Plan Exhibit

HEATH TRACT

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PATRICK ROCK SURVEY ~ ABSTRACT NO. 1063
TOWN OF ARGYLE, DENTON COUNTY, TEXAS

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Fort Worth, TX 76177
Telephone: (972) 422-0077
TBPELS No. F-2121 and No. F-10043100
Contact: Tyler Barnett

Scale: 1" = 150' February, 2026 SEI Job No. 25-028

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0 75 150 300

1 inch = 150 ft.

This Open Space Exhibit plan is provided for preliminary planning purposes only and is not an official or submitted document. All aerial imagery and mapping are based on the best available information at the time of preparation. The plan is subject to revision.

EXHIBIT F: Open Space Exhibit

HEATH TRACT

141.672 AC / 6,171,248 SF

PATRICK ROCK SURVEY ~ ABSTRACT NO. 1063

TOWN OF ARGYLE, DENTON COUNTY, TEXAS

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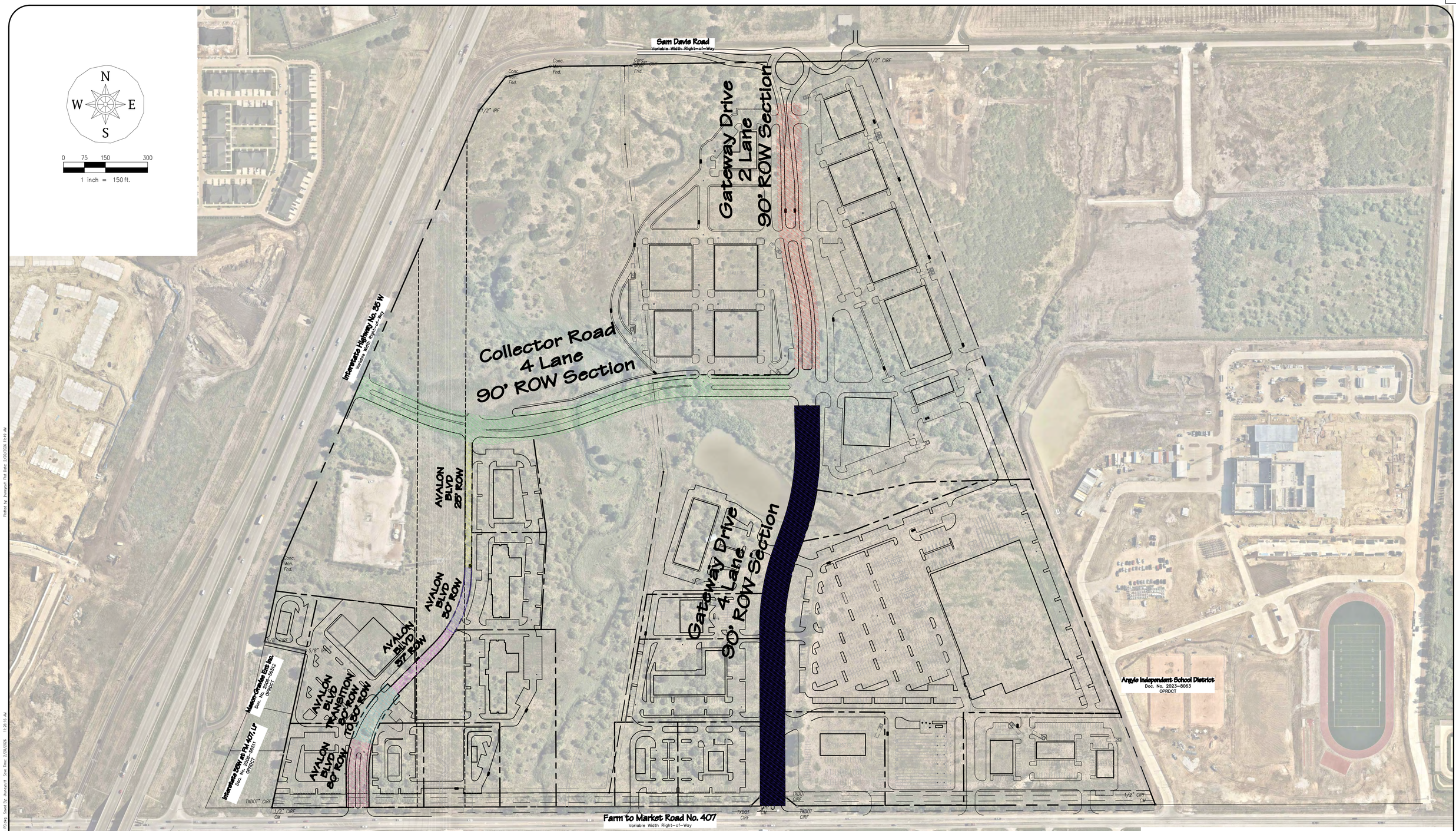
Telephone: (972) 422-0077
TBPELS No. F-2121 and No. F-10043100
Contact: Tyler Barnett

Scale: 1" = 150' February, 2026 SEI Job No. 25-028



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SPIARS
ENGINEERING & SURVEYING
765 Custer Road, Suite 100 • Plano, TX 75075 • 972.422.0077
TBPE No F-2121 • TBLPS No. F-10043100 • www.spiarseng.com

This Roadway Sections Exhibit plan is provided for preliminary planning purposes only and is not an official or submitted document. All aerial imagery and mapping are based on the best available information at the time of preparation. The plan is subject to revision.

EXHIBIT G: Roadway Sections Key Map

HEATH TRACT

141.672 AC / 6,171,248 SF
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TOWN OF ARGYLE, DENTON COUNTY, TEXAS

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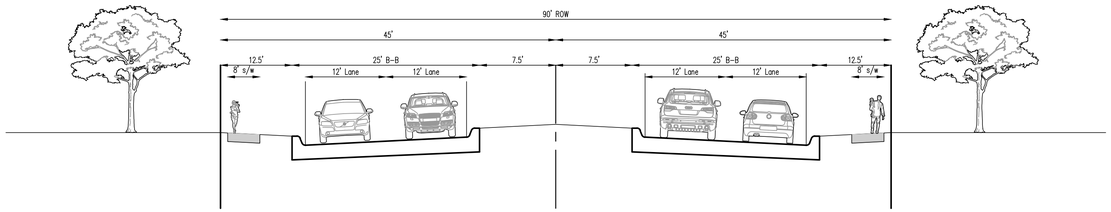
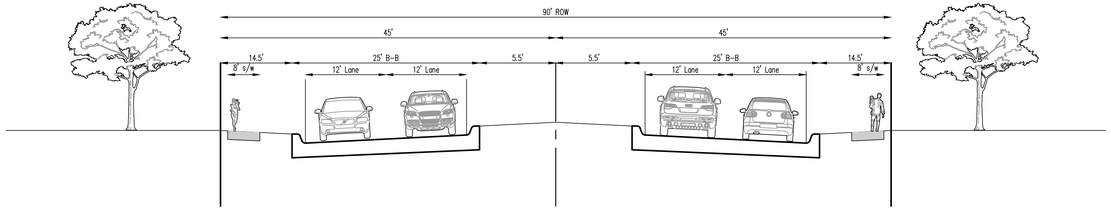
Fort Worth, TX 76177
Telephone: (972) 422-0077
TBPELS No. F-2121 and No. F-10043100
Contact: Tyler Barnett

Scale: NTS February, 2026 SEI Job No. 25-028

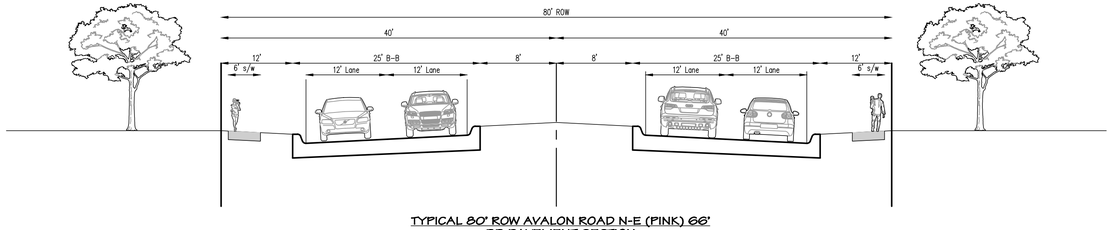


TYPICAL 90' ROW COLLECTOR ROAD E-W (GREEN)
61' BB PAVEMENT SECTION
NOT TO SCALE

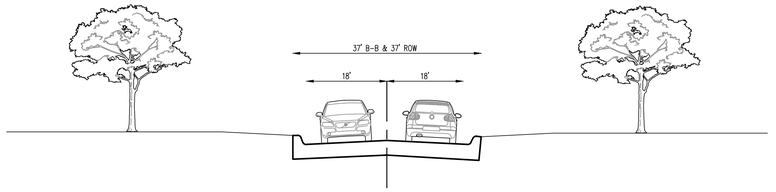


TYPICAL 90' ROW GATEWAY DRIVE N-S
(SOUTH OF COLLECTOR ROAD)
(BLUE)
61' BB PAVEMENT SECTION
NOT TO SCALE

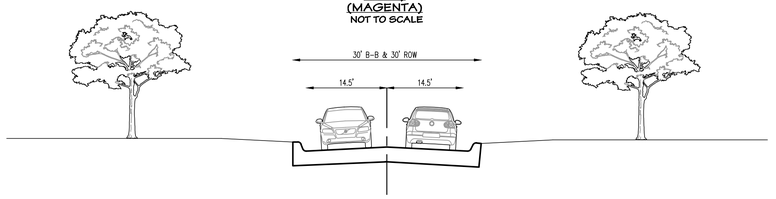
TYPICAL 90' ROW GATEWAY DRIVE N-S
(NORTH OF COLLECTOR ROAD)
(RED)
61' BB PAVEMENT SECTION
NOT TO SCALE



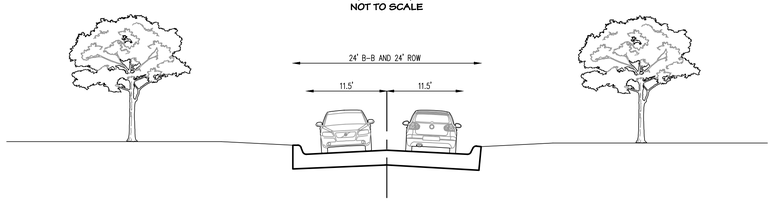
TYPICAL 80' ROW AVALON ROAD N-E (PINK) 66'
BB PAVEMENT SECTION
NOT TO SCALE



TYPICAL 37' ROW
(AVALON BLVD NORTH
OF MEDIAN TO EAST
LINE OF TRANSMISSION
ESMT)
(MAGENTA)
NOT TO SCALE



TYPICAL 30' ROW
(AVALON BLVD EAST
LINE OF TRANSMISSION
ESMT TO COLLECTOR
ROAD
(PURPLE)
NOT TO SCALE



TYPICAL 24' ROW
(AVALON BLVD EAST
LINE OF TRANSMISSION
ESMT TO COLLECTOR
ROAD
(YELLOW)
NOT TO SCALE

This Roadway Sections Exhibit plan is provided for preliminary planning purposes only and is not an official or submitted document. All aerial imagery and mapping are based on the best available information at the time of preparation. The plan is subject to revision.

EXHIBIT G: Roadway Sections

HEATH TRACT

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TOWN OF ARGYLE, DENTON COUNTY, TEXAS

OWNER / APPLICANT
Rise Commercial, LLC
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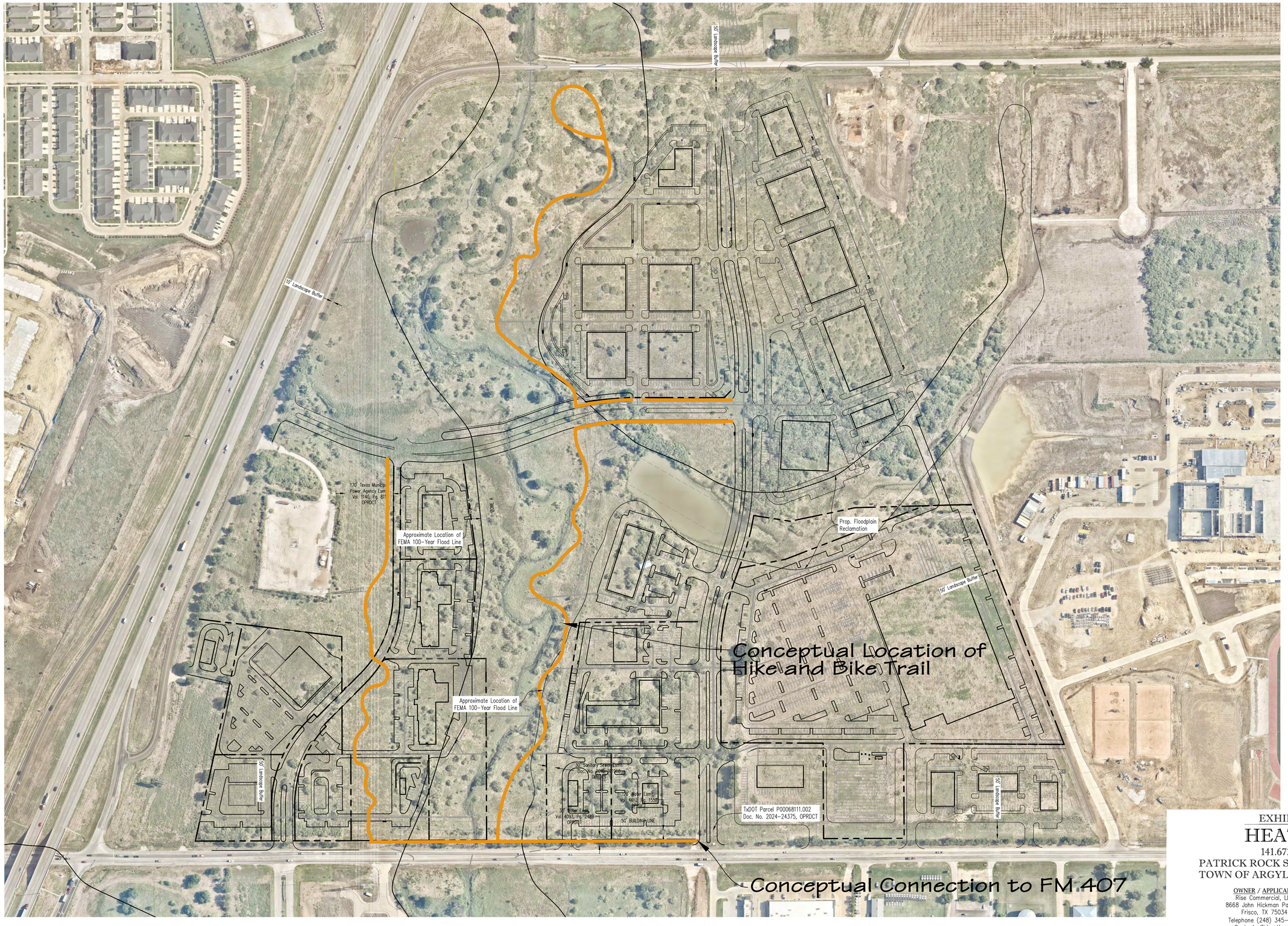
3575 Lone Star Circle, Suite 434
Fort Worth, TX 76177
Telephone: (972) 422-0077
TBPELS No. F-2121 and No. F-10043100
Contact: Tyler Barnett

Scale: NTS **February, 2026** **SEI Job No. 25-028**



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1 inch = 150 ft.

EXHIBIT H: Trail Exhibit

HEATH TRACT

141.672 AC / 6,171,248 SF
PATRICK ROCK SURVEY ~ ABSTRACT NO. 1063
TOWN OF ARGYLE, DENTON COUNTY, TEXAS

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Fort Worth, TX 76177
Telephone: (972) 422-0077
TBPELS No. F-2121 and No. F-10043100
Contact: Tyler Barnett

Scale: 1" = 150' February, 2026 SEI Job No. 25-028

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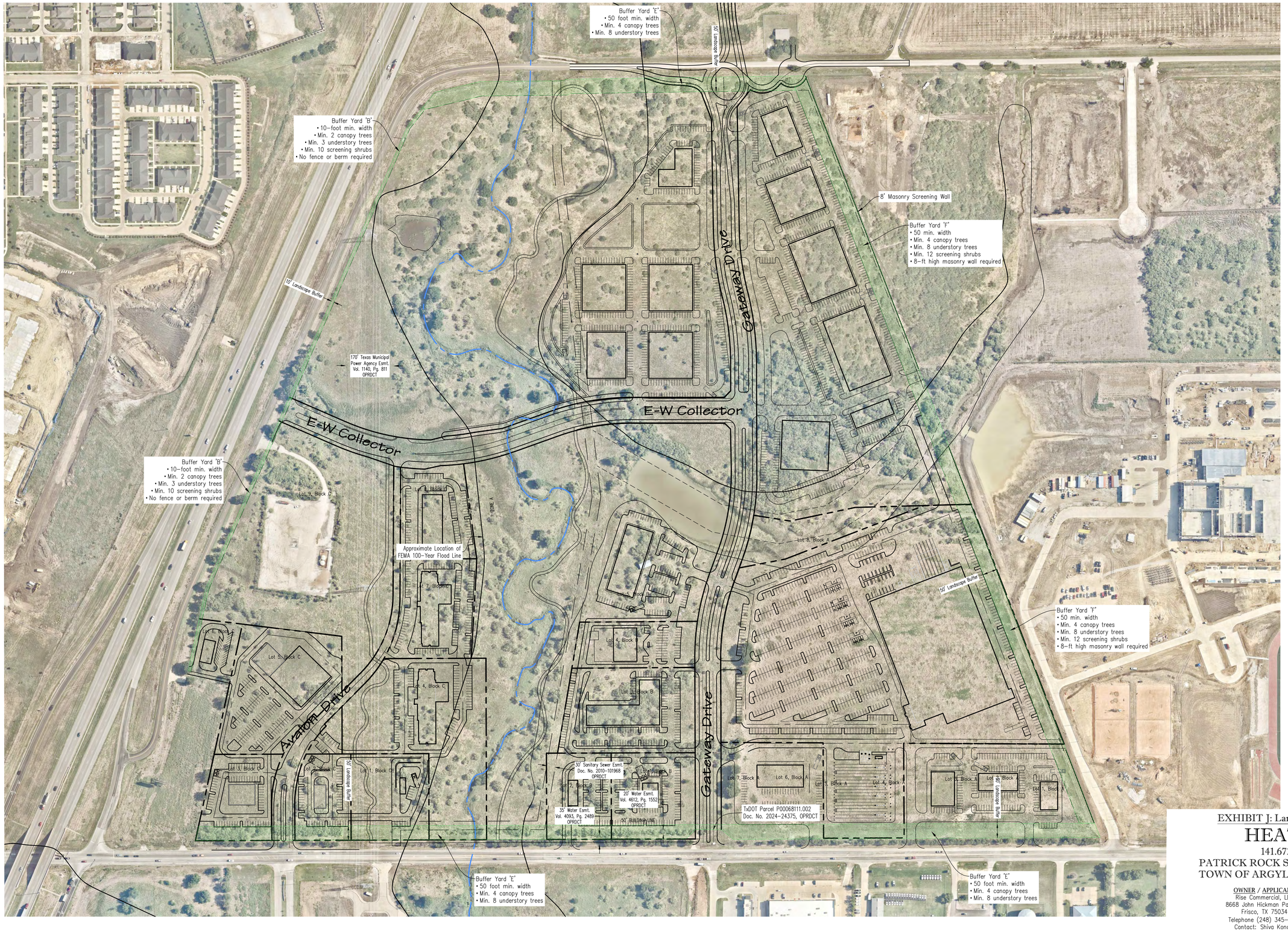

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1 inch = 150 ft.

This Landscape and Screening Exhibit plan is provided for preliminary planning purposes only and is not an official or submitted document. All aerial imagery and mapping are based on the best available information at the time of preparation. The plan is subject to revision.

EXHIBIT J: Landscape and Screening Exhibit

HEATH TRACT

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TBPELS No. F-2121 and No. F-10043100
Contact: Tyler Barnett

Scale: 1" = 150' February, 2026 SEI Job No. 25-028


STAYBRIDGE
SUITES


Welcome.
Exit


LOVEWORKSHERE


WHISKEY
SPIT-ROASTED CHICKEN
TO GO & PICK UP
ORDERS AVAILABLE


Jason's deli

DECEMBER 19, 2025

TRAFFIC IMPACT ANALYSIS

To provide Professional Traffic Engineering Services To:

Rise Commercial

FOR

Heath Tract Infrastructure in Argyle, Texas

For submittal to the Town of Argyle

Presented by:

SPIARS ENGINEERING & SURVEYING
a Christian-led & employee-owned company

765 Custer Road, Suite 100 | Plano, Texas 75075
Main 972.422.0077 | www.spiarseng.com
TBPE Reg. No. F-2121 | TBPLS Reg. No. F-100

EXECUTIVE SUMMARY

Spiars Engineering & Surveying was retained by Rise Commercial to provide a Traffic Impact Analysis (TIA) for the proposed Commercial development. The proposed development is to be located on the north side of the intersection of FM 407 and Gateway Drive in Argyle, Texas. For the purposes of this report, the Development is referred to herein as "Heath Tract Infrastructure". The Development is proposed to consist of restaurant, hotel, and other retail uses and is expected to be ready for occupancy by 2035. The development proposes to have access along the future I-35W Northbound Frontage Road, FM 407 and the future extension of Gateway Drive.

Based on the Town of Argyle's Development Standards Section 14.2.90.C.6 stating that the minimum acceptable congestion level of Level of Service (LOS) C, the following principal findings were found as part of Spiars' analyses of projected operational conditions at the "Build" condition.

Project Background Findings

- Roadway Improvements to I-35W and FM 407 within the project buildout were made known to Spiars at the onset of the traffic study. I-35W will be reconfigured from a 4-lane rural interstate to a six-lane urban freeway with an off-ramp connection to the northbound frontage road just north of FM 407. The interchange with FM 407 will also include a u-turn lane for the southbound frontage road in connection with the northbound frontage road. Additionally, FM 407 will be reconstructed from a 2-lane highway to a four-lane median-divided highway from I-35W to Gateway Drive. These assumptions have been applied to the analysis in the year 2030 and 2035 scenarios.

- In addition to the above improvements, the Town will install traffic signals at the intersections of FM 407 at Avalon Boulevard and FM 407 at Gateway Drive. For purposes of this study, traffic signals have been assumed at these intersections for the No-Build and Build Conditions.

Level of Service Findings

- All intersections and roadways (FM 407) within the study area operate at "acceptable" overall intersection Levels of Services during the Existing Conditions. With the addition of estimated background traffic growth and estimated site development traffic, the overall intersection Levels of Service are projected to continue to operate at "acceptable" Levels of Service with slight increases to the delays except for the following intersections.

- The intersection of I-35W and the Southbound Frontage Road operates at an "acceptable" over intersection Level of Service in the Build Peak Hour Conditions however it is recommended the Town and TxDOT evaluate the traffic signal timings for the intersection to optimize traffic operations. Mitigations for the degrading conditions are listed in the table below.

(Continued)…

- The intersection of I-35W and the Northbound Frontage Road operates at an "acceptable" over intersection Level of Service in the Build Peak Hour Conditions however it is recommended the Town and TxDOT evaluate the traffic signal timings for the intersection to optimize traffic operations. Mitigations for the degrading conditions are listed in the table below. Mitigations for the degrading conditions are listed in the table below.

- The exiting southbound maneuvers at Drive 2 along FM 407 are projected to operate at "unacceptable" Levels of Service in the project Build Conditions in both the AM and PM Peak Hours. These "unacceptable" conditions are typical of other similar unsignalized intersections and driveways along major high-volume roadways such as FM 407 and can only be mitigated with the installation of a traffic signal. However, with the anticipated low traffic volumes exiting the minor approach at the driveway from the development, the warrants for a traffic signal are estimated to not be met. Therefore, no mitigations for the "unacceptable" Levels of Service are recommended.

Site Access Findings

- According to the TxDOT guidelines for the installation of a left-turn deceleration lane, it is recommended that the development install eastbound left-turn deceleration lanes at all driveways with full left-turn access along FM 407. Driveways required to have the installation of a left-turn lane include Avalon Boulevard, Gateway Drive, and Drive 2.

- According to the TxDOT guidelines for the installation of a right-turn deceleration lane, it is recommended that the development install a westbound right-turn deceleration lane at Avalon Boulevard for traffic entering the development.

(Continued)…

Traffic Impact Analysis Mitigations Table

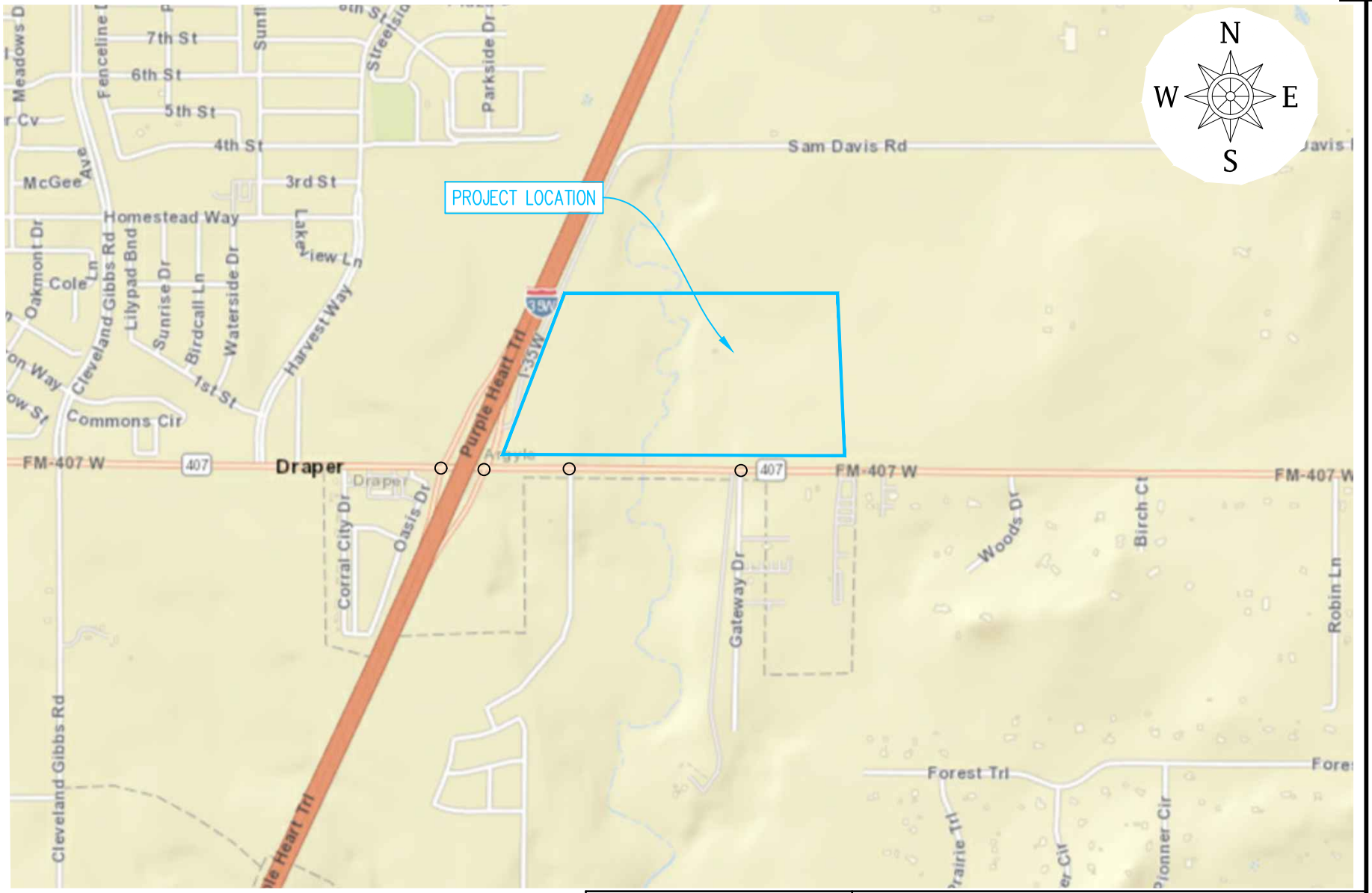
Scenario	Year	Intersection/Approach/Peak	Recommendation	Responsible Party	Pro-Rata
Build	2035	FM 407 and I-35W Southbound Frontage Road	Traffic Signal Timing Adjustments	City/TxDOT	100%
Build	2035	FM 407 and I-35W Northbound Frontage Road	Traffic Signal Timing Adjustments	City/TxDOT	100%
Build	2028	FM 407 and Avalon Boulevard	Installation of Eastbound Left-Turn Lane	Development	100%
Build	2028	FM 407 and Gateway Drive	Installation of Eastbound Left-Turn Lane	Development	100%
Build	2028	FM 407 and Drive 2	Installation of Eastbound Left-Turn Lane	Development	100%
Build	2028	FM 407 and Gateway Drive	Installation of Westbound Right-Turn Lane	Development	100%

TABLE OF CONTENTS

LIST OF TABLES:

LIST OF EXHIBITS:

LIST OF APPENDICES:



LEGEND:

- PROJECT LOCATION
- STUDY INTERSECTION

SPIARS ENGINEERING & SURVEYING

Drawn:	Checked:	Date	Job No.
HWL	HWL	6/19/25	25-028

EXHIBIT 1 - VICINITY MAP

HEATH TRACT INFRASTRUCTURE

CITY OF ARGYLE

DENTON COUNTY, TEXAS

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Plotted by: hemley Plot Date: 6/19/2025 9:44 AM

DESIGN GROUP LLC
2494 BUNNELS FORK ROAD
Frisco,TX 75036
Telephone: 901.603.8765
E-Mail: nkumar@designgroupmemphis.com

OWNER NAME AND ADDRESS

ARGYLE
COMMERCIAL 94LP

FM 407
ARGYLE, TEXAS

SEAL

CONSULTANTS NAME:

CONCEPTUAL DRAWINGS

NO.	DATE	ISSUE \ REVISION
1.	12/08/2025	CONCEPTUAL DRAWINGS

DRAWING NAME
SITE PLAN

DRAWN BY: MANJIRI
CHECKED BY:
APPROVED BY:
DRAWING NUMBER:
A100

1A SITE PLAN
SCALE: 1" = 500'

INTRODUCTION AND BACKGROUND

Purpose

Spiars Engineering & Surveying was retained by Rise Commercial to provide a Traffic Impact Analysis (TIA) for the proposed Commercial development. The proposed development is to be located on the north side of the intersection of FM 407 and Gateway Drive in Argyle, Texas. A vicinity map is provided in **Exhibit 1**.

The purpose of the study is to estimate the traffic impacts of the proposed development in reference to the current traffic conditions of the immediate surrounding vicinity of the property. These impacts are estimated by projecting the development trips arriving and departing the site and developing the traffic patterns to the immediate surrounding intersections to the property. Once the impacts are identified, the findings of the study are to determine the necessary mitigations, if any, needed to maintain acceptable traffic conditions based on SPIARS professional opinions and/or recommendations. Necessary mitigations may include, but are not limited to, safety, overall traffic operations, site access, circulation, etc. Execution and completion of the necessary mitigations are subject to approval of the agency that is responsible for the operation of the transportation facilities. NOTE: The mitigations presented in the analysis of this study should not be regarded as required and not intended to assign financial responsibility to any parties.

A TIA is required by the Town of Argyle as part of the Town's site plan permitting process outlined in the Town of Argyle Development Standards Section 14.2.90.C. This report was prepared by professional expertise in accordance with industry standards by SPIARS traffic engineers that follows the Town's applicable TIA Guidelines and guidance provided by the Town's staff. In cases where parameters were not discussed, SPIARS used professional judgement, as applicable, in order to finalize this report.

Project Description

The development proposes to consist of multiple retail uses throughout the site and is expected to be ready for occupancy by 2035. A site plan is provided in **Exhibit 2**.

Additionally, the development is proposing to construct three new driveways along FM 407 with access along the future extension of Gateway Drive, as well. For purposes of this study, FM 407 will be improved from the current two-lane cross-section to a four-lane, median divided roadway by the completion of the subject development. It is assumed that the improvements will end at Gateway Drive, and therefore, all access points east of Gateway Drive will have full right- and left-turn access. All information pertaining to existing conditions provided within this report is supported and validated by on-site observations conducted at the outset of the study.

Roadway Improvements to I-35W and FM 407 within the project buildout were made known to Spiars at the onset of the traffic study. I-35W will be reconfigured from a 4-lane rural interstate to a six-lane urban freeway with an off-ramp connection to the northbound frontage road just north of FM 407. The interchange with FM 407 will also include a u-turn lane for the southbound frontage road

in connection with the northbound frontage road. Additionally, FM 407 will be reconstructed from a 2-lane highway to a four-lane median-divided highway from I-35W to Gateway Drive. These assumptions have been applied to the analysis in the year 2030 and 2035 scenarios.

Study Parameters

In accordance with the Town's TIA guidelines and staff direction, this TIA includes analyses of traffic operations for the following scenarios listed below. All parameters mentioned in this study were reviewed and approved by the Approving Agency at the commencement of the TIA.

Scenario Parameters

- "Existing" Conditions (2025)
- 2030 "No-Build" Conditions
- 2030 "Build" Conditions
- 2035 "Build" Conditions

Analysis Area Parameters

Per Town direction, the specific analyses performed in this study include Intersection Capacity, including AM and PM peak hour Level of Service by movement, delay by movement, and queuing analysis with 95th percentile queue lengths by movement for the following study area intersections:

- Intersections
    - I-35W SBFR and FM 407
    - I-35W NBFR and FM 407
    - FM 407 and Avalon Boulevard
    - FM 407 and Gateway Drive
    - Site Driveways

And Roadway Link Analysis to determine the appropriate capacity for the type of roadway for the following roadway segments:

- Roadway Links
    - FM 407
        - Existing Cross-Section: Two-lane, undivided roadway
        - Town of Argyle Thoroughfare Plan Designation: Type A Major Arterial (6 lanes, median-divided, 120' R.O.W.)
        - Existing Daily Traffic Count: 14,259 (SPIARS - 2025)
        - Posted Speed Limit: 55 mph

- Gateway Drive
  - Existing Cross-Section: Six-lane, median-divided roadway
  - Town of Argyle Thoroughfare Plan Designation: Proposed Type B Minor Arterial (4 lanes, median-divided, 90' R.O.W.)
  - Existing Daily Traffic Count: Not Available
  - Posted Speed Limit: Not Available

TRAFFIC IMPACT ANALYSIS

Existing Traffic Data Collection and Analyses

Current traffic volumes commissioned by SPIARS were collected on Thursday, April 24, 2025, by a local traffic counting subcontractor, CJ Hensch & Associates. The peak hours that were selected for this study consist of each individual intersection peak hour, as a conservative approach. Raw detailed datasheets from CJ Hensch & Associates compiled into SPIARS formatting datasheets are provided in **Appendix A**.

NOTE: To ensure that automated traffic data captured demand, SPIARS researched multiple TxDOT historical hourly counts at multiple locations. In this research, SPIARS found the initial two-hour window for both AM and PM peak periods. From there, the data presented a peak hour window to be selected for the entire study area. Through observations from field and video, Spiars was able to validate the data to be accurate of current conditions. No short-term developments are proposed at this site other than the proposed development. Any developments to be completed by the subject development's buildout year are provided in the analysis as background traffic in the "No-Build" Conditions analyses.

"No-Build" Traffic Volume Data and Analyses

The "No-Build" scenario incorporates anticipated changes to the "Existing" conditions that are unrelated to and independent of the subject development but that are expected to be in place at the time of development's time of completion. Changes may include increases in traffic volumes, either through background growth or new developments in the area, and/or improvements to the existing roadway network. Those changes are presented below.

According to the Town's Throughfare Plan, the following transportation infrastructure improvements are planned and are anticipated to be in place by the time of the completion of the subject development. The Town's documentation provides a graphical depiction of the roadway network conditions anticipated to exist for this scenario. These improvements are included in the analyses at the "No-Build" Conditions analysis scenario.

- FM 407
  - Cross-Section: 6 lanes with median from I-35W to Gateway Drive

- Gateway Drive
    - Cross-Section: 4 lanes with median north of FM 407

In order to account for anticipated growth of background traffic within the study area, historical traffic volumes collected by the Texas Department of Transportation (TxDOT) were obtained from the TxDOT Traffic Count Database System (TCDS) and provided in a screenshot in **Appendix A**. The growth rate for the station presented below is calculated separately using the compound growth formula. The data used in the calculation in the table below was found at the nearest applicable location with, to the furthest extent possible, enough yearly data (3+ year separation where available) to calculate a projection. The data used in this analysis are summarized in **Table 1.**

Table 1. Annual Calculated Growth Rate Summary

LOCATION	VOLUME	PERCENTAGE
FM 407, west of FM 973	19,925 ('22)	2.33% ~ 2.50%
	16,868 ('18)	

From the calculations presented above, a growth percentage of 2.5% was used in this study. Study traffic volumes with the projected growth rate(s) applied are graphically summarized in **Appendix C**.

Development Related Traffic Volumes and Analyses

To determine the traffic volumes generated by the proposed development, SPIARS applied the standard process of estimating trip generation, mode split, trip distribution, and traffic assignment. Trip generation for the subject development within this study was calculated using the methodologies presented by the Institute of Transportation Engineers (ITE) *Trip Generation* handbook, 12th Edition. The projected daily and peak hour trip generation for the proposed development is summarized in **Table 2** (see also **Appendix B**).

Table 2. Development Calculated Trip Generation Summary

YEAR	AREA	ITE CODE #	LAND USE	UNITS	(WEEKDAY)	AM PEAK HOUR			PM PEAK HOUR		
						Total	In	Out	Total	In	Out
2030	A	310	Hotel	240 Rooms	1,402	82	42	40	113	58	55
		822	Strip Retail Plaza	39,000 SF	2,124	153	84	69	245	123	122
	D	820	Shopping Center	246,000 SF	8,952	216	134	82	802	393	409
2035	B	821	Shopping Plaza	113,000 SF	7,388	180	111	69	538	264	274
	C	820	Shopping Center	170,000 SF	6,186	150	93	57	554	272	282
Pass-By Trips[1]					*0*	*178*	*110*	*68*	*608*	*298*	*310*
	TOTAL:				26,052	603	354	249	1,644	812	832

[1]More information provided in Appendix B

The trip generation calculations provided by ITE typically are calculated by either a range of rates or by fitted curve equations. In this case, the average rates were chosen as worst case and are represented in a Land Use Detail spreadsheet provided in **Appendix B.**

At the discretion of the Engineer, adjustments to the standard trip generation may apply in order to account for development-specific factors. For this analysis, reductions to the calculated trip generation by assumptions made for Internal Trip Capture were not considered significant enough to be applied within the analysis as these metrics are already determined within the Land Use Code used for each portion of the development. However, reductions to the calculated trip generation by assumptions made for Pass-by Trips were considered significant enough to be applied within the analysis.

Pass-by Trips are an estimated determination of the amount of "background" traffic volumes whose vehicle travel path passes by the future proposed development. In this case, the estimation that is used for pass-by reduction refers to the percentage of the development's site-related traffic that is already accounted for within the existing traffic collection data. Furthermore, the existing traffic collection data assumed to access this site is projected to only alter the subject vehicles travel path simply only to access the site's driveway along a particular roadway.

Through the ITE Trip Generation Manuel, 11th Edition, Pass-by trip percentages for Land Use Code 820 are 29% in the PM Peak Hour and for Land Use Code 821 are 40% in the PM Peak Hour. Excerpts from ITE are provided in **Appendix B**.

Mode Split is an estimated determination of the site-related traffic that is projected to utilize other modes of transportation other than accessing the site as a vehicular trip. Modes of transportation that enter into this category are such as arriving and departing the subject site via walking, bus ridership, carpooling, passenger train, etc. For this analysis, reductions to the calculated trip

generation by assumptions made for Mode Split were not considered significant enough to be applied within the analysis as there are no significant transit routes nearby.

To estimate trip distribution, SPIARS first performed a "cordon line" analysis using existing peak hour volumes approaching the site during the peak hours to obtain the relative percentage of traffic on each corridor. Then, based on professional engineering judgement, resulting percentages were estimated through orientation of travel through general vehicular traffic patterns and characteristics by local roadway networks. These resulting percentages are summarized in Appendix B. Communications with the developer about anticipated traffic patterns were also in place for the finalization of the trip distribution.

Once the site-generated traffic was distributed to the major travel directions, the resulting traffic percentages were assigned to specific traffic routes and turning maneuvers through immediate surrounding intersections. These assignments were based upon the location of proposed site access and the assumed best and most-direct travel path to/from the nearest and most appropriate site driveway(s). A graphical summary of projected site-related traffic volumes is provided in **Appendix C.**

"Build" Traffic Volume Data and Analyses

Traffic volumes for the "Build" condition are a sum of the "No-Build" traffic volumes, plus the projected development-related traffic volumes. The resulting calculated "Build" traffic volumes are summarized in **Appendix C**.

When unacceptable conditions arise as presented in the analyses of this study, mitigations measures may be required by the Approving Agency to restore conditions back to acceptable conditions.

Intersection Capacity Analysis

As required by the Approving Agency, SPIARS conducted peak hour traffic intersection capacity analysis of the study area intersections and applicable development driveways for the "Existing", "No Build", and "Build" scenarios. For peak hour intersection operations, analyses were performed using the latest version of the *Synchro* analysis software to apply methodologies from the latest Highway Capacity Manual (HCM – 7th Edition).

The HCM considers the quantitative stratification of a performance measure(s) representing the quality of a transportation system is referred to as the Level of Service (LOS) of a particular facility. The LOS concept facilitates the presentation of results using a familiar A (best) to F (worst) letter grade scale. Control delay is the principal HCM service measure for evaluating LOS at signalized and unsignalized intersections. Control delay consists of vehicles slowing in advance of an intersection, time spent stopped on an intersection approach, time spent as vehicles move up in the queue, and time needed for vehicles to accelerate to their desired speed.

Generally, the HCM LOS can be described as progression is exceptionally favorable (LOS A), progression is highly favorable (LOS B), progression is favorable or moderate (LOS C), progression is ineffective (LOS D), progression is unfavorable (LOS E), and progression is very poor (LOS F). Traffic operational analysis is typically measured in one-hour periods during day-to-day peak conditions. On

high volume roadways and intersections, the peak Levels of Service that are unfavorable are not uncommon. Based on the Town of Argyle's Development Standards Section 14.2.90.C.6, the minimum acceptable congestion level is LOS C.

The following table summarizes the LOS criteria for signalized and unsignalized intersections as defined in the latest edition of the Highway Capacity Manual.

LOS	Signalized Intersection Control Delay (s/veh)	Unsignalized Intersection Control Delay (s/veh)
A	≤ 10	≤ 10
B	> 10 - ≤ 20	> 10 - ≤ 15
C	> 20 - ≤ 35	> 15 - ≤ 25
D	> 35 - ≤ 55	> 25 - ≤ 35
E	> 55 - ≤ 80	> 35 - ≤ 50
F	> 80	> 50

As observed from field and video observations of current conditions, operational results retrieved from software analyses are representative and validated to be accurate of what was observed in the field and video.

In order to illustrate conditions as realistic as possible, the following parameters were applied in the analyses:

- For all future traffic signals, traffic signal timing was inputted by professional traffic engineering judgement
- With the new construction of the intersection of FM 407 and Gateway Drive, a peak hour factor of 0.92 for all movements was used for all scenarios.

Results for the peak hour Level of Service, delay, and 95th percentile queue were summarized by movement and by overall intersection for each analysis scenario and are presented in **Table 3**.

Due to limitations of the HCM 7th Edition methodology results used in this analysis (HCM 7th Edition methodology does not produce Synchro Report results due to clustered intersections not being supported, the interchange of I-35W and FM 407 was required to use the Synchro generated methodology (i.e. the "Percentile Delay Method" -- Synchro defines the Percentile Delay Method as calculations that are interval based. "Vehicle arrivals from adjacent intersections are evaluated in intervals to determine the influence of coordination").

SPIARS ENGINEERING & SURVEYING

Table 3. Intersection Peak Hour Operational Results

INTERSECTION		EXISTING CONDITIONS						2030 NO BUILD CONDITIONS						2030 BUILD CONDITIONS						2035 BUILD CONDITIONS					
		AM Peak Hour of Adj Street			PM Peak Hour of Adj Street			AM Peak Hour of Adj Street			PM Peak Hour of Adj Street			AM Peak Hour of Adj Street			PM Peak Hour of Adj Street			AM Peak Hour of Adj Street			PM Peak Hour of Adj Street		
	Approach	V/C Ratio	delay (s)	LOS	V/C Ratio	delay (s)	LOS	V/C Ratio	delay (s)	LOS	V/C Ratio	delay (s)	LOS	V/C Ratio	delay (s)	LOS	V/C Ratio	delay (s)	LOS	V/C Ratio	delay (s)	LOS	V/C Ratio	delay (s)	LOS
I-35W SBFR	**Overall**		***(18.2)***	**B**		***(19.3)***	**B**		***(18.2)***	**B**		***(18.8)***	**B**		***(19.3)***	**B**		***(19.9)***	**B**		***(22.2)***	**C**		***(27.6)***	**C**
@ FM 407	EBT	0.74	*(32.5)*	C	0.79	*(35.8)*	D	0.72	*(21.2)*	C	0.81	*(24.2)*	C	0.73	*(21.7)*	C	0.83	*(25.8)*	C	0.83	*(26.3)*	C	0.96	*(38.8)*	D
	EBR	0.45	*(4.4)*	A	0.52	*(4.7)*	A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	WBL	0.66	*(31.5)*	C	0.52	*(27.9)*	C	0.72	*(38.0)*	D	0.58	*(32.8)*	C	0.79	*(40.3)*	D	0.75	*(34.9)*	C	0.86	*(44.3)*	D	0.91	*(40.9)*	D
	WBT	0.44	*(12.4)*	B	0.65	*(20.6)*	C	0.24	*(7.1)*	A	0.37	*(10.8)*	B	0.24	*(5.9)*	A	0.34	*(6.8)*	A	0.26	*(5.7)*	A	0.37	*(6.1)*	A
	SBL	0.17	*(22.2)*	C	0.13	*(19.9)*	B	0.12	*(24.8)*	C	0.09	*(22.0)*	C	0.19	*(26.4)*	C	0.11	*(25.6)*	C	0.25	*(27.9)*	C	0.14	*(26.6)*	C
	SBT	0.39	*(5.5)*	A	0.40	*(5.0)*	A	0.07	*(23.7)*	C	0.06	*(21.2)*	C	0.11	*(24.7)*	C	0.08	*(24.7)*	C	0.14	*(25.7)*	C	0.09	*(25.5)*	C
	SBR	--	--	--	--	--	--	0.45	*(5.6)*	A	0.48	*(9.3)*	A	0.46	*(5.9)*	A	0.55	*(12.2)*	B	0.54	*(7.1)*	A	0.72	*(23.1)*	C
I-35W NBFR	**Overall**	--	***(16.1)***	**B**	--	***(19.5)***	**B**	--	***(15.4)***	**C**	--	***(16.4)***	**B**	--	***(17.0)***	**B**	--	***(21.0)***	**C**	--	***(20.2)***	**C**	--	***(34.6)***	**C**
@ FM 407	EBL	0.49	*(11.8)*	B	0.60	*(13.2)*	B	0.46	*(13.2)*	B	0.60	*(16.1)*	B	0.46	*(17.1)*	B	0.61	*(24.7)*	C	0.53	*(21.8)*	C	0.65	*(26.4)*	C
	EBT	0.38	*(6.0)*	A	0.35	*(4.7)*	A	0.21	*(5.6)*	A	0.20	*(5.4)*	A	0.23	*(6.6)*	A	0.24	*(4.7)*	A	0.26	*(6.7)*	A	0.28	*(4.7)*	A
	WBTR	0.59	*(27.6)*	C	0.60	*(39.7)*	D	0.43	*(21.3)*	C	0.46	*(21.3)*	C	0.50	*(22.3)*	C	0.72	*(25.8)*	C	0.60	*(24.1)*	C	0.94	*(43.3)*	D
	NBLTR	0.61	*(32.1)*	C	0.76	*(38.5)*	D	0.56	*(18.3)*	B	0.56	*(18.8)*	B	0.64	*(19.8)*	B	0.76	*(24.8)*	C	0.78	*(25.6)*	C	0.97	*(46.6)*	D
FM 407	**Overall**	--	*(2.0)*	A	--	*(1.3)*	A	--	***(13.1)***	**B**	--	***(13.1)***	**B**	--	***(12.3)***	**B**	--	***(13.4)***	**B**	--	***(12.7)***	**B**	--	***(14.4)***	**B**
@ Avalon Boulevard	EBL	--	--	--	--	--	--	--	--	--	--	--	--	0.21	*(11.8)*	B	0.39	*(16.4)*	B	0.23	*(12.0)*	B	0.50	*(22.8)*	C
	EBT	--	--	--	--	--	--	0.60	*(15.0)*	B	0.67	*(14.5)*	B	0.62	*(14.6)*	B	0.73	*(15.3)*	B	0.68	*(15.0)*	B	0.76	*(15.7)*	B
	WBL	0.025	*(8.8)*	A	0.044	*(9.6)*	A	0.15	*(11.9)*	B	0.24	*(13.6)*	B	0.16	*(11.8)*	B	0.27	*(14.4)*	B	0.19	*(12.2)*	B	0.37	*(19.0)*	B
	WBT	--	--	--	--	--	--	0.41	*(12.8)*	B	0.43	*(11.9)*	B	0.45	*(12.2)*	B	0.57	*(12.6)*	B	0.50	*(12.2)*	B	0.64	*(13.2)*	B
	NBL	0.236	*(24.7)*	C	0.179	*(32.8)*	D	0.09	*(8.0)*	A	0.05	*(8.5)*	A	0.10	*(8.5)*	A	0.06	*(10.5)*	B	0.12	*(9.1)*	A	0.08	*(14.4)*	B
	NBTR	0.097	*(12.0)*	B	0.060	*(13.2)*	B	0.04	*(0.6)*	A	0.02	*(0.3)*	A	0.04	*(1.2)*	A	0.03	*(1.7)*	A	0.05	*(3.3)*	A	0.03	*(3.3)*	A
	SBL	--	--	--	--	--	--	--	--	--	--	--	--	0.05	*(8.2)*	A	0.08	*(10.7)*	B	0.05	*(8.6)*	A	0.09	*(14.5)*	B
	SBTR	--	--	--	--	--	--	--	--	--	--	--	--	0.03	*(0.0)*	A	0.06	*(1.5)*	A	0.03	*(0.0)*	A	0.07	*(4.2)*	A
FM 407	**Overall**	--	*(0.8)*	A	--	*(3.2)*	A	--	***(7.6)***	**A**	--	***(8.3)***	**A**	--	***(7.6)***	**A**	--	***(8.4)***	**A**	--	***(7.9)***	**A**	--	***(10.5)***	**B**
@ Gateway Drive	EBL	--	--	--	--	--	--	--	--	--	--	--	--	0.07	*(6.5)*	A	0.25	*(8.8)*	A	0.17	*(7.7)*	A	0.62	*(19.4)*	B
	EBTR	--	--	--	--	--	--	0.35	*(7.6)*	A	0.37	*(8.1)*	A	0.38	*(7.9)*	A	0.44	*(8.8)*	A	0.42	*(8.3)*	A	0.49	*(9.3)*	A
	WBL	0.032	*(9.3)*	A	0.030	*(9.6)*	A	0.08	*(6.9)*	A	0.08	*(6.8)*	A	0.09	*(7.0)*	A	0.09	*(7.2)*	A	0.12	*(7.4)*	A	0.13	*(7.9)*	A
	WBTR	--	--	--	--	--	--	0.20	*(6.9)*	A	0.23	*(7.1)*	A	0.23	*(7.1)*	A	0.31	*(7.6)*	A	0.27	*(7.2)*	A	0.38	*(7.9)*	A
	NBL	--	--	--	--	--	--	0.06	*(24.1)*	C	0.19	*(26.0)*	C	0.06	*(24.1)*	C	0.21	*(26.5)*	C	0.07	*(24.3)*	C	0.30	*(28.8)*	C
	NBTR	0.107	*(18.5)*	C	0.493	*(33.4)*	D	0.01	*(0.0)*	A	0.07	*(0.1)*	A	0.01	*(0.0)*	A	0.07	*(0.1)*	A	0.02	*(0.0)*	A	0.08	*(1.4)*	A
	SBL	--	--	--	--	--	--	--	--	--	--	--	--	0.01	*(23.3)*	C	0.05	*(23.9)*	C	0.07	*(24.2)*	C	0.30	*(27.9)*	C
	SBTR	--	--	--	--	--	--	--	--	--	--	--	--	0.02	*(0.1)*	A	0.11	*(0.2)*	A	0.06	*(0.1)*	A	0.30	*(6.9)*	A
FM 407	Overall	--	--	--	--	--	--	--	--	--	--	--	--	--	*(0.0)*	A	--	*(0.1)*	A	--	*(0.0)*	A	--	*(0.1)*	A
@ Drive 1	SBR	--	--	--	--	--	--	--	--	--	--	--	--	0.004	*(9.0)*	A	0.019	*(9.3)*	A	0.004	*(9.1)*	A	0.020	*(9.5)*	A
FM 407	Overall	--	--	--	--	--	--	--	--	--	--	--	--	--	*(0.6)*	A	--	*(5.9)*	A	--	*(0.7)*	A	--	*(24.5)*	C
@ Drive 2	EBL	--	--	--	--	--	--	--	--	--	--	--	--	0.031	*(8.6)*	A	0.096	*(9.2)*	A	0.033	*(8.9)*	A	0.11	*(9.9)*	A
	SBL	--	--	--	--	--	--	--	--	--	--	--	--	0.071	*(33.0)*	D	0.77	*(162.1)*	F	0.119	*(54.6)*	F	2.285	*(976.4)*	F
	SBR	--	--	--	--	--	--	--	--	--	--	--	--	0.034	*(11.8)*	B	0.191	*(14.0)*	B	0.038	*(12.7)*	B	0.234	*(16.6)*	C
I-35W NBFR	Overall	--	--	--	--	--	--	--	--	--	--	--	--	--	*(0.5)*	A	--	*(0.7)*	A	--	*(0.5)*	A	--	*(0.6)*	A
@ Drive 3	WBR	--	--	--	--	--	--	--	--	--	--	--	--	0.030	*(9.6)*	A	0.052	*(10.2)*	B	0.032	*(9.9)*	A	0.06	*(10.9)*	B
I-35W NBFR	Overall	--	--	--	--	--	--	--	--	--	--	--	--	--	*(0.0)*	A	--	*(0.2)*	A	--	*(0.4)*	A	--	*(0.9)*	A
@ Drive 4	WBR	--	--	--	--	--	--	--	--	--	--	--	--	0.007	*(9.5)*	A	0.013	*(10.0)*	A	0.026	*(10.0)*	A	0.101	*(11.4)*	B

NOTE: Traffic signal operational parameters used in this analysis were based upon actual, field conditions. LOS = Level of Service

Roadway Link Capacity Analysis

As required in the approved the Approving Agency TIA Scope, a roadway link capacity analysis was performed for each roadway within the scope. A segment of roadway between intersections is considered to be a roadway link. The general roadway link analysis methodology includes comparing the projected daily traffic volume with the theoretical maximum capacity. The theoretical maximum capacity for roadway links for this study utilizes The North Central Texas Council of Governments (NCTCOG) methodology which outlines the hourly service volume capacities as shown in the table below.

NCTCOG Roadway Link Hourly Service Volumes By Function

Area Type	Principal Arterial		Minor Arterial & Frontage Road		Collector & Local Street	
	Median Divided or One-Way	Undivided, Two-Way	Median Divided or One-Way	Undivided, Two-Way	Median Divided or One-Way	Undivided, Two-Way
CBD	725	650	725	650	475	425
Urban/Commercial	850	775	825	750	525	475
Suburban Residential	925	875	900	825	575	525
Rural	1,025	925	975	875	600	550

Level of Service (LOS) for each roadway link is determined by evaluating the volume:capacity (V/C) ratio and comparing to each Level of Service letter grade as shown in the table below. The V/C for a roadway segment is determined by using the calculated traffic volumes for each analysis scenario and dividing by the theoretical capacity, as shown above. Typically, when LOS exceeds "LOS D" (or 80%), the Approving Agency will require that the roadway be recommended for upgrade.

Level of Service (LOS)	V/C Ratio
LOS A / LOS B	$\leq$ 45 %
LOS C	> 45% - $\leq$ 65%
LOS D	> 65% - $\leq$ 80%
LOS E	> 80% - $\leq$ 100%
LOS F	> 100%

By adding the same projected background growth, applicable estimated adjustment factors, and site-generated traffic to the existing daily volumes, the "Existing", "No Build", and "Build" volumes were determined for each study area roadway segment. The roadway segment capacity was also determined for each analysis scenario based upon the existing roadway cross-section, plus any assumed improvements, if applicable. The results of the Roadway Link Analysis are summarized in **Table 4**.

Table 4. Roadway Link Operational Results

ROADWAY/ SCENARIO	CALCULATED PEAK VOLUME (PM)			FUNCTIONAL CLASS
FM 407	EXIST	NO BUILD	BUILD	
Existing Cross-Section	1,014	1,147	2,089	None
Proposed Cross-Section (Capacity)	1,850	3,700	3,700	Type A
V:C RATIO	0.55	0.31	0.56	--
LOS	C	B	C	--

SUPPLEMENTAL ANALYSIS

Driveway Spacing

As required by the Town, Driveway Spacing for the subject development was analyzed for all new site access driveways that are proposed along State roadways. This study evaluates the requirements for driveway spacing by Table 2-1 and Table 2-2 of the TxDOT Access Management Manual (AMM) as shown in the table below. TxDOT measures driveway spacing along the edge of traveled way from the closest edge of pavement of the first access connection to the closest edge of pavement of the second access connection.

Posted Speed Limit	One-Way Frontage Roads	Two-Way Frontage Roads	Other State Highways
≤ 30 MPH	200'	200'	200'
35 MPH	250'	300'	250'
40 MPH	305'	360'	305'
45 MPH	360'	435'	360'
≥ 50 MPH	425'	510'	425'

Table 5 summarizes driveway spacing for each access point according to TxDOT's requirements. Also, driveway spacing results are graphically shown in **Exhibit 2**.

Table 5. Driveway Spacing Analysis Summary

PROPOSED DRIVEWAY	SCENARIO	SPACING PROVIDED	SPACING REQUIRED
Avalon Boulevard along FM 407	To the west	590'	425'
	To the east	940'	425'
Drive 1 along FM 407	To the west	940'	425'
	To the east	440'	425'
Gateway Drive along FM 407	To the west	440'	425'
	To the east	655'	425'
Drive 2 along FM 407	To the west	655'	425'
	To the east	600'	425'
Drive 3 along I-35W NBFR	To the south	600'	425'
	To the north	915'	425'
Drive 4 along I-35W NBFR	To the south	915'	425'
	To the north	+1,000'	425'

Turn Lane Analysis

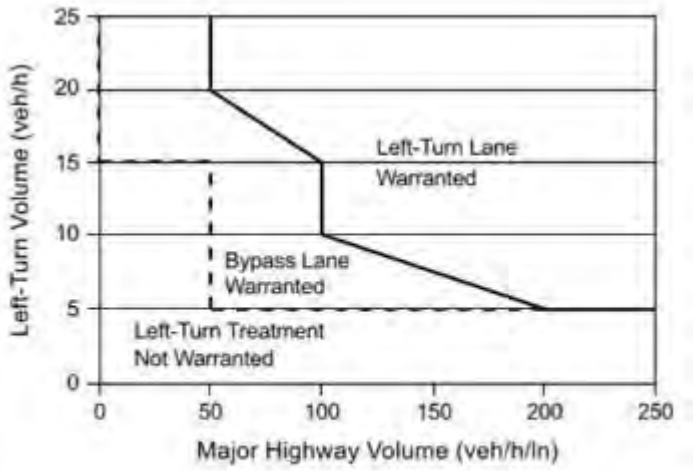
This study evaluates the need for left-turn auxiliary lanes at the study area driveway(s) in accordance with the TxDOT Roadway Design Manual (RDM) Table 3-10, as shown in the table below.

LEFT-TURN LANE PEAK-HOUR VOLUME (VEH./HOUR)	THREE-LEG INTERSECTION MAJOR-ROAD PEAK-HOUR VOLUME (VEH/HR/LN) FOR A LEFT-TURN LANE
5	200
10	100
15	100
20	50
25	50

In order to analyze the requirements for a deceleration lane, calculating the projected peak hour driveway volumes is required. Traffic generated by the proposed development was calculated using the standard approach mentioned above. Supporting data developed for these calculations are provided in **Appendix B**. A summary of the left-turn lane analysis for each of the proposed site access points is presented in **Table 6** and the figure below from the TxDOT RDM Figure 3-8.

Table 6. Left-Turn Lane Analysis Summary

PROPOSED DRIVEWAY		PROJECTED HOURLY VOLUME		THRESHOLD	LANE REQUIRED?
		INBOUND SITE VOLUME (VEH/HR)	THREE-LEG INTERSECTION MAJOR-ROAD PEAK-HOUR VOLUME (VEH/HR/LN) FOR A LEFT-TURN LANE	THREE-LEG INTERSECTION MAJOR-ROAD PEAK-HOUR VOLUME (VEH/HR/LN) FOR A LEFT-TURN LANE	
FM 407, Avalon Boulevard	AM	50	366	50	Yes
	PM	72	529	50	Yes
FM 407, Gateway Drive	AM	77	370	50	Yes
	PM	201	464	50	Yes
FM 407, Drive 2	AM	29	339	50	Yes
	PM	84	429	50	Yes



(a) Three-Leg Intersections

Also, the TxDOT criteria for providing right-turn deceleration lanes are outlined in Table 2-3 of the Access Management Manual. The threshold for roadways with a posted speed limit greater than 45 MPH is 50 vehicles per hour (or, 60 vehicles per hour if the posted speed limit is 45 MPH or less).

In order to analyze the requirements for a right-turn auxiliary lane, calculating the projected peak hour driveway volumes is required. Traffic generated by the proposed development was calculated using the standard approach mentioned above. Supporting data developed for these calculations are provided in **Appendix B.** A summary of the right-turn lane analysis for each of the proposed site access points is presented in **Table 7**.

Table 7. Right-Turn Lane Analysis Summary

PROPOSED DRIVEWAY		INBOUND SITE VOLUME (VEH/HR)		LANE REQUIRED?
		PROJECTED	THRESHOLD	
FM 407, Avalon Boulevard	AM	32	50	No
	PM	45	50	No
FM 407, Drive 1	AM	5	50	No
	PM	14	50	No
FM 407, Gateway Drive	AM	38	50	No
	PM	93	50	Yes
FM 407, Drive 2	AM	14	50	No
	PM	42	50	No

CONCLUSIONS AND MITIGATIONS

Based upon the analyses presented herein, the resulting findings that follow the Traffic Impact Analysis Guidelines are documented below for all study area intersections along with the development's driveways. Also, detailed information documenting the findings of the analyses is presented in the **Appendix**.

Project Background Findings

- Roadway Improvements to I-35W and FM 407 within the project buildout were made known to Spiars at the onset of the traffic study. I-35W will be reconfigured from a 4-lane rural interstate to a six-lane urban freeway with an off-ramp connection to the northbound frontage road just north of FM 407. The interchange with FM 407 will also include a u-turn lane for the southbound frontage road in connection with the northbound frontage road. Additionally, FM 407 will be reconstructed from a 2-lane highway to a four-lane median-divided highway from I-35W to Gateway Drive. These assumptions have been applied to the analysis in the year 2030 and 2035 scenarios.

- In addition to the above improvements, the Town will install traffic signals at the intersections of FM 407 at Avalon Boulevard and FM 407 at Gateway Drive. For purposes of this study, traffic signals have been assumed at these intersections for the No-Build and Build Conditions.

Level of Service Findings

- All intersections and roadways (FM 407) within the study area operate at "acceptable" overall intersection Levels of Services during the Existing Conditions. With the addition of estimated background traffic growth and estimated site development traffic, the overall intersection Levels of Service are projected to continue to operate at "acceptable" Levels of Service with slight increases to the delays except for the following intersections.

- The intersection of I-35W and the Southbound Frontage Road operates at an "acceptable" over intersection Level of Service in the Build Peak Hour Conditions however it is recommended the Town and TxDOT evaluate the traffic signal timings for the intersection to optimize traffic operations. Mitigations for the degrading conditions are listed in the table below.

- The intersection of I-35W and the Northbound Frontage Road operates at an "acceptable" over intersection Level of Service in the Build Peak Hour Conditions however it is recommended the Town and TxDOT evaluate the traffic signal timings for the intersection to optimize traffic operations. Mitigations for the degrading conditions are listed in the table below. Mitigations for the degrading conditions are listed in the table below.

(Continued)…

- The exiting southbound maneuvers at Drive 2 along FM 407 are projected to operate at "unacceptable" Levels of Service in the project Build Conditions in both the AM and PM Peak Hours. These "unacceptable" conditions are typical of other similar unsignalized intersections and driveways along major high-volume roadways such as FM 407 and can only be mitigated with the installation of a traffic signal. However, with the anticipated low traffic volumes exiting the minor approach at the driveway from the development, the warrants for a traffic signal are estimated to not be met. Therefore, no mitigations for the "unacceptable" Levels of Service are recommended.

Site Access Findings

- According to the TxDOT guidelines for the installation of a left-turn deceleration lane, it is recommended that the development install eastbound left-turn deceleration lanes at all driveways with full left-turn access along FM 407. Driveways required to have the installation of a left-turn lane include Avalon Boulevard, Gateway Drive, and Drive 2.

- According to the TxDOT guidelines for the installation of a right-turn deceleration lane, it is recommended that the development install a westbound right-turn deceleration lane at Avalon Boulevard for traffic entering the development.

Traffic Impact Analysis Mitigations Table

Scenario	Year	Intersection/Approach/Peak	Recommendation	Responsible Party	Pro-Rata
Build	2035	FM 407 and I-35W Southbound Frontage Road	Traffic Signal Timing Adjustments	City/TxDOT	100%
Build	2035	FM 407 and I-35W Northbound Frontage Road	Traffic Signal Timing Adjustments	City/TxDOT	100%
Build	2028	FM 407 and Avalon Boulevard	Installation of Eastbound Left-Turn Lane	Development	100%
Build	2028	FM 407 and Gateway Drive	Installation of Eastbound Left-Turn Lane	Development	100%
Build	2028	FM 407 and Drive 2	Installation of Eastbound Left-Turn Lane	Development	100%
Build	2028	FM 407 and Gateway Drive	Installation of Westbound Right-Turn Lane	Development	100%

Appendix A – Existing Data Collection and Information

1. I-35W SBFR at FM 407 - TMC

Tue Jun 10, 2025
Full Length (7 AM-9 AM, 4:30 PM-6:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1306590, Location: 33.100448, -97.224881

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	I-35W SBFR						FM 407						I-35W SBFR						FM 407						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2025-06-10 7:00AM	14	0	34	0	**48**	0	47	65	0	0	**112**	0	0	0	0	0	**0**	0	0	106	100	0	**206**	0	**366**
7:15AM	26	1	42	0	**69**	0	55	71	0	0	**126**	0	0	0	0	0	**0**	0	0	104	79	0	**183**	0	**378**
7:30AM	22	0	45	0	**67**	0	59	101	0	0	**160**	0	0	0	0	0	**0**	0	0	114	77	0	**191**	0	**418**
7:45AM	27	0	59	0	**86**	0	55	112	0	0	**167**	0	0	0	0	0	**0**	0	0	119	88	0	**207**	0	**460**
Hourly Total	89	1	180	0	**270**	0	216	349	0	0	**565**	0	0	0	0	0	**0**	0	0	443	344	0	**787**	0	**1622**
8:00AM	26	3	54	0	**83**	0	58	87	0	0	**145**	0	0	0	0	0	**0**	0	0	113	77	0	**190**	0	**418**
8:15AM	25	0	64	0	**89**	0	43	111	0	0	**154**	0	0	0	0	0	**0**	0	0	117	75	0	**192**	0	**435**
8:30AM	25	0	69	0	**94**	0	67	97	0	0	**164**	0	0	0	0	0	**0**	0	0	108	68	0	**176**	0	**434**
8:45AM	29	0	61	0	**90**	0	28	87	0	0	**115**	0	0	0	0	0	**0**	0	0	113	60	0	**173**	0	**378**
Hourly Total	105	3	248	0	**356**	0	196	382	0	0	**578**	0	0	0	0	0	**0**	0	0	451	280	0	**731**	0	**1665**
4:30PM	23	1	53	0	**77**	0	32	152	0	0	**184**	0	0	0	0	0	**0**	0	0	119	70	0	**189**	0	**450**
4:45PM	24	0	69	0	**93**	0	30	149	0	0	**179**	0	0	0	0	0	**0**	0	0	102	48	0	**150**	0	**422**
Hourly Total	47	1	122	0	**170**	0	62	301	0	0	**363**	0	0	0	0	0	**0**	0	0	221	118	0	**339**	0	**872**
5:00PM	21	1	57	0	**79**	0	45	149	0	0	**194**	0	0	0	0	0	**0**	0	0	128	109	0	**237**	0	**510**
5:15PM	22	4	61	0	**87**	0	42	152	0	0	**194**	0	0	0	0	0	**0**	0	0	124	105	0	**229**	0	**510**
5:30PM	19	1	68	0	**88**	0	44	160	0	0	**204**	0	0	0	0	0	**0**	0	0	108	49	0	**157**	0	**449**
5:45PM	19	1	76	0	**96**	0	44	157	0	0	**201**	0	0	0	0	0	**0**	0	0	106	69	0	**175**	0	**472**
Hourly Total	81	7	262	0	**350**	0	175	618	0	0	**793**	0	0	0	0	0	**0**	0	0	466	332	0	**798**	0	**1941**
6:00PM	21	2	60	0	**83**	0	37	136	0	0	**173**	0	0	0	0	0	**0**	0	0	100	71	0	**171**	0	**427**
6:15PM	22	1	46	0	**69**	0	41	136	0	0	**177**	0	0	0	0	0	**0**	0	0	120	53	0	**173**	0	**419**
Hourly Total	43	3	106	0	**152**	0	78	272	0	0	**350**	0	0	0	0	0	**0**	0	0	220	124	0	**344**	0	**846**
Total	365	15	918	0	**1298**	0	727	1922	0	0	**2649**	0	0	0	0	0	**0**	0	0	1801	1198	0	**2999**	0	**6946**
% Approach	28.1%	1.2%	70.7%	0%	**-**	-	27.4%	72.6%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	60.1%	39.9%	0%	**-**	-	-
% Total	5.3%	0.2%	13.2%	0%	**18.7%**	-	10.5%	27.7%	0%	0%	**38.1%**	-	0%	0%	0%	0%	**0%**	-	0%	25.9%	17.2%	0%	**43.2%**	-	-
Lights	354	14	882	0	**1250**	-	700	1881	0	0	**2581**	-	0	0	0	0	**0**	-	0	1759	1182	0	**2941**	-	6772
% Lights	97.0%	93.3%	96.1%	0%	**96.3%**	-	96.3%	97.9%	0%	0%	**97.4%**	-	0%	0%	0%	0%	**-**	-	0%	97.7%	98.7%	0%	**98.1%**	-	97.5%
Articulated Trucks	2	1	11	0	**14**	-	9	10	0	0	**19**	-	0	0	0	0	**0**	-	0	12	1	0	**13**	-	46
% Articulated Trucks	0.5%	6.7%	1.2%	0%	**1.1%**	-	1.2%	0.5%	0%	0%	**0.7%**	-	0%	0%	0%	0%	**-**	-	0%	0.7%	0.1%	0%	**0.4%**	-	0.7%
Buses and Single-Unit Trucks	9	0	25	0	**34**	-	18	31	0	0	**49**	-	0	0	0	0	**0**	-	0	30	15	0	**45**	-	128
% Buses and Single-Unit Trucks	2.5%	0%	2.7%	0%	**2.6%**	-	2.5%	1.6%	0%	0%	**1.8%**	-	0%	0%	0%	0%	**-**	-	0%	1.7%	1.3%	0%	**1.5%**	-	1.8%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

1. I-35W SBFR at FM 407 - TMC

Tue Jun 10, 2025
AM Peak (7:45 AM - 8:45 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1306590, Location: 33.100448, -97.224881

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	I-35W SBFR Southbound						FM 407 Westbound						I-35W SBFR Northbound						FM 407 Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2025-06-10 7:45AM	27	0	59	0	**86**	0	55	112	0	0	**167**	0	0	0	0	0	**0**	0	0	119	88	0	**207**	0	**460**
8:00AM	26	3	54	0	**83**	0	58	87	0	0	**145**	0	0	0	0	0	**0**	0	0	113	77	0	**190**	0	**418**
8:15AM	25	0	64	0	**89**	0	43	111	0	0	**154**	0	0	0	0	0	**0**	0	0	117	75	0	**192**	0	**435**
8:30AM	25	0	69	0	**94**	0	67	97	0	0	**164**	0	0	0	0	0	**0**	0	0	108	68	0	**176**	0	**434**
Total	103	3	246	0	**352**	0	223	407	0	0	**630**	0	0	0	0	0	**0**	0	0	457	308	0	**765**	0	**1747**
% Approach	29.3%	0.9%	69.9%	0%	**-**	-	35.4%	64.6%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	59.7%	40.3%	0%	**-**	-	**-**
% Total	5.9%	0.2%	14.1%	0%	**20.1%**	-	12.8%	23.3%	0%	0%	**36.1%**	-	0%	0%	0%	0%	**0%**	-	0%	26.2%	17.6%	0%	**43.8%**	-	**-**
PHF	0.954	0.250	0.891	-	**0.936**	-	0.832	0.908	-	-	**0.943**	-	-	-	-	-	**-**	-	-	0.960	0.875	-	**0.924**	-	0.949
Lights	96	3	231	0	**330**	-	218	395	0	0	**613**	-	0	0	0	0	**0**	-	0	443	303	0	**746**	-	1689
% Lights	93.2%	100%	93.9%	0%	**93.8%**	-	97.8%	97.1%	0%	0%	**97.3%**	-	0%	0%	0%	0%	**-**	-	0%	96.9%	98.4%	0%	**97.5%**	-	96.7%
Articulated Trucks	1	0	4	0	**5**	-	4	4	0	0	**8**	-	0	0	0	0	**0**	-	0	3	0	0	**3**	-	16
% Articulated Trucks	1.0%	0%	1.6%	0%	**1.4%**	-	1.8%	1.0%	0%	0%	**1.3%**	-	0%	0%	0%	0%	**-**	-	0%	0.7%	0%	0%	**0.4%**	-	0.9%
Buses and Single-Unit Trucks	6	0	11	0	**17**	-	1	8	0	0	**9**	-	0	0	0	0	**0**	-	0	11	5	0	**16**	-	42
% Buses and Single-Unit Trucks	5.8%	0%	4.5%	0%	**4.8%**	-	0.4%	2.0%	0%	0%	**1.4%**	-	0%	0%	0%	0%	**-**	-	0%	2.4%	1.6%	0%	**2.1%**	-	2.4%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

1. I-35W SBFR at FM 407 - TMC

Tue Jun 10, 2025
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1306590, Location: 33.100448, -97.224881

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	I-35W SBFR						FM 407						I-35W SBFR						FM 407						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2025-06-10 5:00PM	21	1	57	0	**79**	0	45	149	0	0	**194**	0	0	0	0	0	**0**	0	0	128	109	0	**237**	0	**510**
5:15PM	22	4	61	0	**87**	0	42	152	0	0	**194**	0	0	0	0	0	**0**	0	0	124	105	0	**229**	0	**510**
5:30PM	19	1	68	0	**88**	0	44	160	0	0	**204**	0	0	0	0	0	**0**	0	0	108	49	0	**157**	0	**449**
5:45PM	19	1	76	0	**96**	0	44	157	0	0	**201**	0	0	0	0	0	**0**	0	0	106	69	0	**175**	0	**472**
Total	81	7	262	0	**350**	0	175	618	0	0	**793**	0	0	0	0	0	**0**	0	0	466	332	0	**798**	0	**1941**
% Approach	23.1%	2.0%	74.9%	0%	**-**	-	22.1%	77.9%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	58.4%	41.6%	0%	**-**	-	-
% Total	4.2%	0.4%	13.5%	0%	**18.0%**	-	9.0%	31.8%	0%	0%	**40.9%**	-	0%	0%	0%	0%	**0%**	-	0%	24.0%	17.1%	0%	**41.1%**	-	-
PHF	0.920	0.438	0.862	-	**0.911**	-	0.972	0.966	-	-	**0.972**	-	-	-	-	-	**-**	-	-	0.910	0.761	-	**0.842**	-	0.951
Lights	81	6	260	0	**347**	-	166	610	0	0	**776**	-	0	0	0	0	**0**	-	0	459	326	0	**785**	-	1908
% Lights	100%	85.7%	99.2%	0%	**99.1%**	-	94.9%	98.7%	0%	0%	**97.9%**	-	0%	0%	0%	0%	**-**	-	0%	98.5%	98.2%	0%	**98.4%**	-	98.3%
Articulated Trucks	0	1	1	0	**2**	-	3	2	0	0	**5**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	8
% Articulated Trucks	0%	14.3%	0.4%	0%	**0.6%**	-	1.7%	0.3%	0%	0%	**0.6%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0.3%	0%	**0.1%**	-	0.4%
Buses and Single-Unit Trucks	0	0	1	0	**1**	-	6	6	0	0	**12**	-	0	0	0	0	**0**	-	0	7	5	0	**12**	-	25
% Buses and Single-Unit Trucks	0%	0%	0.4%	0%	**0.3%**	-	3.4%	1.0%	0%	0%	**1.5%**	-	0%	0%	0%	0%	**-**	-	0%	1.5%	1.5%	0%	**1.5%**	-	1.3%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2. I-35W NBFR at FM 407 - TMC

Tue Jun 10, 2025
Full Length (7 AM-9 AM, 4:30 PM-6:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1306591, Location: 33.100448, -97.223674

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	I-35W NBFR						FM 407						I-35W NBFR						FM 407						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2025-06-10 7:00AM	0	0	5	0	**5**	0	0	73	9	0	**82**	0	41	0	58	0	**99**	0	60	61	0	0	**121**	0	**307**
7:15AM	0	0	2	0	**2**	0	0	84	9	0	**93**	0	42	0	43	0	**85**	0	53	70	0	0	**123**	0	**303**
7:30AM	0	0	4	0	**4**	0	0	83	15	0	**98**	0	62	0	61	0	**123**	0	59	81	0	0	**140**	0	**365**
7:45AM	0	0	9	0	**9**	0	0	87	19	0	**106**	0	73	0	61	0	**134**	0	58	84	0	0	**142**	0	**391**
Hourly Total	0	0	20	0	**20**	0	0	327	52	0	**379**	0	218	0	223	0	**441**	0	230	296	0	0	**526**	0	**1366**
8:00AM	0	0	5	0	**5**	0	0	95	17	0	**112**	0	47	3	65	0	**115**	0	49	95	0	0	**144**	0	**376**
8:15AM	1	0	4	0	**5**	0	0	79	11	0	**90**	0	66	3	53	0	**122**	0	53	91	0	0	**144**	0	**361**
8:30AM	0	0	3	0	**3**	0	0	105	9	0	**114**	0	48	3	46	0	**97**	0	43	96	0	0	**139**	0	**353**
8:45AM	0	0	4	0	**4**	0	0	71	13	0	**84**	0	48	1	53	0	**102**	0	50	91	0	0	**141**	0	**331**
Hourly Total	1	0	16	0	**17**	0	0	350	50	0	**400**	0	209	10	217	0	**436**	0	195	373	0	0	**568**	0	**1421**
4:30PM	1	0	14	0	**15**	0	0	79	14	0	**93**	0	101	2	52	0	**155**	0	47	98	0	0	**145**	0	**408**
4:45PM	0	0	15	0	**15**	0	0	84	18	0	**102**	0	85	5	64	0	**154**	0	52	73	0	0	**125**	0	**396**
Hourly Total	1	0	29	0	**30**	0	0	163	32	0	**195**	0	186	7	116	0	**309**	0	99	171	0	0	**270**	0	**804**
5:00PM	2	0	31	0	**33**	0	0	78	25	0	**103**	0	85	1	43	0	**129**	0	64	86	0	0	**150**	0	**415**
5:15PM	0	0	36	0	**36**	0	0	84	12	0	**96**	0	71	4	64	0	**139**	0	65	82	0	0	**147**	0	**418**
5:30PM	3	0	28	0	**31**	0	0	97	14	0	**111**	0	81	2	58	0	**141**	0	48	81	0	0	**129**	0	**412**
5:45PM	0	0	18	0	**18**	0	0	81	13	0	**94**	0	99	0	63	0	**162**	0	42	76	0	0	**118**	0	**392**
Hourly Total	5	0	113	0	**118**	0	0	340	64	0	**404**	0	336	7	228	0	**571**	0	219	325	0	0	**544**	0	**1637**
6:00PM	0	0	15	0	**15**	0	0	83	18	0	**101**	0	78	3	62	0	**143**	0	46	74	0	0	**120**	0	**379**
6:15PM	0	0	12	0	**12**	0	0	101	12	0	**113**	0	64	0	61	0	**125**	0	50	98	0	0	**148**	0	**398**
Hourly Total	0	0	27	0	**27**	0	0	184	30	0	**214**	0	142	3	123	0	**268**	0	96	172	0	0	**268**	0	**777**
Total	7	0	205	0	**212**	0	0	1364	228	0	**1592**	0	1091	27	907	0	**2025**	0	839	1337	0	0	**2176**	0	**6005**
% Approach	3.3%	0%	96.7%	0%	**-**	-	0%	85.7%	14.3%	0%	**-**	-	53.9%	1.3%	44.8%	0%	**-**	-	38.6%	61.4%	0%	0%	**-**	-	-
% Total	0.1%	0%	3.4%	0%	**3.5%**	-	0%	22.7%	3.8%	0%	**26.5%**	-	18.2%	0.4%	15.1%	0%	**33.7%**	-	14.0%	22.3%	0%	0%	**36.2%**	-	-
Lights	7	0	201	0	**208**	-	0	1323	219	0	**1542**	-	1065	27	889	0	**1981**	-	812	1310	0	0	**2122**	-	5853
% Lights	100%	0%	98.0%	0%	**98.1%**	-	0%	97.0%	96.1%	0%	**96.9%**	-	97.6%	100%	98.0%	0%	**97.8%**	-	96.8%	98.0%	0%	0%	**97.5%**	-	97.5%
Articulated Trucks	0	0	0	0	**0**	-	0	10	3	0	**13**	-	10	0	5	0	**15**	-	11	4	0	0	**15**	-	43
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.7%	1.3%	0%	**0.8%**	-	0.9%	0%	0.6%	0%	**0.7%**	-	1.3%	0.3%	0%	0%	**0.7%**	-	0.7%
Buses and Single-Unit Trucks	0	0	4	0	**4**	-	0	31	6	0	**37**	-	16	0	13	0	**29**	-	16	23	0	0	**39**	-	109
% Buses and Single-Unit Trucks	0%	0%	2.0%	0%	**1.9%**	-	0%	2.3%	2.6%	0%	**2.3%**	-	1.5%	0%	1.4%	0%	**1.4%**	-	1.9%	1.7%	0%	0%	**1.8%**	-	1.8%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2. I-35W NBFR at FM 407 - TMC

Tue Jun 10, 2025
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1306591, Location: 33.100448, -97.223674

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	I-35W NBFR Southbound						FM 407 Westbound						I-35W NBFR Northbound						FM 407 Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2025-06-10 7:30AM	0	0	4	0	**4**	0	0	83	15	0	**98**	0	62	0	61	0	**123**	0	59	81	0	0	**140**	0	**365**
7:45AM	0	0	9	0	**9**	0	0	87	19	0	**106**	0	73	0	61	0	**134**	0	58	84	0	0	**142**	0	**391**
8:00AM	0	0	5	0	**5**	0	0	95	17	0	**112**	0	47	3	65	0	**115**	0	49	95	0	0	**144**	0	**376**
8:15AM	1	0	4	0	**5**	0	0	79	11	0	**90**	0	66	3	53	0	**122**	0	53	91	0	0	**144**	0	**361**
Total	1	0	22	0	**23**	0	0	344	62	0	**406**	0	248	6	240	0	**494**	0	219	351	0	0	**570**	0	**1493**
% Approach	4.3%	0%	95.7%	0%	**-**	-	0%	84.7%	15.3%	0%	**-**	-	50.2%	1.2%	48.6%	0%	**-**	-	38.4%	61.6%	0%	0%	**-**	-	-
% Total	0.1%	0%	1.5%	0%	**1.5%**	-	0%	23.0%	4.2%	0%	**27.2%**	-	16.6%	0.4%	16.1%	0%	**33.1%**	-	14.7%	23.5%	0%	0%	**38.2%**	-	-
PHF	0.250	-	0.611	-	**0.639**	-	-	0.905	0.816	-	**0.906**	-	0.849	0.500	0.923	-	**0.922**	-	0.928	0.924	-	-	**0.990**	-	0.955
Lights	1	0	22	0	**23**	-	0	336	58	0	**394**	-	239	6	234	0	**479**	-	212	341	0	0	**553**	-	1449
% Lights	100%	0%	100%	0%	**100%**	-	0%	97.7%	93.5%	0%	**97.0%**	-	96.4%	100%	97.5%	0%	**97.0%**	-	96.8%	97.2%	0%	0%	**97.0%**	-	97.1%
Articulated Trucks	0	0	0	0	**0**	-	0	4	1	0	**5**	-	4	0	3	0	**7**	-	4	2	0	0	**6**	-	18
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	1.2%	1.6%	0%	**1.2%**	-	1.6%	0%	1.3%	0%	**1.4%**	-	1.8%	0.6%	0%	0%	**1.1%**	-	1.2%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	0	4	3	0	**7**	-	5	0	3	0	**8**	-	3	8	0	0	**11**	-	26
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	1.2%	4.8%	0%	**1.7%**	-	2.0%	0%	1.3%	0%	**1.6%**	-	1.4%	2.3%	0%	0%	**1.9%**	-	1.7%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2. I-35W NBFR at FM 407 - TMC

Tue Jun 10, 2025
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1306591, Location: 33.100448, -97.223674

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	I-35W NBFR Southbound						FM 407 Westbound						I-35W NBFR Northbound						FM 407 Eastbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2025-06-10 4:45PM	0	0	15	0	**15**	0	0	84	18	0	**102**	0	85	5	64	0	**154**	0	52	73	0	0	**125**	0	**396**
5:00PM	2	0	31	0	**33**	0	0	78	25	0	**103**	0	85	1	43	0	**129**	0	64	86	0	0	**150**	0	**415**
5:15PM	0	0	36	0	**36**	0	0	84	12	0	**96**	0	71	4	64	0	**139**	0	65	82	0	0	**147**	0	**418**
5:30PM	3	0	28	0	**31**	0	0	97	14	0	**111**	0	81	2	58	0	**141**	0	48	81	0	0	**129**	0	**412**
Total	5	0	110	0	**115**	0	0	343	69	0	**412**	0	322	12	229	0	**563**	0	229	322	0	0	**551**	0	**1641**
% Approach	4.3%	0%	95.7%	0%	**-**	-	0%	83.3%	16.7%	0%	**-**	-	57.2%	2.1%	40.7%	0%	**-**	-	41.6%	58.4%	0%	0%	**-**	-	-
% Total	0.3%	0%	6.7%	0%	**7.0%**	-	0%	20.9%	4.2%	0%	**25.1%**	-	19.6%	0.7%	14.0%	0%	**34.3%**	-	14.0%	19.6%	0%	0%	**33.6%**	-	-
PHF	0.417	-	0.764	-	**0.799**	-	-	0.884	0.690	-	**0.928**	-	0.947	0.600	0.895	-	**0.914**	-	0.881	0.936	-	-	**0.918**	-	0.981
Lights	5	0	108	0	**113**	-	0	333	69	0	**402**	-	318	12	224	0	**554**	-	227	317	0	0	**544**	-	1613
% Lights	100%	0%	98.2%	0%	**98.3%**	-	0%	97.1%	100%	0%	**97.6%**	-	98.8%	100%	97.8%	0%	**98.4%**	-	99.1%	98.4%	0%	0%	**98.7%**	-	98.3%
Articulated Trucks	0	0	0	0	**0**	-	0	2	0	0	**2**	-	1	0	1	0	**2**	-	0	1	0	0	**1**	-	5
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.6%	0%	0%	**0.5%**	-	0.3%	0%	0.4%	0%	**0.4%**	-	0%	0.3%	0%	0%	**0.2%**	-	0.3%
Buses and Single-Unit Trucks	0	0	2	0	**2**	-	0	8	0	0	**8**	-	3	0	4	0	**7**	-	2	4	0	0	**6**	-	23
% Buses and Single-Unit Trucks	0%	0%	1.8%	0%	**1.7%**	-	0%	2.3%	0%	0%	**1.9%**	-	0.9%	0%	1.7%	0%	**1.2%**	-	0.9%	1.2%	0%	0%	**1.1%**	-	1.4%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

3. FM 407 at Avalon Boulevard - TMC

Wed Jun 4, 2025
Full Length (7 AM-9 AM, 4:30 PM-6:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1306589, Location: 33.100409, -97.221487

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	FM 407 Westbound					Avalon Boulevard Northbound					FM 407 Eastbound					
Time	L	T	U	**App**	Ped*	L	R	U	**App**	Ped*	T	R	U	**App**	Ped*	**Int**
2025-06-04 7:00AM	3	62	0	**65**	0	12	2	0	**14**	0	110	4	0	**114**	0	**193**
7:15AM	6	84	0	**90**	0	14	14	0	**28**	0	142	2	0	**144**	0	**262**
7:30AM	0	83	0	**83**	0	11	8	0	**19**	0	141	4	0	**145**	0	**247**
7:45AM	0	100	0	**100**	0	12	11	0	**23**	0	132	4	0	**136**	0	**259**
Hourly Total	9	329	0	**338**	0	49	35	0	**84**	0	525	14	0	**539**	0	**961**
8:00AM	1	99	0	**100**	0	9	11	0	**20**	0	129	5	0	**134**	0	**254**
8:15AM	5	86	0	**91**	0	13	12	0	**25**	0	129	4	0	**133**	0	**249**
8:30AM	3	78	0	**81**	0	9	6	0	**15**	0	157	6	0	**163**	0	**259**
8:45AM	4	87	0	**91**	0	6	7	0	**13**	0	151	3	0	**154**	0	**258**
Hourly Total	13	350	0	**363**	0	37	36	0	**73**	0	566	18	0	**584**	0	**1020**
4:30PM	5	89	0	**94**	0	8	5	0	**13**	0	140	16	0	**156**	0	**263**
4:45PM	3	96	0	**99**	0	5	2	0	**7**	0	120	10	0	**130**	0	**236**
Hourly Total	8	185	0	**193**	0	13	7	0	**20**	0	260	26	0	**286**	0	**499**
5:00PM	7	119	0	**126**	0	9	7	0	**16**	0	122	12	0	**134**	0	**276**
5:15PM	8	103	0	**111**	0	3	6	0	**9**	0	165	10	0	**175**	0	**295**
5:30PM	9	89	0	**98**	0	7	5	0	**12**	0	139	19	0	**158**	0	**268**
5:45PM	7	99	0	**106**	0	3	7	0	**10**	0	128	9	0	**137**	0	**253**
Hourly Total	31	410	0	**441**	0	22	25	0	**47**	0	554	50	0	**604**	0	**1092**
6:00PM	9	118	0	**127**	0	7	5	0	**12**	0	130	10	0	**140**	0	**279**
6:15PM	10	109	0	**119**	0	9	5	0	**14**	0	145	14	0	**159**	0	**292**
Hourly Total	19	227	0	**246**	0	16	10	0	**26**	0	275	24	0	**299**	0	**571**
Total	80	1501	0	**1581**	0	137	113	0	**250**	0	2180	132	0	**2312**	0	**4143**
% Approach	5.1%	94.9%	0%	**-**	-	54.8%	45.2%	0%	**-**	-	94.3%	5.7%	0%	**-**	-	-
% Total	1.9%	36.2%	0%	**38.2%**	-	3.3%	2.7%	0%	**6.0%**	-	52.6%	3.2%	0%	**55.8%**	-	-
Lights	80	1453	0	**1533**	-	136	113	0	**249**	-	2134	130	0	**2264**	-	4046
% Lights	100%	96.8%	0%	**97.0%**	-	99.3%	100%	0%	**99.6%**	-	97.9%	98.5%	0%	**97.9%**	-	97.7%
Articulated Trucks	0	8	0	**8**	-	0	0	0	**0**	-	11	0	0	**11**	-	19
% Articulated Trucks	0%	0.5%	0%	**0.5%**	-	0%	0%	0%	**0%**	-	0.5%	0%	0%	**0.5%**	-	0.5%
Buses and Single-Unit Trucks	0	40	0	**40**	-	1	0	0	**1**	-	35	2	0	**37**	-	78
% Buses and Single-Unit Trucks	0%	2.7%	0%	**2.5%**	-	0.7%	0%	0%	**0.4%**	-	1.6%	1.5%	0%	**1.6%**	-	1.9%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

3. FM 407 at Avalon Boulevard - TMC

Wed Jun 4, 2025
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1306589, Location: 33.100409, -97.221487

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	FM 407 Westbound					Avalon Boulevard Northbound					FM 407 Eastbound					
Time	L	T	U	**App**	Ped*	L	R	U	**App**	Ped*	T	R	U	**App**	Ped*	**Int**
2025-06-04 7:15AM	6	84	0	**90**	0	14	14	0	**28**	0	142	2	0	**144**	0	**262**
7:30AM	0	83	0	**83**	0	11	8	0	**19**	0	141	4	0	**145**	0	**247**
7:45AM	0	100	0	**100**	0	12	11	0	**23**	0	132	4	0	**136**	0	**259**
8:00AM	1	99	0	**100**	0	9	11	0	**20**	0	129	5	0	**134**	0	**254**
Total	7	366	0	**373**	0	46	44	0	**90**	0	544	15	0	**559**	0	**1022**
% Approach	1.9%	98.1%	0%	**-**	-	51.1%	48.9%	0%	**-**	-	97.3%	2.7%	0%	**-**	-	**-**
% Total	0.7%	35.8%	0%	**36.5%**	-	4.5%	4.3%	0%	**8.8%**	-	53.2%	1.5%	0%	**54.7%**	-	**-**
PHF	0.292	0.915	-	**0.933**	-	0.821	0.786	-	**0.804**	-	0.958	0.750	-	**0.964**	-	0.975
Lights	7	348	0	**355**	-	46	44	0	**90**	-	526	15	0	**541**	-	986
% Lights	100%	95.1%	0%	**95.2%**	-	100%	100%	0%	**100%**	-	96.7%	100%	0%	**96.8%**	-	96.5%
Articulated Trucks	0	2	0	**2**	-	0	0	0	**0**	-	3	0	0	**3**	-	5
% Articulated Trucks	0%	0.5%	0%	**0.5%**	-	0%	0%	0%	**0%**	-	0.6%	0%	0%	**0.5%**	-	0.5%
Buses and Single-Unit Trucks	0	16	0	**16**	-	0	0	0	**0**	-	15	0	0	**15**	-	31
% Buses and Single-Unit Trucks	0%	4.4%	0%	**4.3%**	-	0%	0%	0%	**0%**	-	2.8%	0%	0%	**2.7%**	-	3.0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

3. FM 407 at Avalon Boulevard - TMC

Wed Jun 4, 2025
PM Peak (5:15 PM - 6:15 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1306589, Location: 33.100409, -97.221487

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	FM 407 Westbound					Avalon Boulevard Northbound					FM 407 Eastbound					
Time	L	T	U	**App**	Ped*	L	R	U	**App**	Ped*	T	R	U	**App**	Ped*	**Int**
2025-06-04 5:15PM	8	103	0	**111**	0	3	6	0	**9**	0	165	10	0	**175**	0	**295**
5:30PM	9	89	0	**98**	0	7	5	0	**12**	0	139	19	0	**158**	0	**268**
5:45PM	7	99	0	**106**	0	3	7	0	**10**	0	128	9	0	**137**	0	**253**
6:00PM	9	118	0	**127**	0	7	5	0	**12**	0	130	10	0	**140**	0	**279**
Total	33	409	0	**442**	0	20	23	0	**43**	0	562	48	0	**610**	0	**1095**
% Approach	7.5%	92.5%	0%	**-**	-	46.5%	53.5%	0%	**-**	-	92.1%	7.9%	0%	**-**	-	**-**
% Total	3.0%	37.4%	0%	**40.4%**	-	1.8%	2.1%	0%	**3.9%**	-	51.3%	4.4%	0%	**55.7%**	-	**-**
PHF	0.917	0.867	**-**	**0.870**	-	0.714	0.821	**-**	**0.896**	-	0.852	0.632	**-**	**0.871**	-	0.928
Lights	33	400	0	**433**	-	20	23	0	**43**	-	558	47	0	**605**	-	1081
% Lights	100%	97.8%	0%	**98.0%**	-	100%	100%	0%	**100%**	-	99.3%	97.9%	0%	**99.2%**	-	98.7%
Articulated Trucks	0	2	0	**2**	-	0	0	0	**0**	-	2	0	0	**2**	-	4
% Articulated Trucks	0%	0.5%	0%	**0.5%**	-	0%	0%	0%	**0%**	-	0.4%	0%	0%	**0.3%**	-	0.4%
Buses and Single-Unit Trucks	0	7	0	**7**	-	0	0	0	**0**	-	2	1	0	**3**	-	10
% Buses and Single-Unit Trucks	0%	1.7%	0%	**1.6%**	-	0%	0%	0%	**0%**	-	0.4%	2.1%	0%	**0.5%**	-	0.9%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

4. FM 407 at Gateway Drive - TMC

Wed Jun 4, 2025
Full Length (7 AM-9 AM, 4:30 PM-6:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1306592, Location: 33.100349, -97.216558

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	FM 407 Westbound					Gateway Driveway Northbound					FM 407 Eastbound					
Time	L	T	U	**App**	Ped*	L	R	U	**App**	Ped*	T	R	U	**App**	Ped*	**Int**
2025-06-04 7:00AM	5	61	0	**66**	0	1	4	0	**5**	0	98	11	0	**109**	0	**180**
7:15AM	2	92	0	**94**	0	3	2	0	**5**	0	147	12	0	**159**	0	**258**
7:30AM	2	90	0	**92**	0	2	1	0	**3**	0	139	10	0	**149**	0	**244**
7:45AM	3	97	0	**100**	0	2	3	0	**5**	0	126	15	0	**141**	0	**246**
Hourly Total	12	340	0	**352**	0	8	10	0	**18**	0	510	48	0	**558**	0	**928**
8:00AM	7	94	0	**101**	0	5	2	0	**7**	0	122	22	0	**144**	0	**252**
8:15AM	4	84	0	**88**	0	6	1	0	**7**	0	124	12	1	**137**	0	**232**
8:30AM	2	84	0	**86**	0	4	2	0	**6**	0	156	8	0	**164**	0	**256**
8:45AM	1	90	0	**91**	0	3	3	0	**6**	0	148	13	0	**161**	0	**258**
Hourly Total	14	352	0	**366**	0	18	8	0	**26**	0	550	55	1	**606**	0	**998**
4:30PM	5	87	0	**92**	0	8	7	0	**15**	0	140	7	0	**147**	0	**254**
4:45PM	7	79	0	**86**	0	19	8	0	**27**	0	109	12	0	**121**	0	**234**
Hourly Total	12	166	0	**178**	0	27	15	0	**42**	0	249	19	0	**268**	0	**488**
5:00PM	4	108	0	**112**	0	16	14	0	**30**	0	126	4	0	**130**	0	**272**
5:15PM	3	113	0	**116**	0	10	10	0	**20**	0	174	10	0	**184**	0	**320**
5:30PM	6	87	0	**93**	0	13	7	0	**20**	0	136	8	0	**144**	0	**257**
5:45PM	4	88	0	**92**	0	9	2	0	**11**	0	132	4	0	**136**	0	**239**
Hourly Total	17	396	0	**413**	0	48	33	0	**81**	0	568	26	0	**594**	0	**1088**
6:00PM	5	110	0	**115**	0	9	3	0	**12**	0	130	5	0	**135**	0	**262**
6:15PM	4	115	0	**119**	0	10	3	0	**13**	0	142	5	0	**147**	0	**279**
Hourly Total	9	225	0	**234**	0	19	6	0	**25**	0	272	10	0	**282**	0	**541**
Total	64	1479	0	**1543**	0	120	72	0	**192**	0	2149	158	1	**2308**	0	**4043**
% Approach	4.1%	95.9%	0%	**-**	-	62.5%	37.5%	0%	**-**	-	93.1%	6.8%	0%	**-**	-	-
% Total	1.6%	36.6%	0%	**38.2%**	-	3.0%	1.8%	0%	**4.7%**	-	53.2%	3.9%	0%	**57.1%**	-	-
Lights	63	1440	0	**1503**	-	115	70	0	**185**	-	2100	154	1	**2255**	-	3943
% Lights	98.4%	97.4%	0%	**97.4%**	-	95.8%	97.2%	0%	**96.4%**	-	97.7%	97.5%	100%	**97.7%**	-	97.5%
Articulated Trucks	0	6	0	**6**	-	2	0	0	**2**	-	11	1	0	**12**	-	20
% Articulated Trucks	0%	0.4%	0%	**0.4%**	-	1.7%	0%	0%	**1.0%**	-	0.5%	0.6%	0%	**0.5%**	-	0.5%
Buses and Single-Unit Trucks	1	33	0	**34**	-	3	2	0	**5**	-	38	3	0	**41**	-	80
% Buses and Single-Unit Trucks	1.6%	2.2%	0%	**2.2%**	-	2.5%	2.8%	0%	**2.6%**	-	1.8%	1.9%	0%	**1.8%**	-	2.0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

4. FM 407 at Gateway Drive - TMC

Wed Jun 4, 2025
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1306592, Location: 33.100349, -97.216558

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	FM 407 Westbound					Gateway Driveway Northbound					FM 407 Eastbound					
Time	L	T	U	**App**	Ped*	L	R	U	**App**	Ped*	T	R	U	**App**	Ped*	**Int**
2025-06-04 7:15AM	2	92	0	**94**	0	3	2	0	**5**	0	147	12	0	**159**	0	**258**
7:30AM	2	90	0	**92**	0	2	1	0	**3**	0	139	10	0	**149**	0	**244**
7:45AM	3	97	0	**100**	0	2	3	0	**5**	0	126	15	0	**141**	0	**246**
8:00AM	7	94	0	**101**	0	5	2	0	**7**	0	122	22	0	**144**	0	**252**
Total	14	373	0	**387**	0	12	8	0	**20**	0	534	59	0	**593**	0	**1000**
% Approach	3.6%	96.4%	0%	**-**	-	60.0%	40.0%	0%	**-**	-	90.1%	9.9%	0%	**-**	-	**-**
% Total	1.4%	37.3%	0%	**38.7%**	-	1.2%	0.8%	0%	**2.0%**	-	53.4%	5.9%	0%	**59.3%**	-	**-**
PHF	0.500	0.961	-	**0.958**	-	0.600	0.667	-	**0.714**	-	0.908	0.670	-	**0.932**	-	0.969
Lights	14	357	0	**371**	-	10	8	0	**18**	-	516	57	0	**573**	-	962
% Lights	100%	95.7%	0%	**95.9%**	-	83.3%	100%	0%	**90.0%**	-	96.6%	96.6%	0%	**96.6%**	-	96.2%
Articulated Trucks	0	3	0	**3**	-	1	0	0	**1**	-	5	0	0	**5**	-	9
% Articulated Trucks	0%	0.8%	0%	**0.8%**	-	8.3%	0%	0%	**5.0%**	-	0.9%	0%	0%	**0.8%**	-	0.9%
Buses and Single-Unit Trucks	0	13	0	**13**	-	1	0	0	**1**	-	13	2	0	**15**	-	29
% Buses and Single-Unit Trucks	0%	3.5%	0%	**3.4%**	-	8.3%	0%	0%	**5.0%**	-	2.4%	3.4%	0%	**2.5%**	-	2.9%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

4. FM 407 at Gateway Drive - TMC

Wed Jun 4, 2025
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1306592, Location: 33.100349, -97.216558

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	FM 407 Westbound					Gateway Driveway Northbound					FM 407 Eastbound					
Time	L	T	U	**App**	Ped*	L	R	U	**App**	Ped*	T	R	U	**App**	Ped*	**Int**
2025-06-04 5:00PM	4	108	0	**112**	0	16	14	0	**30**	0	126	4	0	**130**	0	**272**
5:15PM	3	113	0	**116**	0	10	10	0	**20**	0	174	10	0	**184**	0	**320**
5:30PM	6	87	0	**93**	0	13	7	0	**20**	0	136	8	0	**144**	0	**257**
5:45PM	4	88	0	**92**	0	9	2	0	**11**	0	132	4	0	**136**	0	**239**
Total	17	396	0	**413**	0	48	33	0	**81**	0	568	26	0	**594**	0	**1088**
% Approach	4.1%	95.9%	0%	**-**	-	59.3%	40.7%	0%	**-**	-	95.6%	4.4%	0%	**-**	-	**-**
% Total	1.6%	36.4%	0%	**38.0%**	-	4.4%	3.0%	0%	**7.4%**	-	52.2%	2.4%	0%	**54.6%**	-	**-**
PHF	0.708	0.876	-	**0.890**	-	0.750	0.589	-	**0.675**	-	0.816	0.650	-	**0.807**	-	0.850
Lights	17	392	0	**409**	-	45	33	0	**78**	-	560	26	0	**586**	-	1073
% Lights	100%	99.0%	0%	**99.0%**	-	93.8%	100%	0%	**96.3%**	-	98.6%	100%	0%	**98.7%**	-	98.6%
Articulated Trucks	0	1	0	**1**	-	1	0	0	**1**	-	2	0	0	**2**	-	4
% Articulated Trucks	0%	0.3%	0%	**0.2%**	-	2.1%	0%	0%	**1.2%**	-	0.4%	0%	0%	**0.3%**	-	0.4%
Buses and Single-Unit Trucks	0	3	0	**3**	-	2	0	0	**2**	-	6	0	0	**6**	-	11
% Buses and Single-Unit Trucks	0%	0.8%	0%	**0.7%**	-	4.2%	0%	0%	**2.5%**	-	1.1%	0%	0%	**1.0%**	-	1.0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

FM 407, west of Gateway Drive - ATR

Wed Jun 4, 2025
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Channels
ID: 1306593, Location: 33.100414, -97.218607

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Westbound		West Eastbound		
Time	T	**App**	T	**App**	**Int**
2025-06-04 12:00AM	10	**10**	7	**7**	**17**
12:15AM	6	**6**	7	**7**	**13**
12:30AM	3	**3**	8	**8**	**11**
12:45AM	6	**6**	4	**4**	**10**
Hourly Total	25	**25**	26	**26**	**51**
1:00AM	9	**9**	4	**4**	**13**
1:15AM	3	**3**	2	**2**	**5**
1:30AM	6	**6**	4	**4**	**10**
1:45AM	4	**4**	5	**5**	**9**
Hourly Total	22	**22**	15	**15**	**37**
2:00AM	2	**2**	3	**3**	**5**
2:15AM	1	**1**	1	**1**	**2**
2:30AM	3	**3**	3	**3**	**6**
2:45AM	2	**2**	2	**2**	**4**
Hourly Total	8	**8**	9	**9**	**17**
3:00AM	1	**1**	5	**5**	**6**
3:15AM	6	**6**	3	**3**	**9**
3:30AM	3	**3**	4	**4**	**7**
3:45AM	1	**1**	2	**2**	**3**
Hourly Total	11	**11**	14	**14**	**25**
4:00AM	6	**6**	3	**3**	**9**
4:15AM	7	**7**	12	**12**	**19**
4:30AM	9	**9**	15	**15**	**24**
4:45AM	14	**14**	22	**22**	**36**
Hourly Total	36	**36**	52	**52**	**88**
5:00AM	13	**13**	13	**13**	**26**
5:15AM	18	**18**	16	**16**	**34**
5:30AM	22	**22**	27	**27**	**49**
5:45AM	28	**28**	41	**41**	**69**
Hourly Total	81	**81**	97	**97**	**178**
6:00AM	45	**45**	54	**54**	**99**
6:15AM	45	**45**	81	**81**	**126**
6:30AM	47	**47**	85	**85**	**132**
6:45AM	69	**69**	116	**116**	**185**
Hourly Total	206	**206**	336	**336**	**542**
7:00AM	63	**63**	107	**107**	**170**
7:15AM	94	**94**	158	**158**	**252**
7:30AM	91	**91**	150	**150**	**241**
7:45AM	100	**100**	141	**141**	**241**
Hourly Total	348	**348**	556	**556**	**904**
8:00AM	99	**99**	144	**144**	**243**
8:15AM	90	**90**	137	**137**	**227**
8:30AM	84	**84**	164	**164**	**248**
8:45AM	90	**90**	161	**161**	**251**
Hourly Total	363	**363**	606	**606**	**969**
9:00AM	106	**106**	145	**145**	**251**
9:15AM	90	**90**	126	**126**	**216**
9:30AM	102	**102**	155	**155**	**257**
9:45AM	89	**89**	153	**153**	**242**
Hourly Total	387	**387**	579	**579**	**966**
10:00AM	98	**98**	111	**111**	**209**
10:15AM	82	**82**	114	**114**	**196**
10:30AM	111	**111**	135	**135**	**246**
10:45AM	114	**114**	117	**117**	**231**

Leg Direction	East Westbound		West Eastbound		
Time	T	**App**	T	**App**	**Int**
Hourly Total	405	**405**	477	**477**	**882**
11:00AM	113	**113**	135	**135**	**248**
11:15AM	88	**88**	168	**168**	**256**
11:30AM	133	**133**	154	**154**	**287**
11:45AM	101	**101**	108	**108**	**209**
Hourly Total	435	**435**	565	**565**	**1000**
12:00PM	107	**107**	127	**127**	**234**
12:15PM	117	**117**	158	**158**	**275**
12:30PM	124	**124**	158	**158**	**282**
12:45PM	127	**127**	127	**127**	**254**
Hourly Total	475	**475**	570	**570**	**1045**
1:00PM	105	**105**	147	**147**	**252**
1:15PM	115	**115**	137	**137**	**252**
1:30PM	101	**101**	127	**127**	**228**
1:45PM	128	**128**	146	**146**	**274**
Hourly Total	449	**449**	557	**557**	**1006**
2:00PM	121	**121**	129	**129**	**250**
2:15PM	100	**100**	135	**135**	**235**
2:30PM	110	**110**	131	**131**	**241**
2:45PM	104	**104**	137	**137**	**241**
Hourly Total	435	**435**	532	**532**	**967**
3:00PM	147	**147**	104	**104**	**251**
3:15PM	106	**106**	150	**150**	**256**
3:30PM	144	**144**	143	**143**	**287**
3:45PM	108	**108**	152	**152**	**260**
Hourly Total	505	**505**	549	**549**	**1054**
4:00PM	103	**103**	140	**140**	**243**
4:15PM	89	**89**	133	**133**	**222**
4:30PM	97	**97**	152	**152**	**249**
4:45PM	96	**96**	118	**118**	**214**
Hourly Total	385	**385**	543	**543**	**928**
5:00PM	121	**121**	128	**128**	**249**
5:15PM	116	**116**	174	**174**	**290**
5:30PM	102	**102**	148	**148**	**250**
5:45PM	95	**95**	136	**136**	**231**
Hourly Total	434	**434**	586	**586**	**1020**
6:00PM	123	**123**	129	**129**	**252**
6:15PM	125	**125**	151	**151**	**276**
6:30PM	119	**119**	126	**126**	**245**
6:45PM	103	**103**	104	**104**	**207**
Hourly Total	470	**470**	510	**510**	**980**
7:00PM	94	**94**	90	**90**	**184**
7:15PM	102	**102**	89	**89**	**191**
7:30PM	116	**116**	82	**82**	**198**
7:45PM	125	**125**	85	**85**	**210**
Hourly Total	437	**437**	346	**346**	**783**
8:00PM	100	**100**	62	**62**	**162**
8:15PM	105	**105**	89	**89**	**194**
8:30PM	110	**110**	57	**57**	**167**
8:45PM	115	**115**	62	**62**	**177**
Hourly Total	430	**430**	270	**270**	**700**
9:00PM	78	**78**	48	**48**	**126**
9:15PM	79	**79**	52	**52**	**131**
9:30PM	60	**60**	47	**47**	**107**
9:45PM	53	**53**	38	**38**	**91**
Hourly Total	270	**270**	185	**185**	**455**
10:00PM	57	**57**	28	**28**	**85**
10:15PM	51	**51**	29	**29**	**80**
10:30PM	39	**39**	21	**21**	**60**
10:45PM	23	**23**	15	**15**	

Leg Direction	East Westbound		West Eastbound		
Time	T	**App**	T	**App**	**Int**
Hourly Total	170	**170**	93	**93**	**263**
11:00PM	24	**24**	17	**17**	**41**
11:15PM	24	**24**	14	**14**	**38**
11:30PM	17	**17**	11	**11**	**28**
11:45PM	14	**14**	14	**14**	**28**
Hourly Total	79	**79**	56	**56**	**135**
Total	6866	**6866**	8129	**8129**	**14995**
% Approach	100%	**-**	100%	**-**	-
% Total	45.8%	**45.8%**	54.2%	**54.2%**	-
Lights	6695	**6695**	7920	**7920**	14615
% Lights	97.5%	**97.5%**	97.4%	**97.4%**	97.5%
Articulated Trucks	46	**46**	44	**44**	90
% Articulated Trucks	0.7%	**0.7%**	0.5%	**0.5%**	0.6%
Buses and Single-Unit Trucks	125	**125**	165	**165**	290
% Buses and Single-Unit Trucks	1.8%	**1.8%**	2.0%	**2.0%**	1.9%

*T: Thru

FM 407, west of Gateway Drive - ATR
Wed Jun 4, 2025
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Channels
ID: 1306593, Location: 33.100414, -97.218607

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

FM 407, west of Gateway Drive - ATR

Wed Jun 4, 2025
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Channels
ID: 1306593, Location: 33.100414, -97.218607

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Westbound		West Eastbound		
Time	T	**App**	T	**App**	**Int**
2025-06-04 7:15AM	94	**94**	158	**158**	**252**
7:30AM	91	**91**	150	**150**	**241**
7:45AM	100	**100**	141	**141**	**241**
8:00AM	99	**99**	144	**144**	**243**
Total	384	**384**	593	**593**	**977**
% Approach	100%	**-**	100%	**-**	-
% Total	39.3%	**39.3%**	60.7%	**60.7%**	-
PHF	0.960	**0.960**	0.938	**0.938**	0.969
Lights	366	**366**	573	**573**	939
% Lights	95.3%	**95.3%**	96.6%	**96.6%**	96.1%
Articulated Trucks	5	**5**	4	**4**	9
% Articulated Trucks	1.3%	**1.3%**	0.7%	**0.7%**	0.9%
Buses and Single-Unit Trucks	13	**13**	16	**16**	29
% Buses and Single-Unit Trucks	3.4%	**3.4%**	2.7%	**2.7%**	3.0%

*T: Thru

FM 407, west of Gateway Drive - ATR
Wed Jun 4, 2025
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Channels
ID: 1306593, Location: 33.100414, -97.218607

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

FM 407, west of Gateway Drive - ATR

Wed Jun 4, 2025
Midday Peak (12:15 PM - 1:15 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Channels
ID: 1306593, Location: 33.100414, -97.218607

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Westbound		West Eastbound		
Time	T	**App**	T	**App**	**Int**
2025-06-04 12:15PM	117	**117**	158	**158**	**275**
12:30PM	124	**124**	158	**158**	**282**
12:45PM	127	**127**	127	**127**	**254**
1:00PM	105	**105**	147	**147**	**252**
Total	473	**473**	590	**590**	**1063**
% Approach	100%	**-**	100%	**-**	-
% Total	44.5%	**44.5%**	55.5%	**55.5%**	-
PHF	0.931	**0.931**	0.934	**0.934**	0.942
Lights	460	**460**	575	**575**	1035
% Lights	97.3%	**97.3%**	97.5%	**97.5%**	97.4%
Articulated Trucks	4	**4**	2	**2**	6
% Articulated Trucks	0.8%	**0.8%**	0.3%	**0.3%**	0.6%
Buses and Single-Unit Trucks	9	**9**	13	**13**	22
% Buses and Single-Unit Trucks	1.9%	**1.9%**	2.2%	**2.2%**	2.1%

*T: Thru

FM 407, west of Gateway Drive - ATR
Wed Jun 4, 2025
Midday Peak (12:15 PM - 1:15 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Channels
ID: 1306593, Location: 33.100414, -97.218607

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

FM 407, west of Gateway Drive - ATR

Wed Jun 4, 2025
PM Peak (3 PM - 4 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Channels
ID: 1306593, Location: 33.100414, -97.218607

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Westbound		West Eastbound		
Time	T	**App**	T	**App**	**Int**
2025-06-04 3:00PM	147	**147**	104	**104**	**251**
3:15PM	106	**106**	150	**150**	**256**
3:30PM	144	**144**	143	**143**	**287**
3:45PM	108	**108**	152	**152**	**260**
Total	505	**505**	549	**549**	**1054**
% Approach	100%	**-**	100%	**-**	-
% Total	47.9%	**47.9%**	52.1%	**52.1%**	-
PHF	0.859	**0.859**	0.903	**0.903**	0.918
Lights	494	**494**	537	**537**	1031
% Lights	97.8%	**97.8%**	97.8%	**97.8%**	97.8%
Articulated Trucks	3	**3**	3	**3**	6
% Articulated Trucks	0.6%	**0.6%**	0.5%	**0.5%**	0.6%
Buses and Single-Unit Trucks	8	**8**	9	**9**	17
% Buses and Single-Unit Trucks	1.6%	**1.6%**	1.6%	**1.6%**	1.6%

*T: Thru

FM 407, west of Gateway Drive - ATR
Wed Jun 4, 2025
PM Peak (3 PM - 4 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Channels
ID: 1306593, Location: 33.100414, -97.218607

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Item 1.

Traffic Count (TCDS)

Home Locate Locate All Email This Auto-Locate:

List View | All DIRs | Report Center

Record 1 of 1 Goto Record go

AF Group	M1450_WB (2024)	**Route**	407
GF Group	DALLAS FC - (2015)	**Active**	Yes
Class Dist Grp		**Category**	ANNUAL ACR
Seas Clss Grp	DALLAS (2016)		
WIM Group			
QC Group	Volume Group 2		
Fnct'l Class	(4)Minor Arterial		
Located On	FM0407		
Loc On Alias	FM0407-KG		

More Detail

STATION DATA

Directions: 2-WAY

AADT

Year	AADT	DHV-30	K %	D %	PA	BC	Src
2022	11,900[3]						PBV
2019	12,216	1,154	9		11,841 (97%)	375 (3%)	
2014	7,579	775	10				
2009	6,320						
2004	5,220						

|<< < > >>| 1-5 of 6

VOLUME COUNT

	Date	Int	Total
	Mon 10/28/2019	15	12,419
	Mon 11/24/2014	15	7,895

VOLUME TREND

Year	Annual Growth
2024	13%
2022	-1%
2019	10%
2014	4%
2009	4%

SPEED

	Date	Int	Pace	85th	Total
No Data					

CLASSIFICATION

	Date	Int	Total
No Data			

WEIGH-IN-MOTION

	Date	Axles	Avg GVW	Total
No Data				

PER VEHICLE

	Date	Axles	85th	Total
No Data				

GAP

	Date	Int	Total
No Data			

PARTIAL COUNT

Date	Int	24-Hr Total

NOTES/FILES

	Note	Date	

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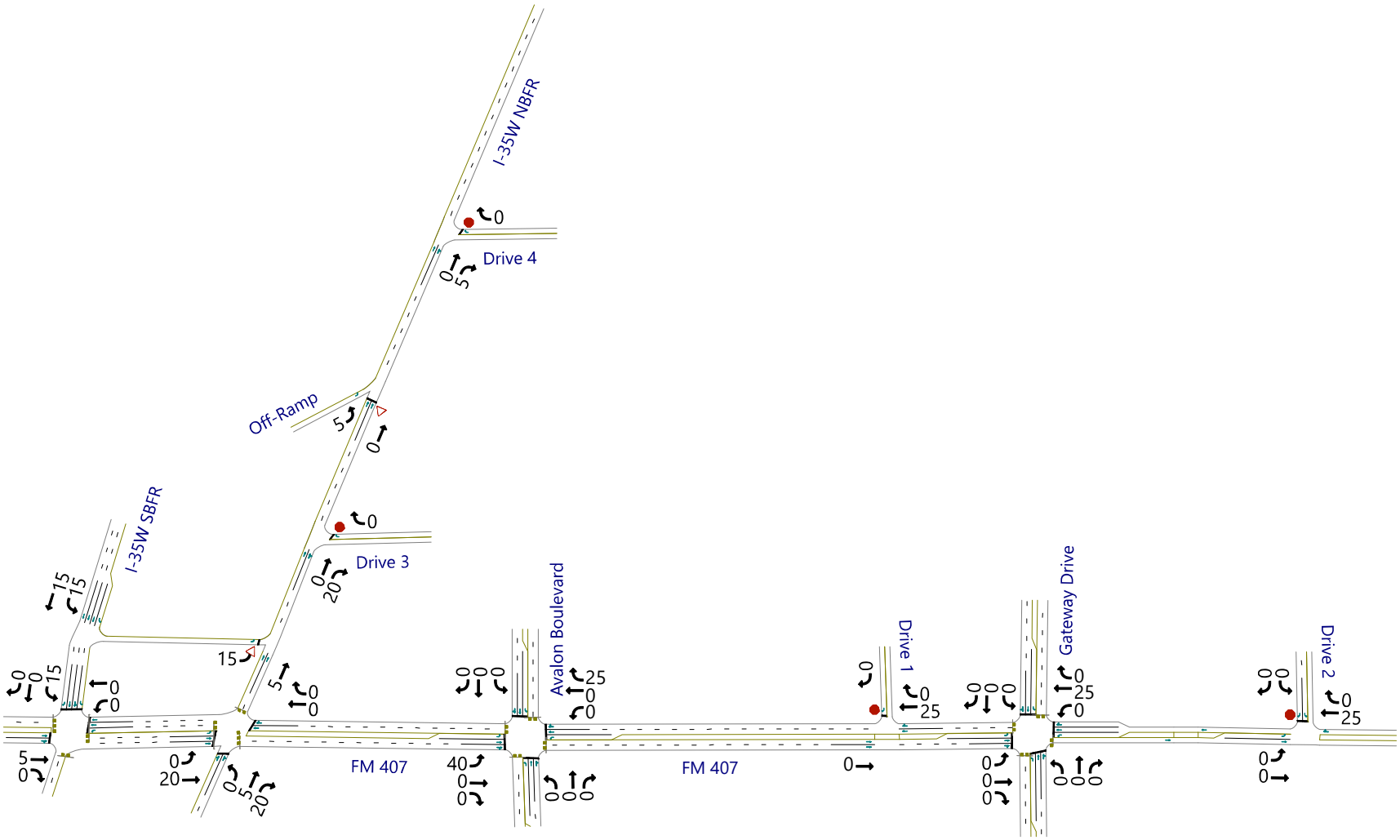
Appendix B – Trip Generation and Traffic Assignment

Appendix B1 - Traffic Assignment Inbound A Site

25-028

North

Not to Scale



12/19/2025

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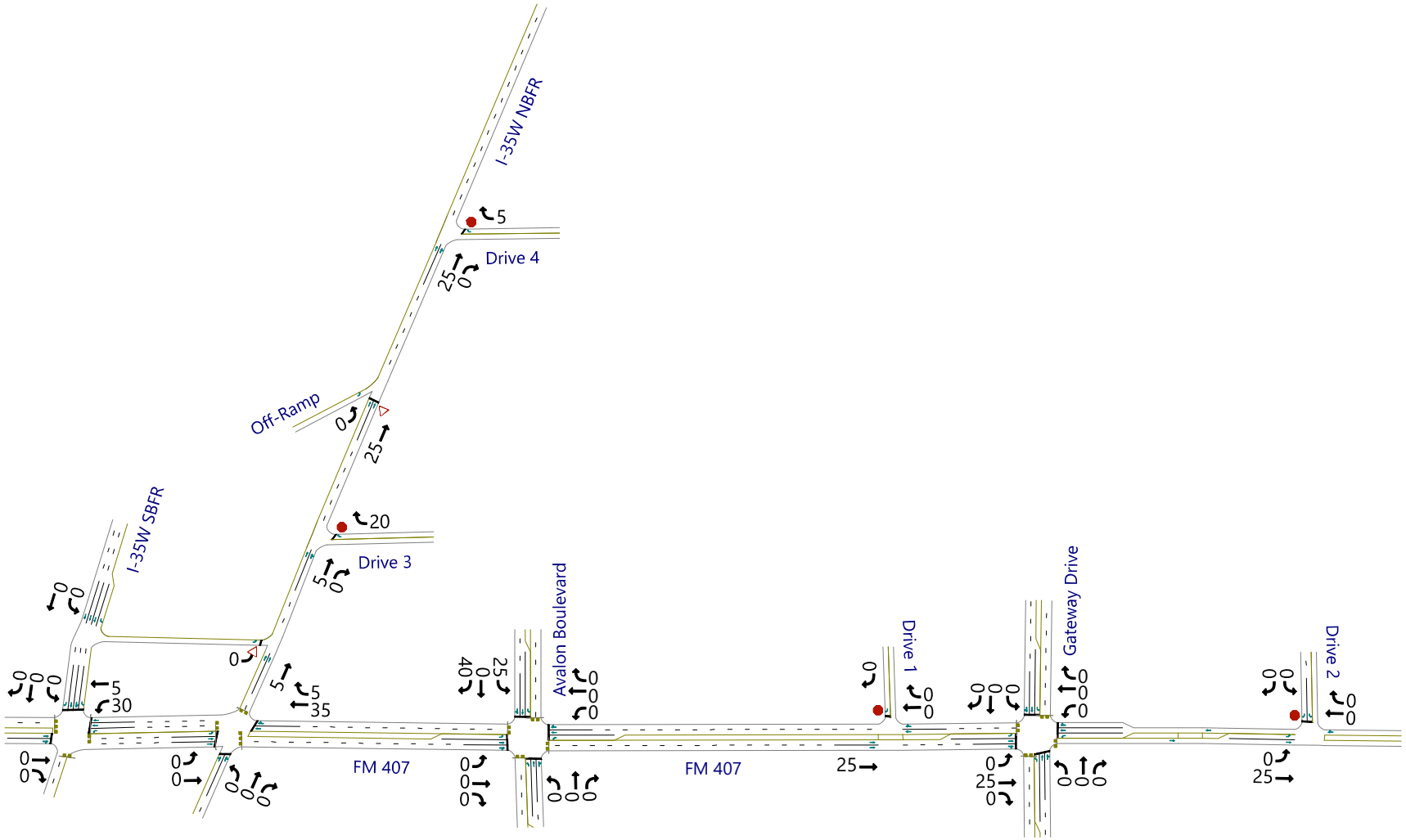
Appendix B2 - Traffic Assignment Outbound A Site

25-028

North

Not to Scale



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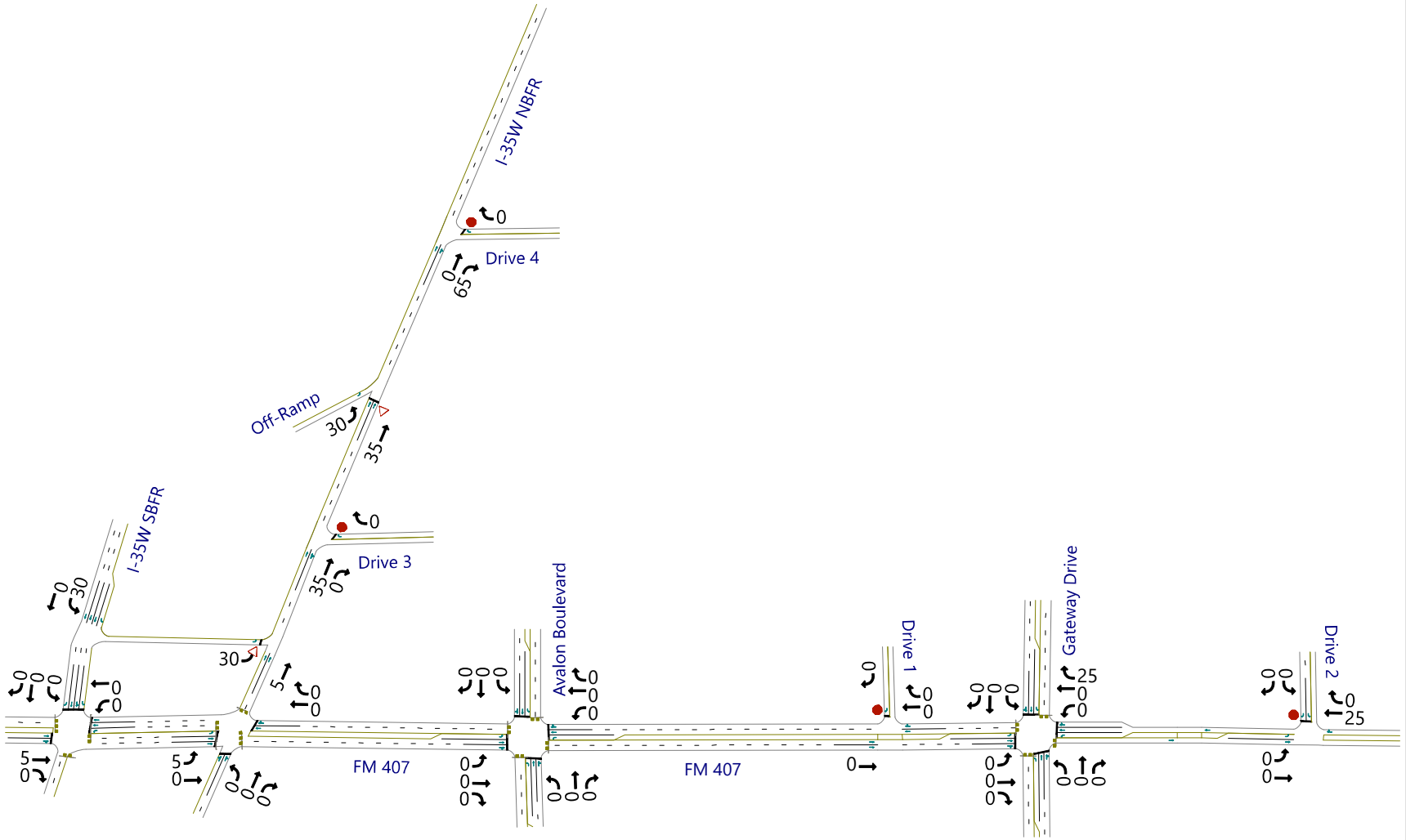
Appendix B3 - Traffic Assignment Inbound B Site
25-028

North
Not to Scale



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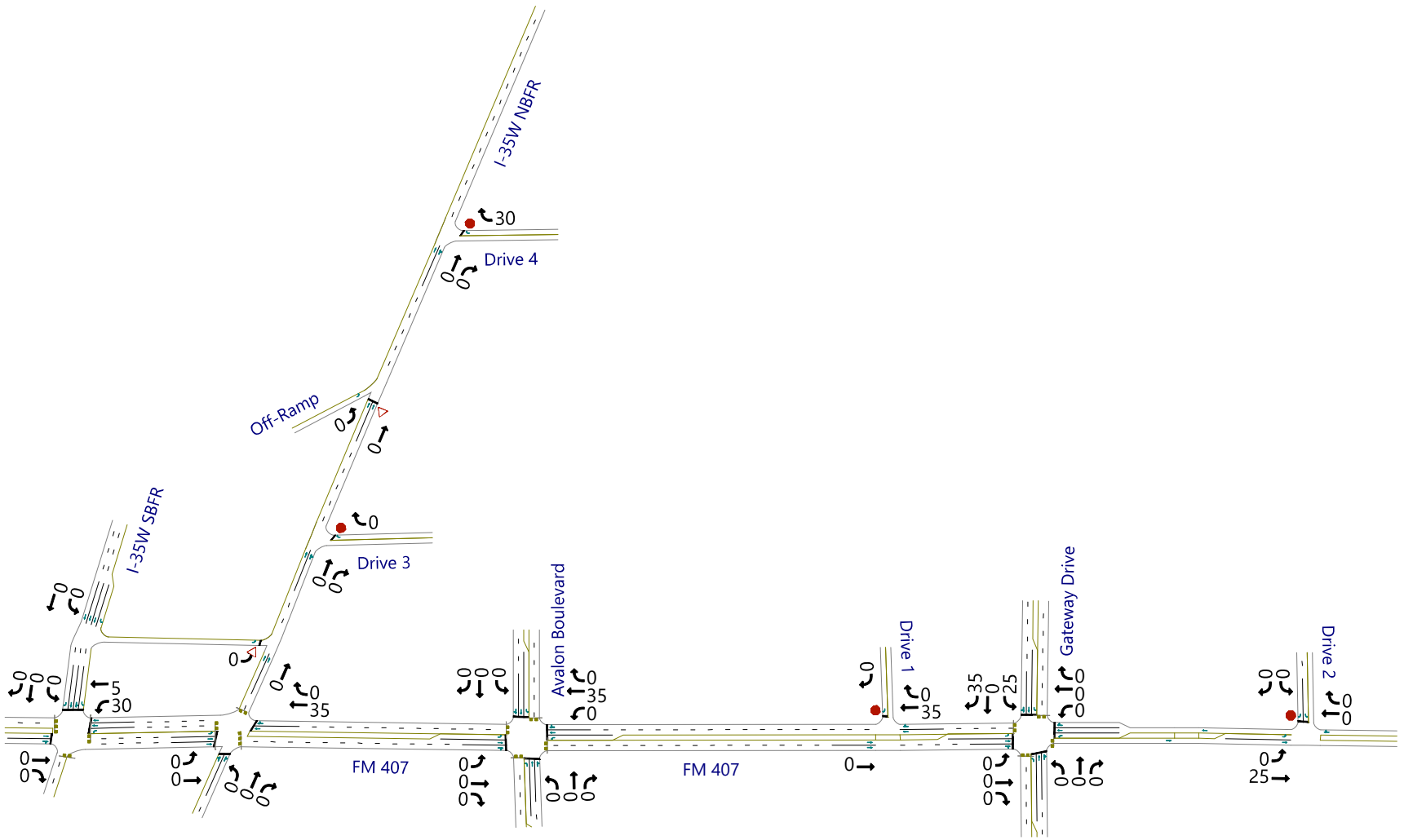
Appendix B4 - Traffic Assignment Outbound B Site

25-028

North

Not to Scale



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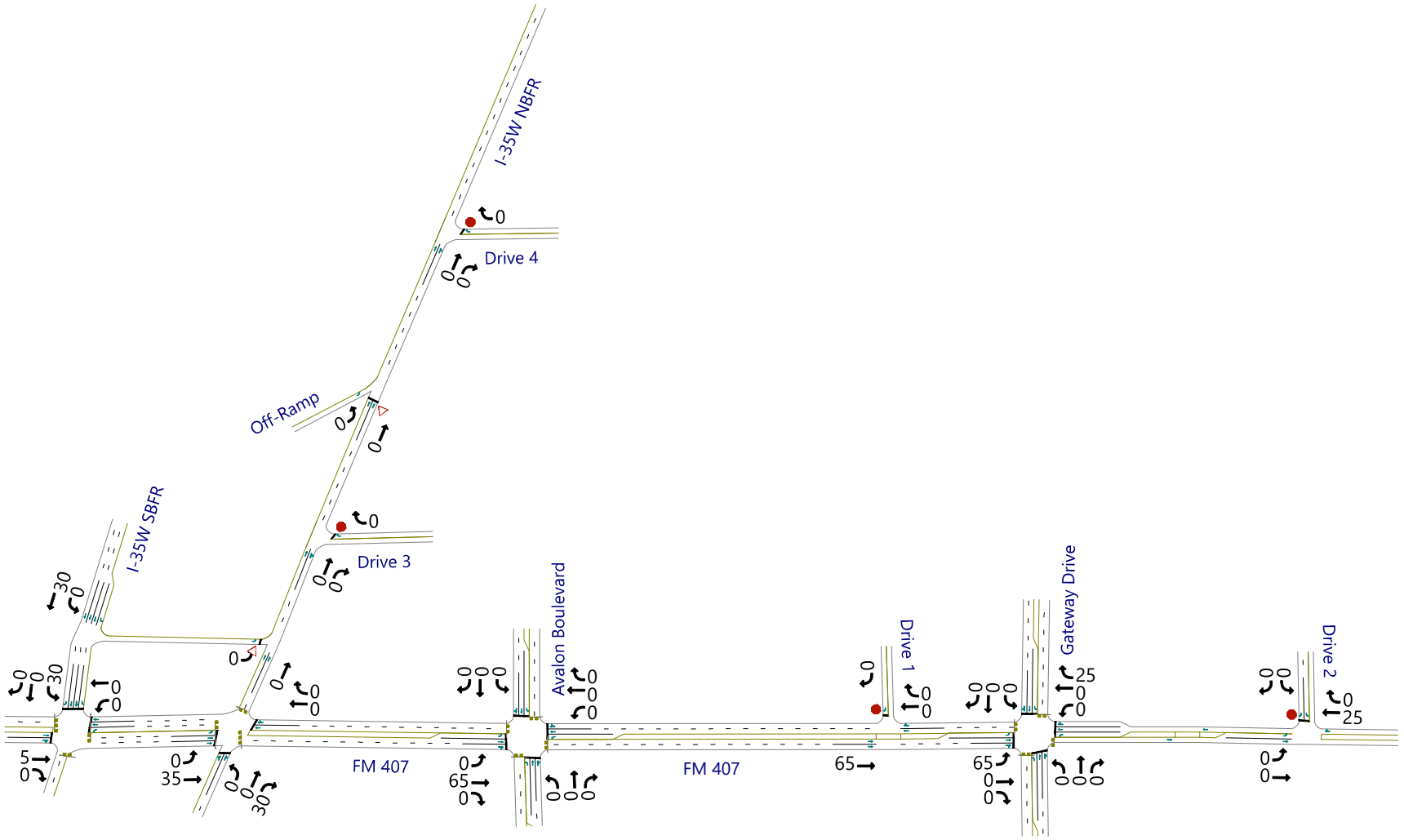
Appendix B5 - Traffic Assignment Inbound C Site

25-028

North

Not to Scale



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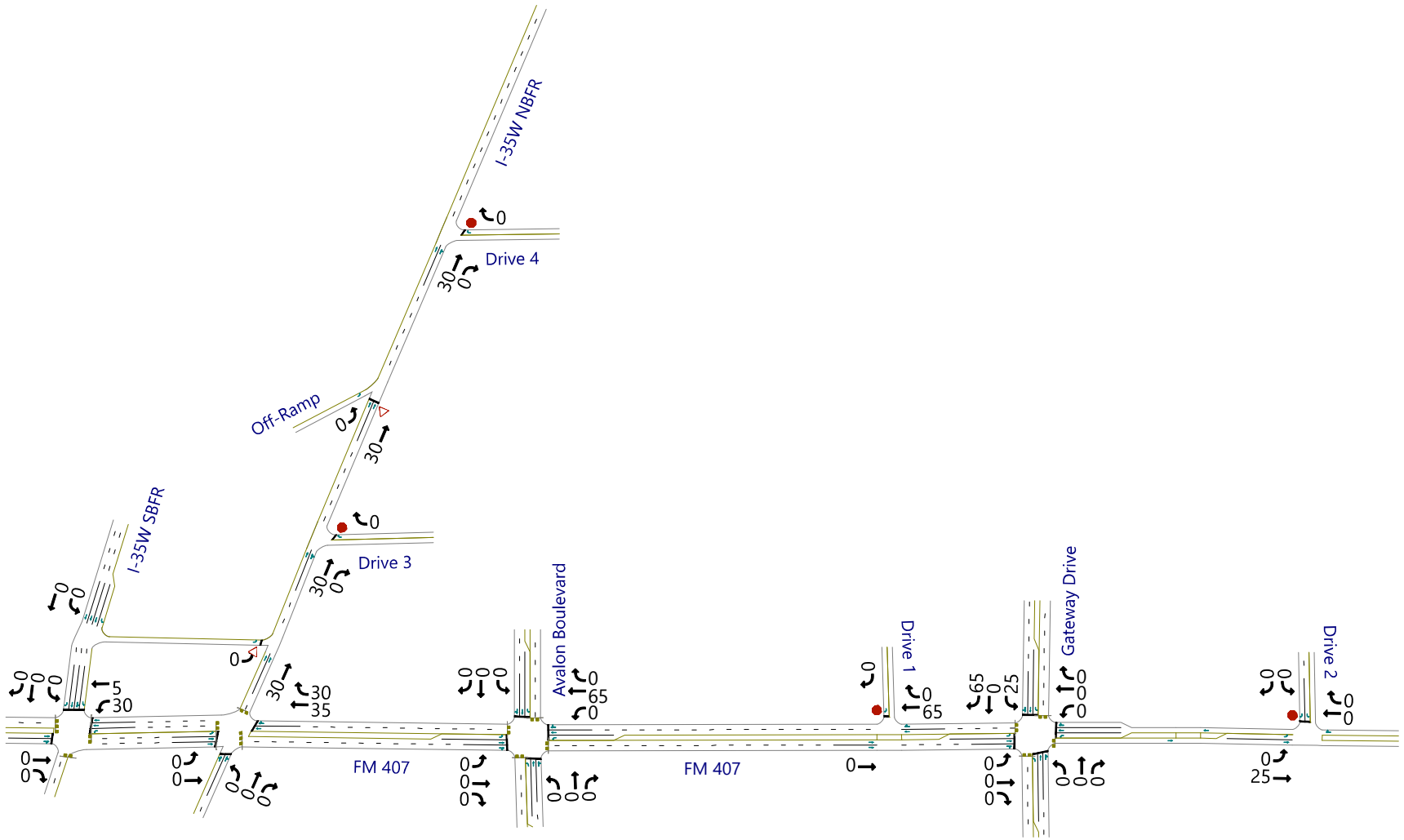
Appendix B6 - Traffic Assignment Outbound C Site

25-028

North

Not to Scale



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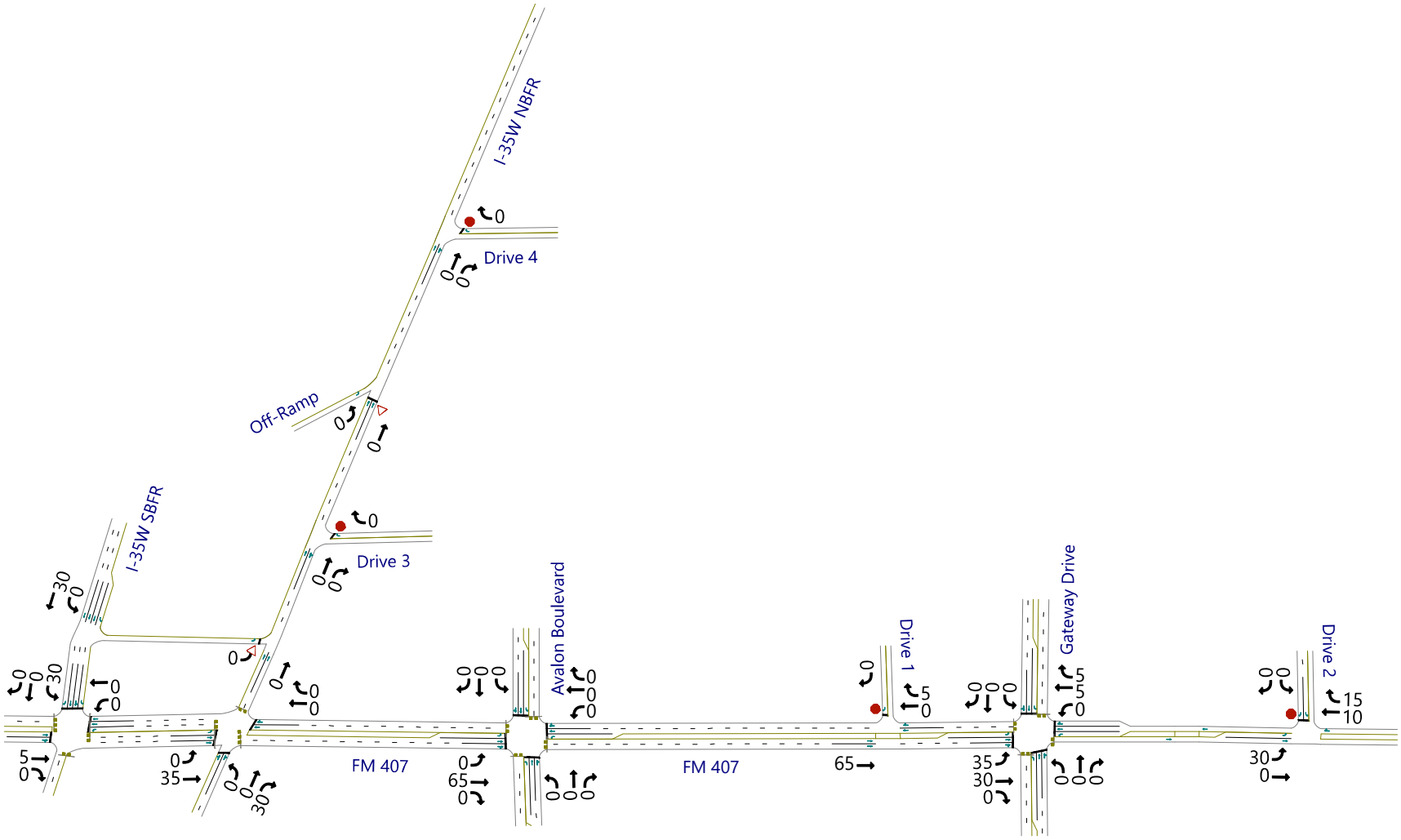
Appendix B7 - Traffic Assignment Inbound D Site

25-028

North

Not to Scale



12/19/2025

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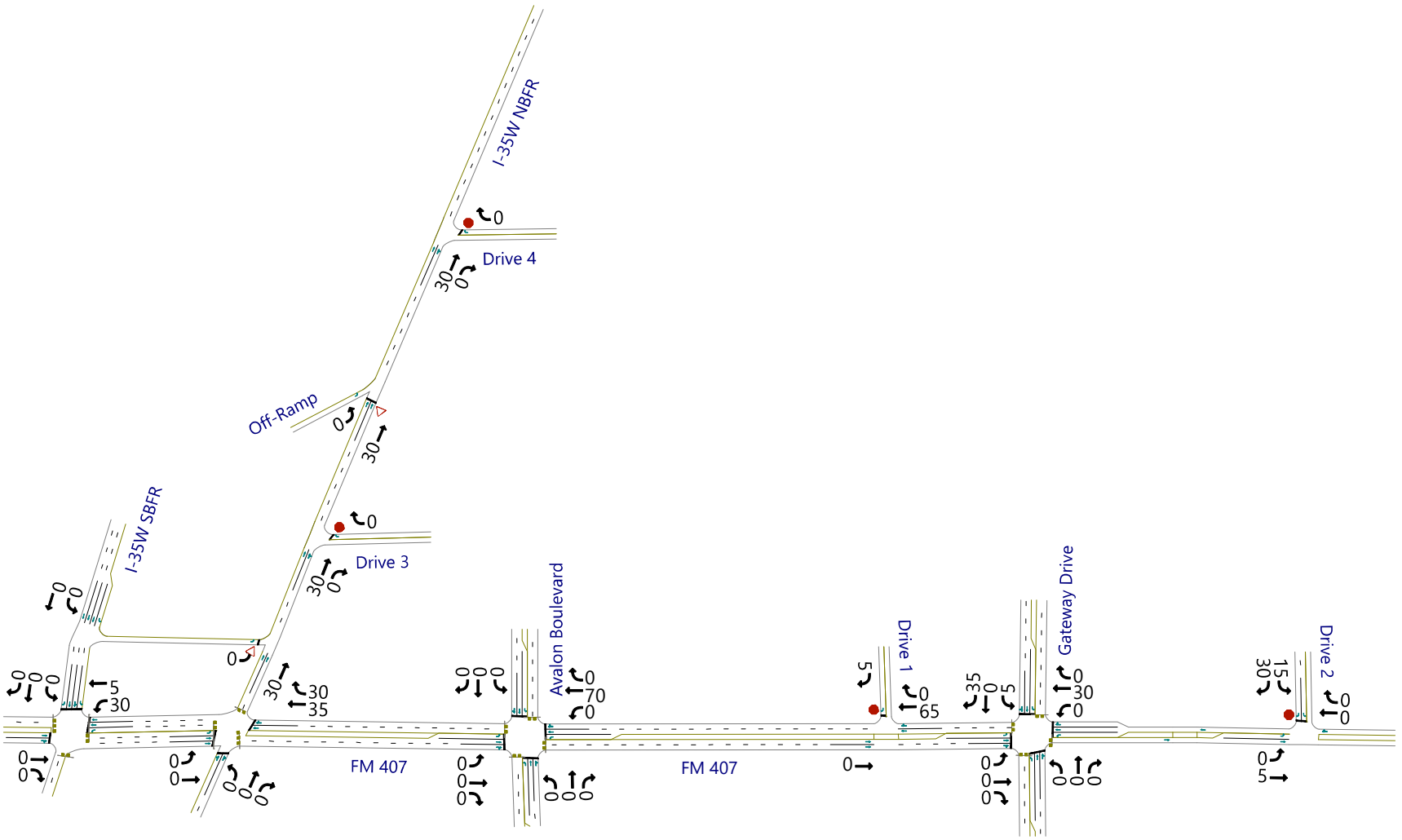
Appendix B8 - Traffic Assignment Outbound D Site

25-028

North

Not to Scale



12/19/2025

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ITE Trip Generation Volumes (ITE Trip Generation Manual, 12th Ed.)

Project: Heath Tract Infrastructure
Date: 12/18/2025
Analyst: HWL

					Peak											
					Status	Daily		Status	AM Peak Hour of Adjacent Street				Status	PM Peak Hour of Adjacent Street		
AREA	ITE Code	Land Use	Units		Equation/Rate		Volume	Equation/Rate		Volume			Equation/Rate		Volume		
										Total	Enter	Exit			Total	Enter	Exit
A	310	Hotel	240	Rooms	Rate	T=X*5.84	1402	Rate	T=X*0.34	82	42	40	Rate	T=X*0.47	113	58	55
	822	Strip Retail Plaza (<40k)	39	kSF	Rate	T=X*54.45	2124	Rate	T=X*3.93	153	84	69	Rate	T=X*6.29	245	123	122
B	821	Shopping Plaza (40-150k)	113	kSF	Rate	T=X*65.38	7388	Rate	T=X*1.59	180	111	69	Rate	T=X*4.76	538	264	274
		Pass-By Trips (PM Peak Hour at 40%)*					*0*			*72*	*44*	*28*			*215*	*106*	*110*
C	820	Shopping Center (>150k)	170	kSF	Rate	T=X*36.39	6186	Rate	T=X*0.88	150	93	57	Rate	T=X*3.26	554	272	282
		Pass-By Trips (PM Peak Hour at 29%)*					*0*			*44*	*27*	*17*			*161*	*79*	*82*
D	820	Shopping Center (>150k)	246	kSF	Rate	T=X*36.39	8952	Rate	T=X*0.88	216	134	82	Rate	T=X*3.26	802	393	409
		Pass-By Trips (PM Peak Hour at 29%)*					*0*			*63*	*39*	*24*			*233*	*114*	*119*
		Subtotal:					26052			781	464	317			2252	1110	1142
		Internal Trip Capture					0			*178*	*110*	*68*			*608*	*298*	*310*
		Pass By Trips					0			0	0	0			0	0	0
		TOTAL:					26052			603	354	249			1644	812	832

*As shown in the ITE Trip Generation Manual, 11th Edition, provided in Appendix B

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	820								
Land Use	Shopping Center (> 150k)								
Setting	General Urban/Suburban								
Time Period	Weekday PM Peak Period								
# Data Sites	8 Sites with GLA between 150 and 300k				16 Sites with GLA between 300 and 900k				
Average Pass-By Rate	29% for Sites with GLA between 150 and 300k				19% for Sites with GLA between 300 and 900k				
	Pass-By Characteristics for Individual Sites								
		Survey	#	Pass-By	Non-Pass-By Trips			Adj Street Peak	
GLA (000)	State or Province	Year	Interviews	Trip (%)	Primary (%)	Diverted (%)	Total (%)	Hour Volume	Source
213	Florida	1990	312	28	31	41	72	—	33
225	Illinois	1994	264	35	32	33	65	1970	24
227.9	Kentucky	1993	—	34	35	31	66	—	34
235	Kentucky	1993	211	35	29	36	65	2593	2
255	Iowa	1994	222	23	38	39	77	3706	24
256	Connecticut	1994	208	27	51	22	73	3422	24
293	Illinois	1994	282	24	70	6	76	4606	13
294	Pennsylvania	1994	213	24	48	18	76	4055	24
350	Massachusetts	1994	224	18	45	37	82	2112	24
361	Virginia	1994	315	17	54	29	83	2034	24
375	North Carolina	1994	214	29	48	23	71	2053	24
413	Texas	1994	228	28	51	21	72	589	24
418	Maryland	1994	281	20	50	30	80	5610	24
450	California	1994	321	23	49	28	77	2787	24
476	Washington	1994	234	25	53	22	75	3427	24
488	Texas	1994	257	12	75	13	88	1094	13
560	Virginia	1994	437	19	49	32	81	3051	24
581	Colorado	1994	296	18	53	29	82	2939	24
598	Colorado	1994	205	17	55	28	83	3840	24
633	Texas	1994	257	10	64	26	90	—	24
667	Illinois	1994	200	16	53	31	84	2770	24
738	New Jersey	1994	283	13	75	12	87	8059	24
800	California	1994	205	21	51	28	79	7474	24
808	California	1994	240	13	73	14	87	4035	24

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	821
Land Use	Shopping Plaza (40 - 150k)
Setting	General Urban/Suburban
Time Period	Weekday PM Peak Period
# Data Sites	15
Average Pass-By Rate	40%

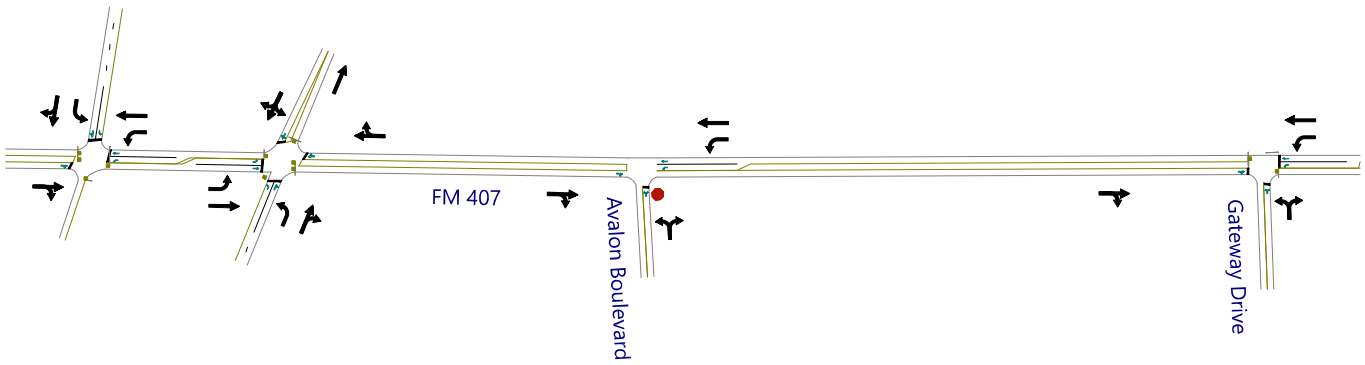
Pass-By Characteristics for Individual Sites

GLA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume	Source
					Primary (%)	Diverted (%)	Total (%)		
45	Florida	1992	844	56	24	20	44	—	30
50	Florida	1992	555	41	41	18	59	—	30
52	Florida	1995	665	42	33	25	58	—	30
53	Florida	1993	162	59	—	—	41	—	30
57.23	Kentucky	1993	247	31	53	16	69	2659	34
60	Florida	1995	1583	40	38	22	60	—	30
69.4	Kentucky	1993	109	25	42	33	75	1559	34
77	Florida	1992	365	46	—	—	54	—	30
78	Florida	1991	702	55	23	22	45	—	30
82	Florida	1992	336	34	—	—	66	—	30
92.857	Kentucky	1993	133	22	50	28	78	3555	34
100.888	Kentucky	1993	281	28	50	22	72	2111	34
121.54	Kentucky	1993	210	53	30	17	47	2636	34
144	New Jersey	1990	176	32	44	24	68	—	24
146.8	Kentucky	1993	—	36	39	25	64	—	34

Appendix C – Traffic Volume Exhibits

Appendix C1 - Existing Roadway Geometry
25-028

North
Not to Scale



06/19/2025
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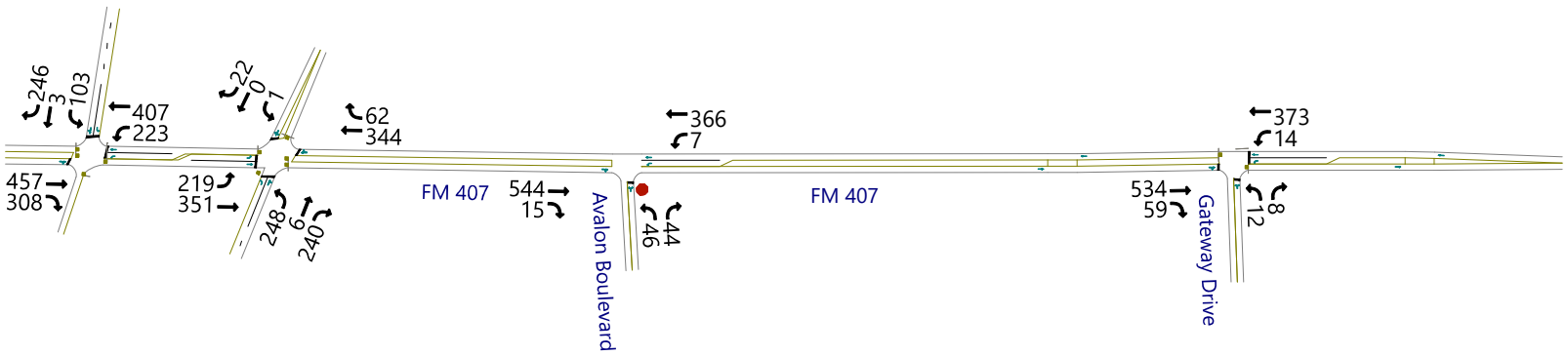
Appendix C2 - Existing AM
25-028

North
Not to Scale



06/18/2025
HWL

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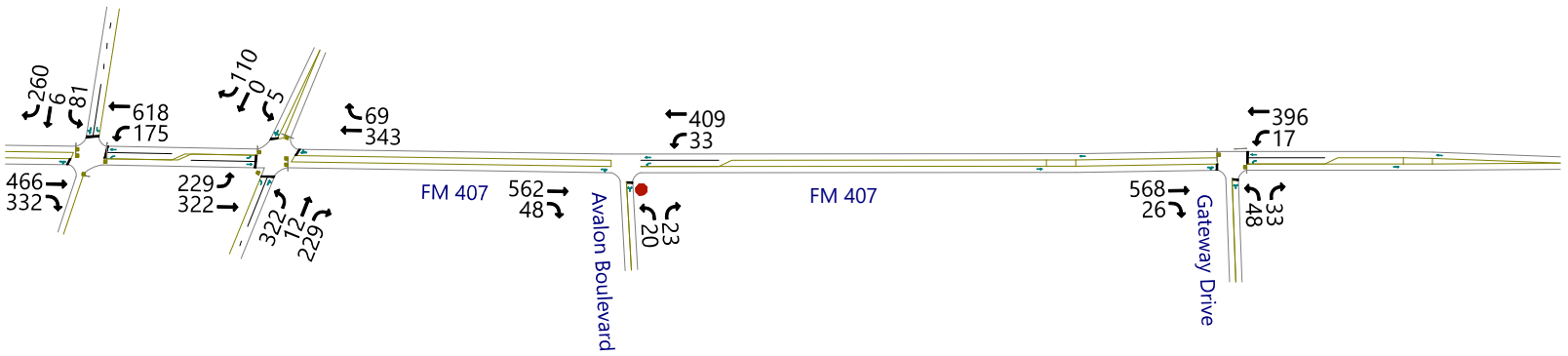
Appendix C3 - Existing PM
25-028

North
Not to Scale



06/18/2025
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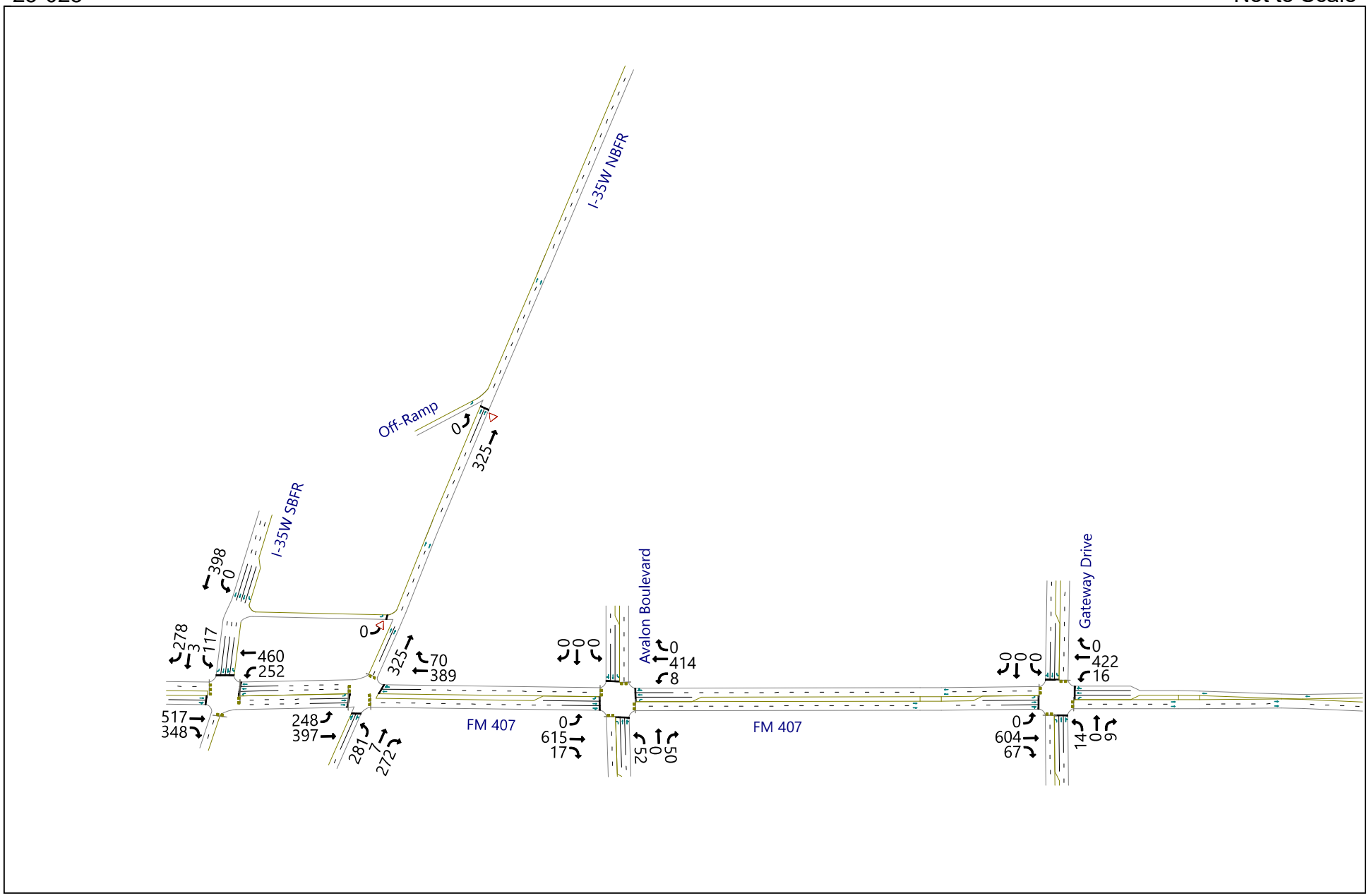
Appendix C4 - 2030 No Build AM
25-028

North
Not to Scale

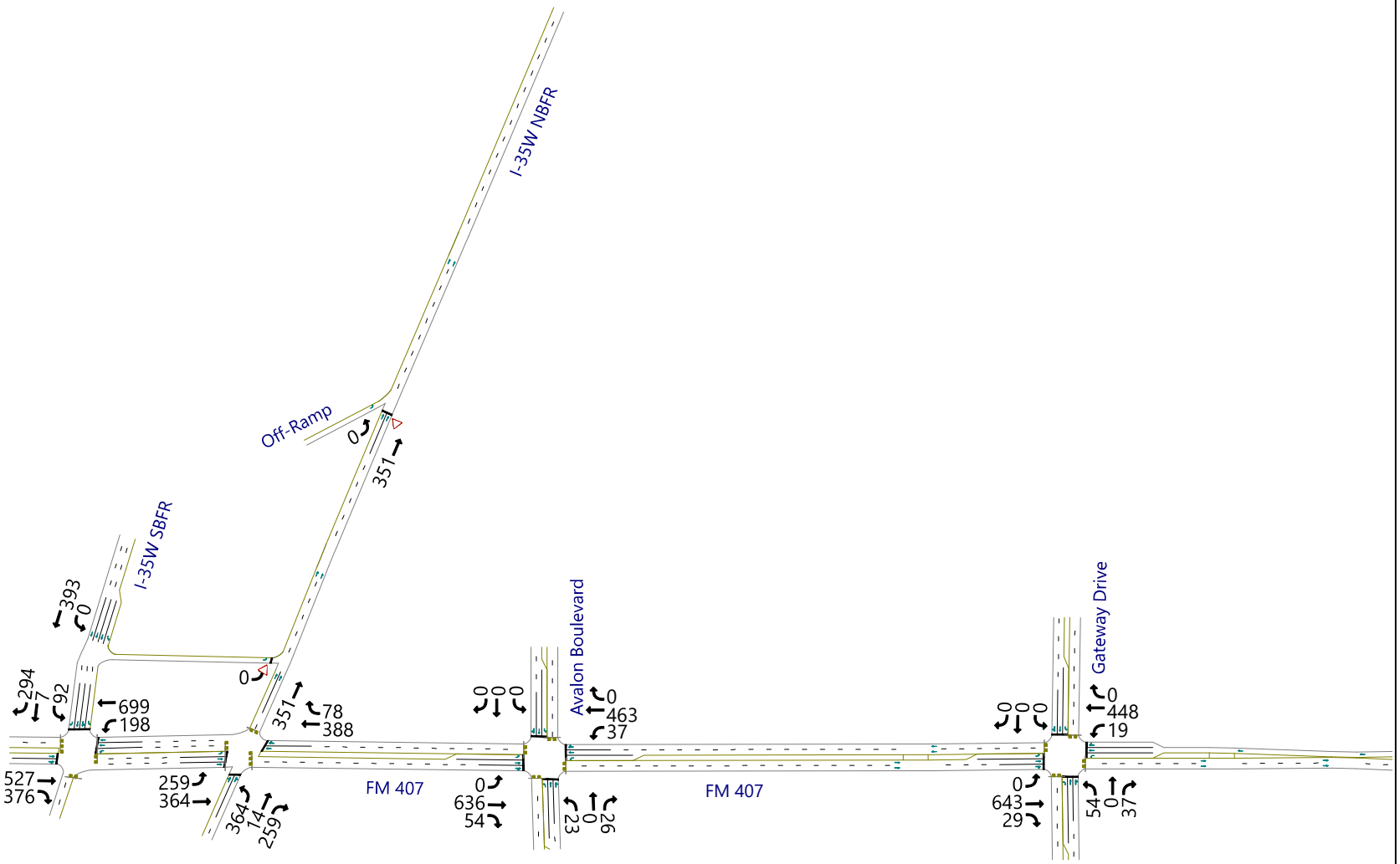


12/19/2025
HWL

SPIARS

Appendix C5 - 2030 No Build PM
25-028

North
Not to Scale

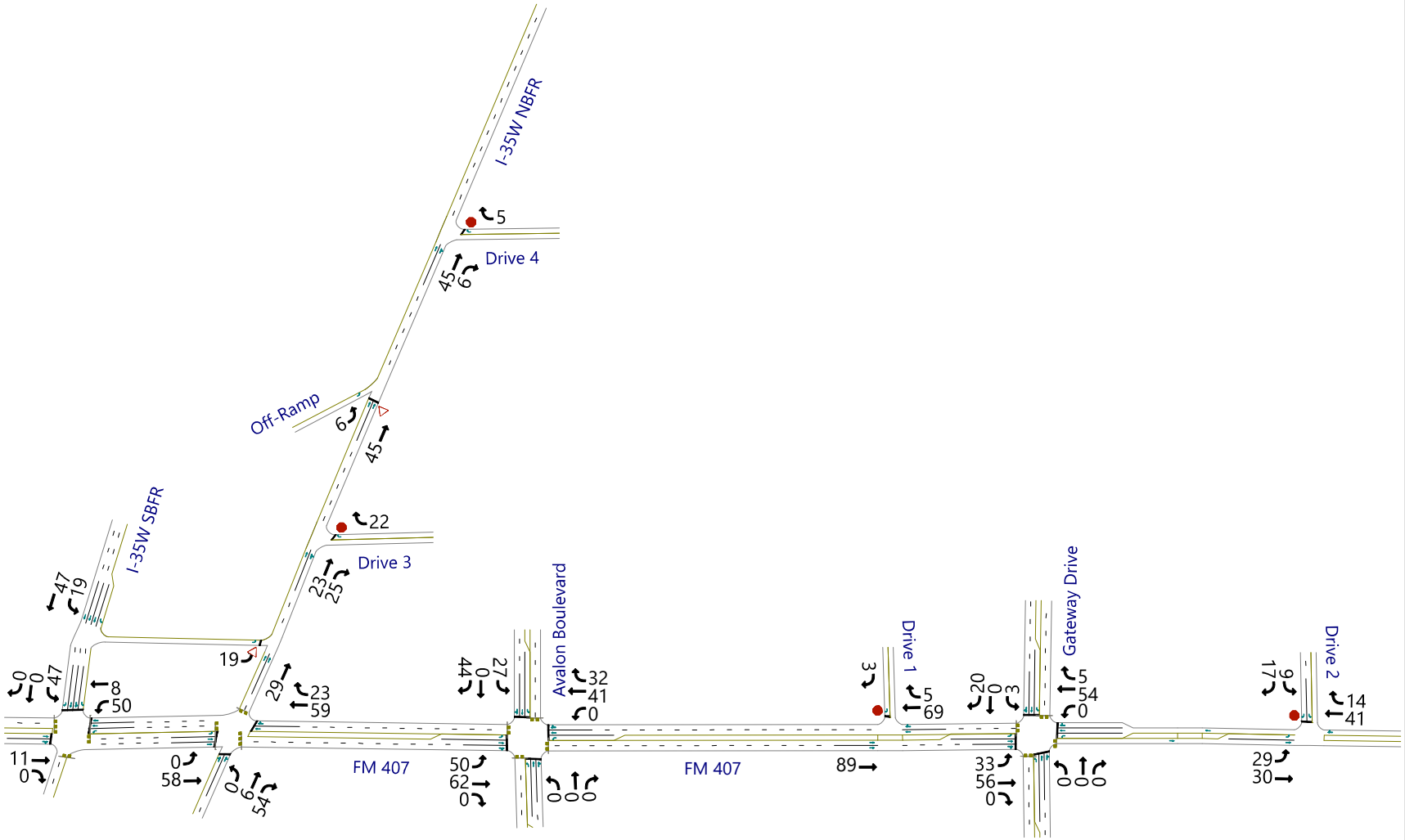


12/19/2025
HWL

SPIARS

Appendix C6 - 2030 Site Generated AM
25-028

North
Not to Scale



12/19/2025
HWL

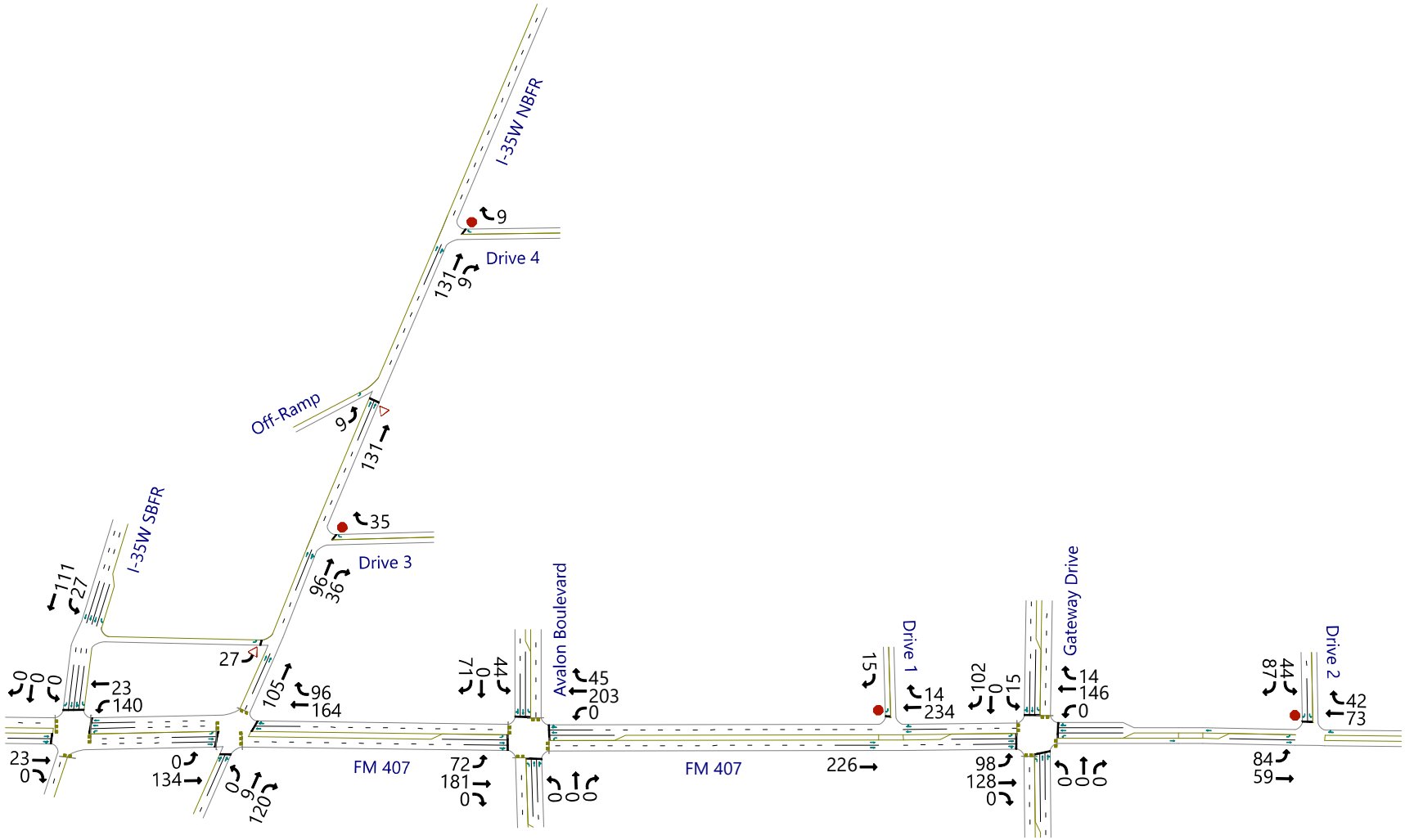
SPIARS

Appendix C7 - 2030 Site Generated PM

25-028

North

Not to Scale



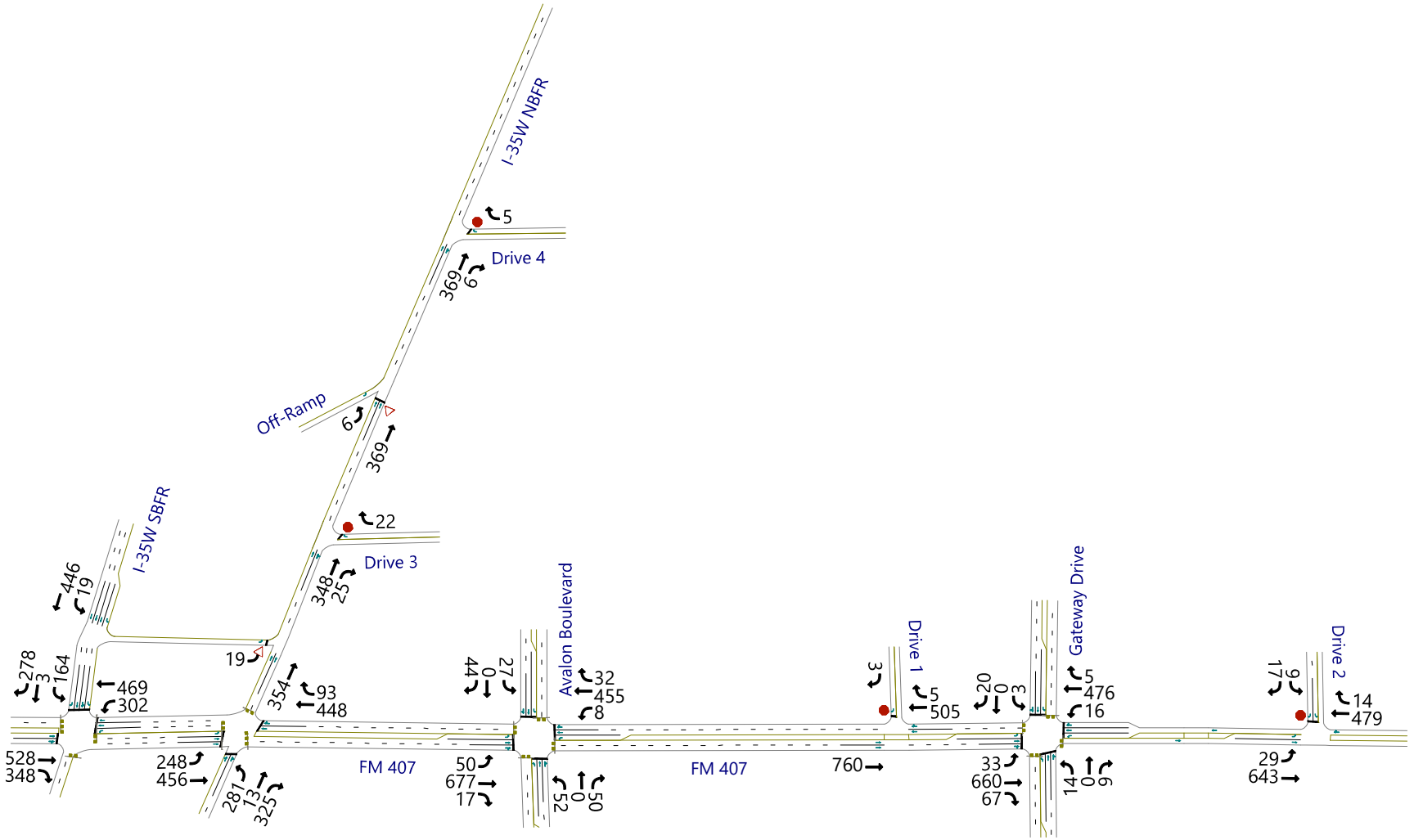
12/19/2025

HWL

SPIARS

Appendix C8 - 2030 Build AM
25-028

North
Not to Scale

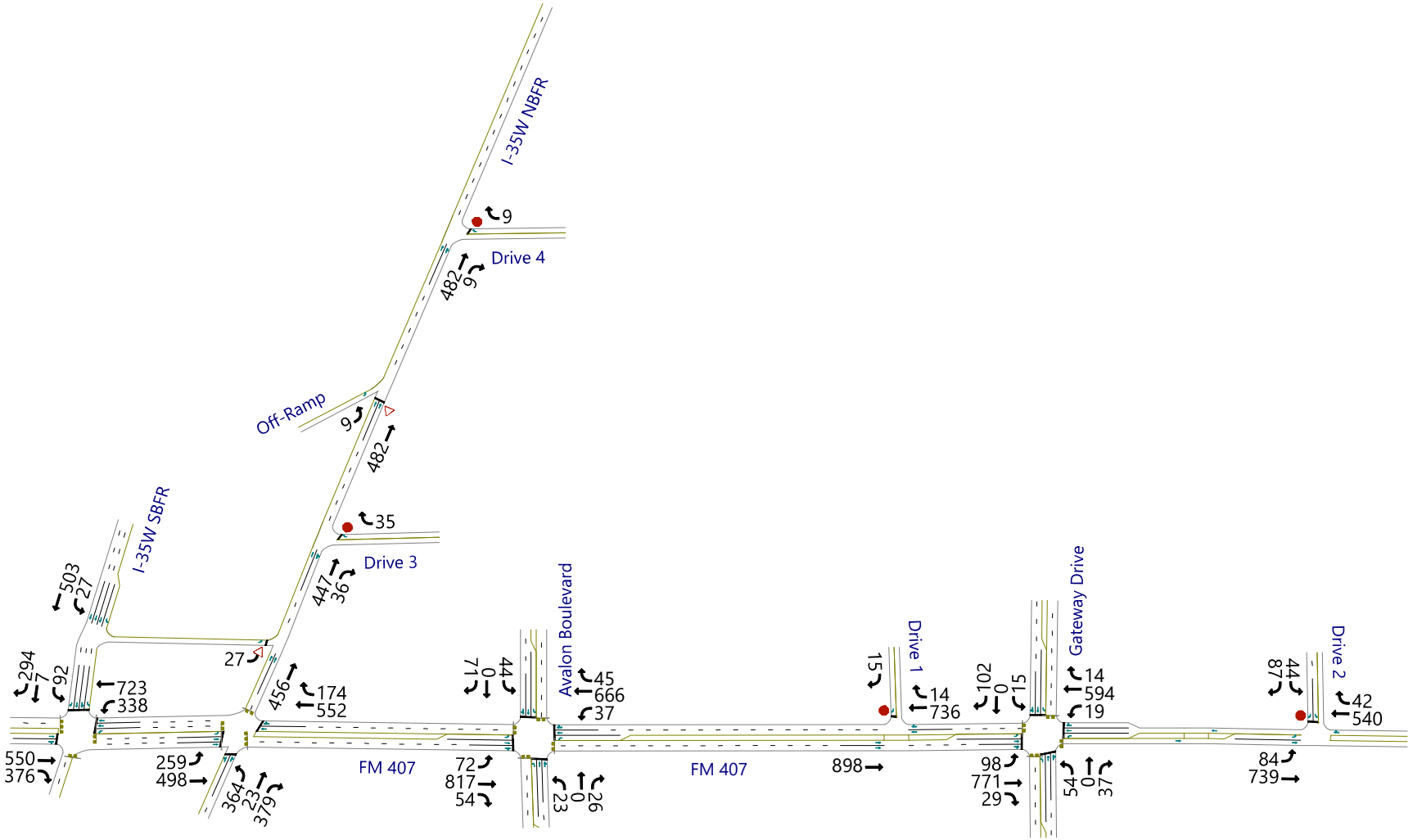


12/19/2025
HWL

SPIARS

Appendix C9 - 2030 Build PM
25-028

North
Not to Scale

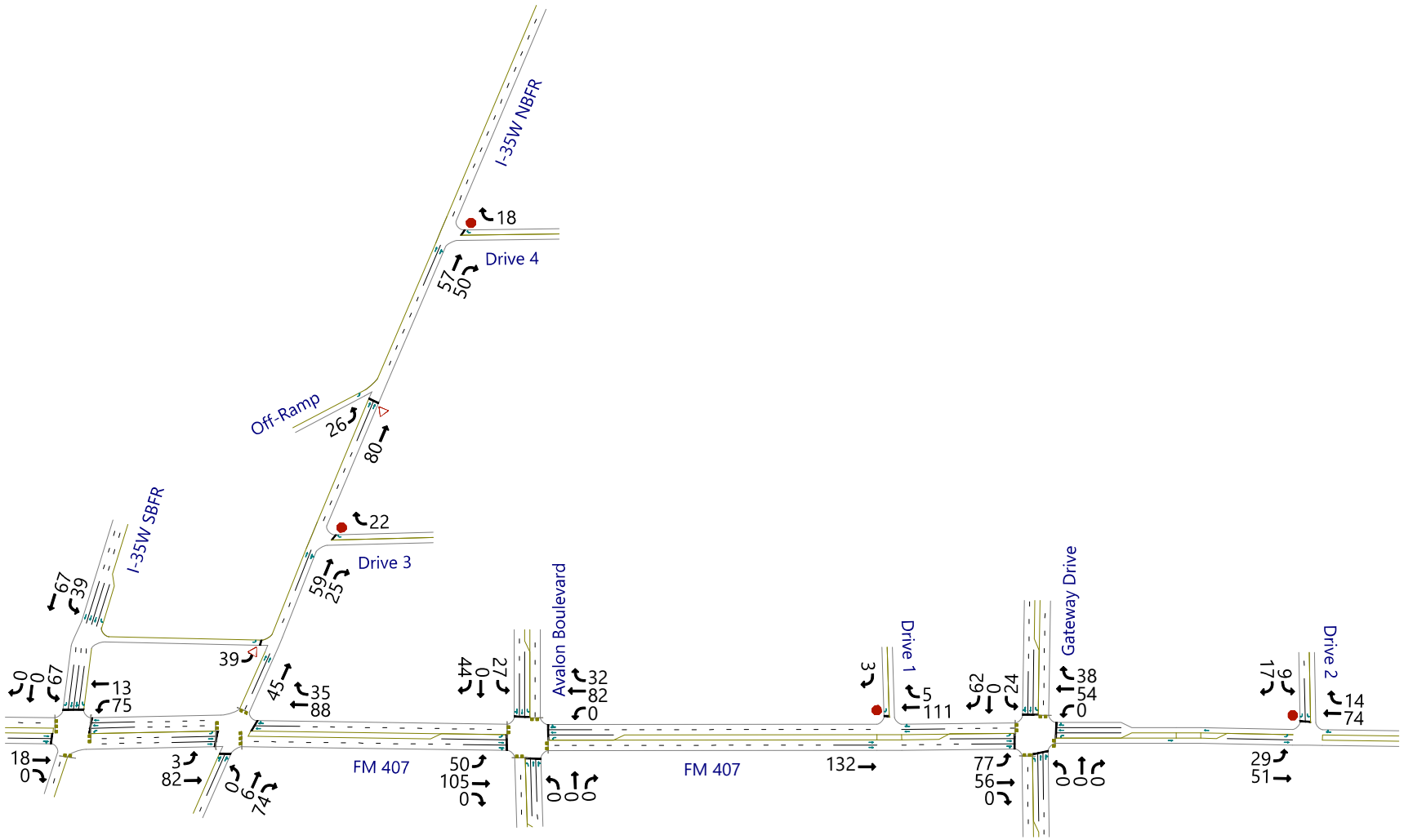


12/19/2025
HWL

SPIARS

Appendix C10 - 2035 Site Generated AM
25-028

North
Not to Scale

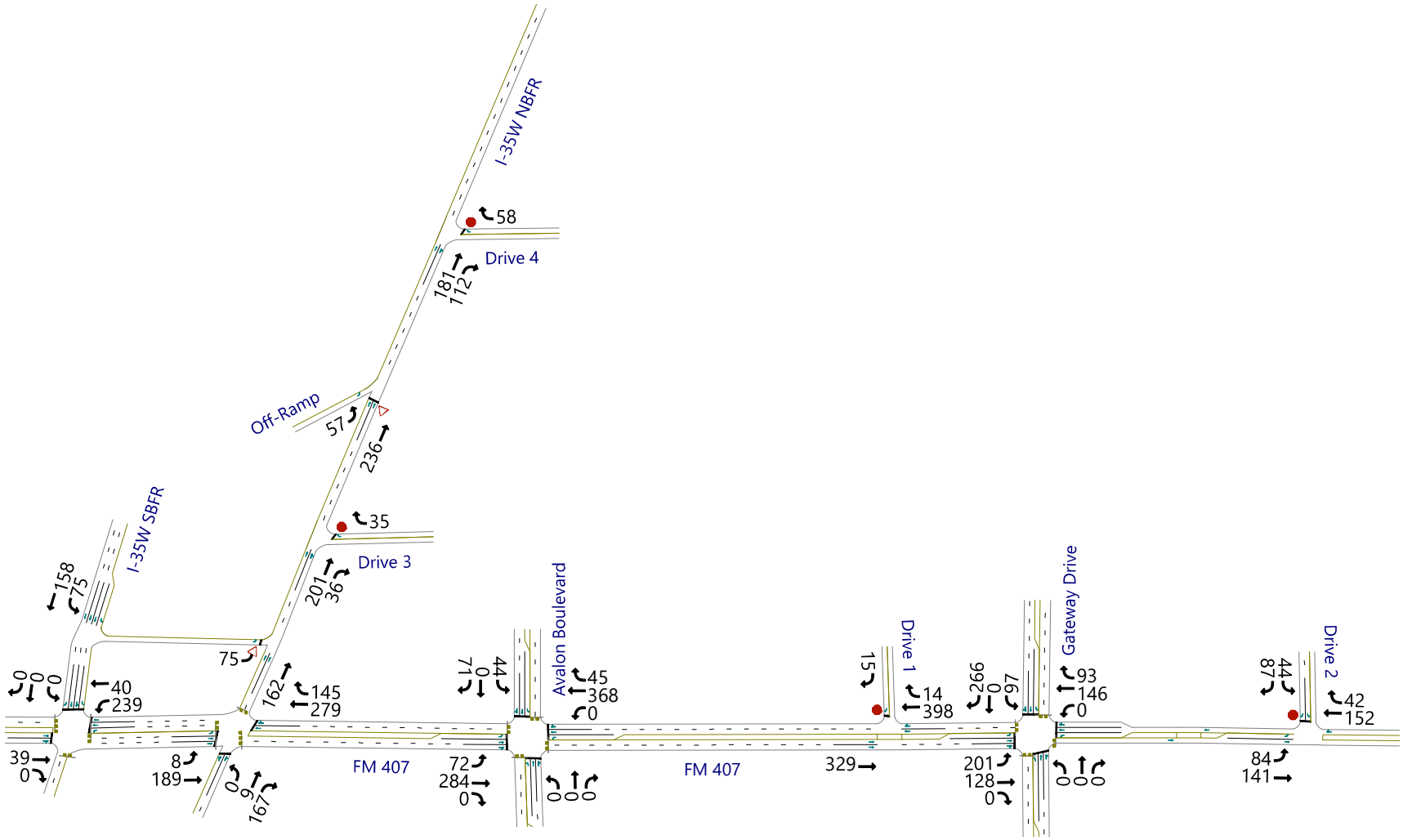


12/19/2025
HWL

SPIARS

Appendix C11 - 2035 Site Generated PM
25-028

North
Not to Scale

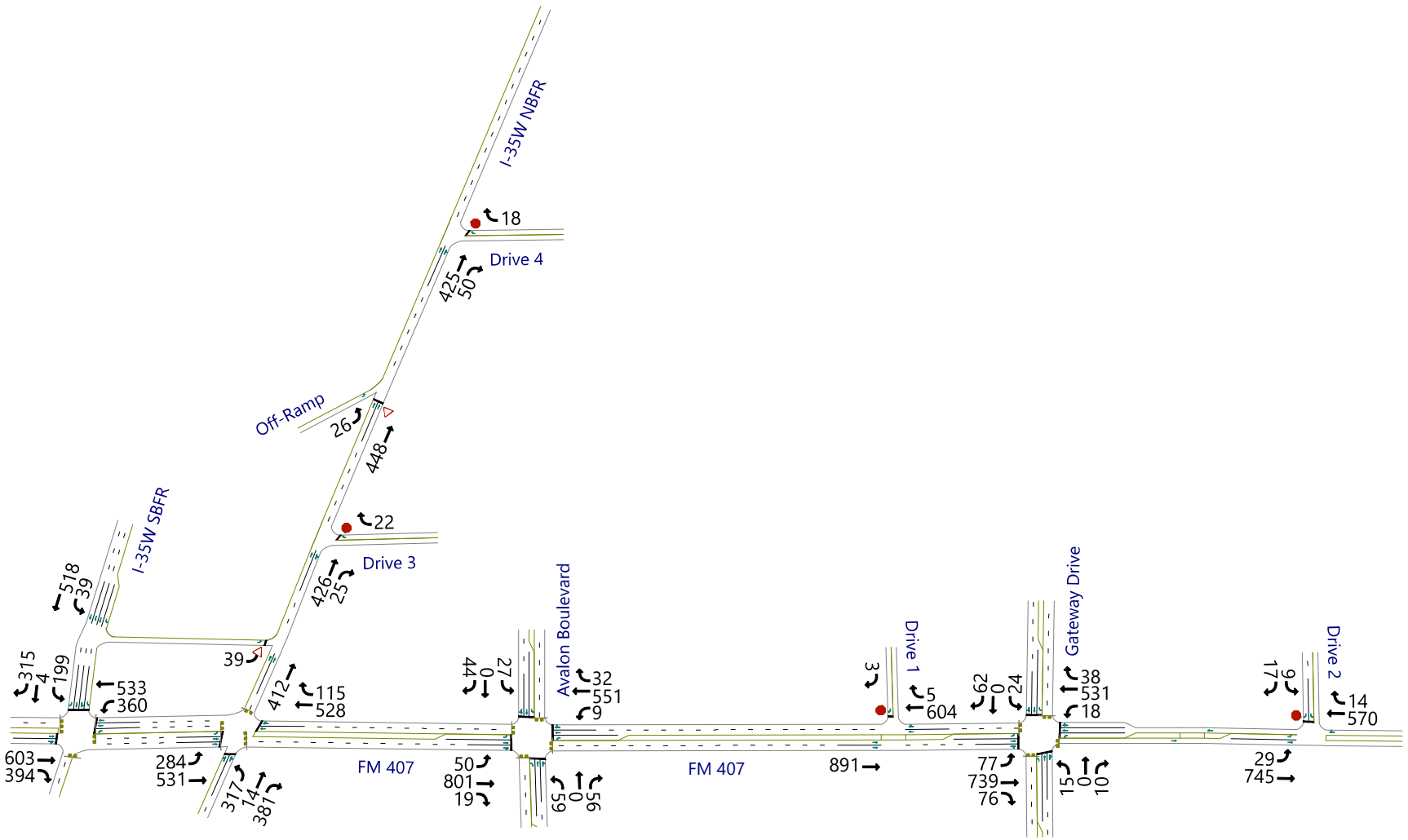


12/19/2025
HWL

SPIARS

Appendix C12 - 2035 Build AM
25-028

North
Not to Scale

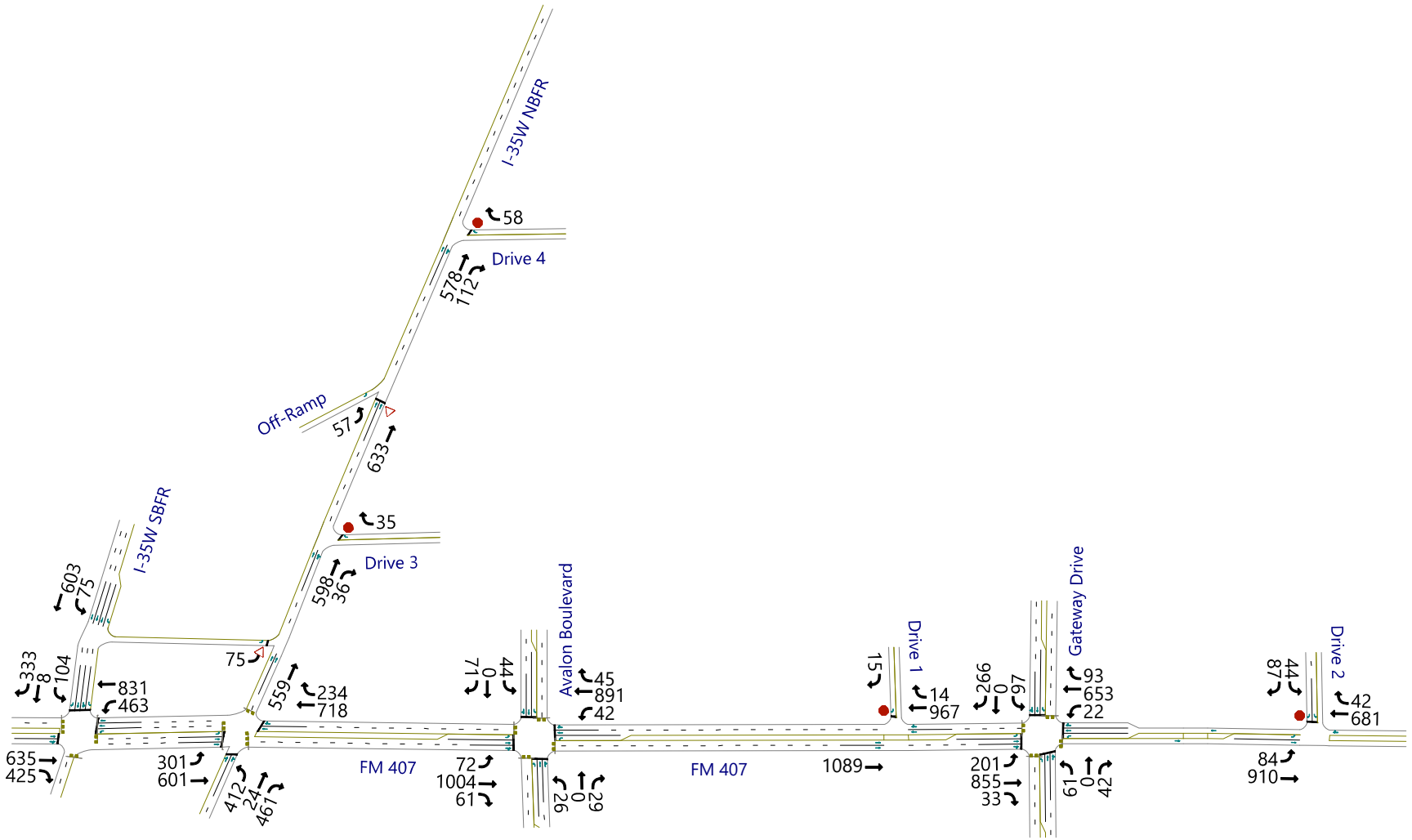


12/19/2025
HWL

SPIARS

Appendix C13 - 2035 Build PM
25-028

North
Not to Scale

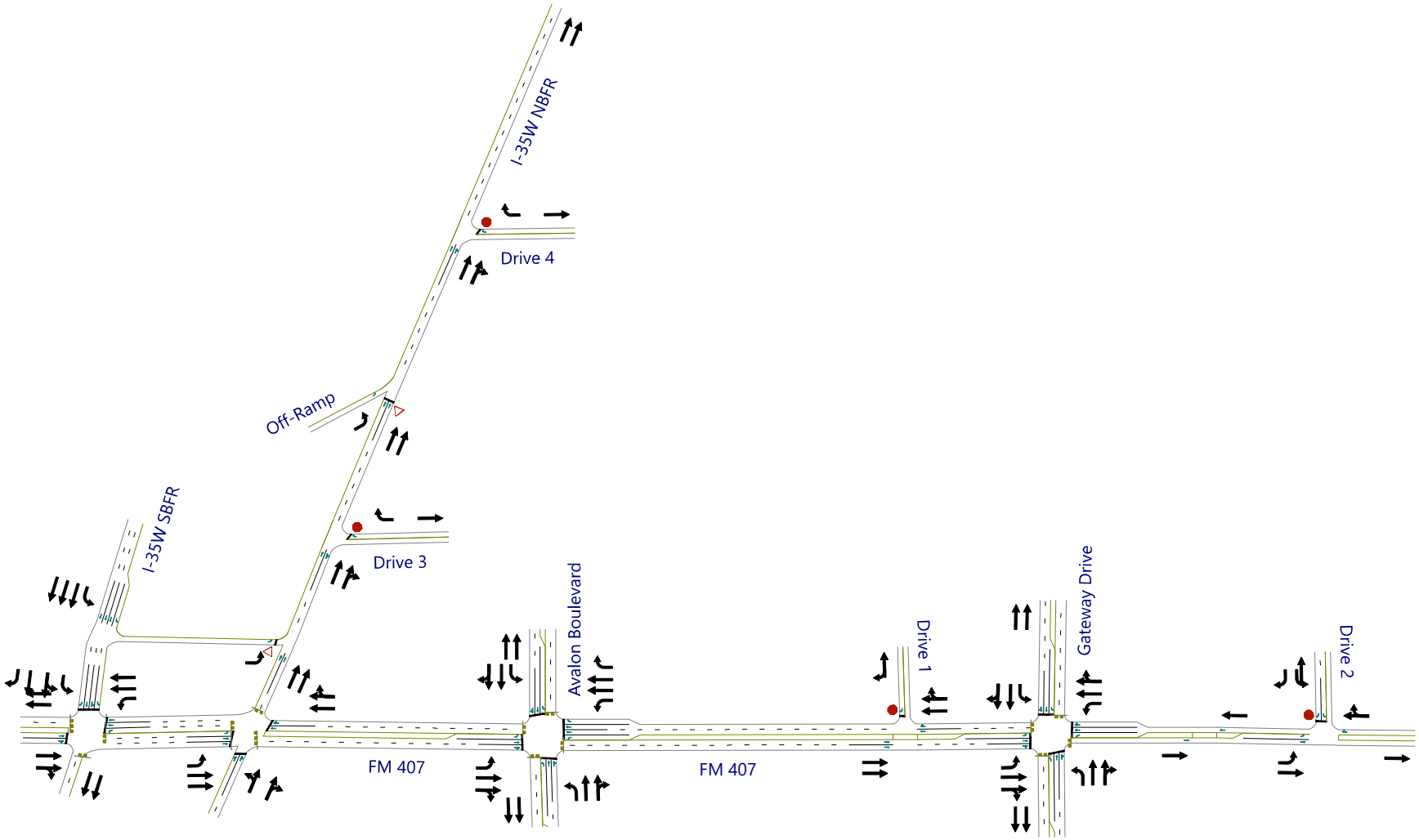


12/19/2025
HWL

SPIARS

Appendix C14 - Future Roadway Geometry
25-028

North
Not to Scale



12/19/2025
HWL

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Appendix D – Synchro Analysis

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	457	308	223	407	0	0	0	0	103	3	246
Future Volume (vph)	0	457	308	223	407	0	0	0	0	103	3	246
Peak Hour Factor	0.92	0.96	0.88	0.83	0.91	0.92	0.92	0.92	0.92	0.95	0.25	0.89
Adj. Flow (vph)	0	476	350	269	447	0	0	0	0	108	12	276
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	476	350	269	447	0	0	0	0	108	288	0
Turn Type		NA	Perm	pm+pt	NA					Perm	NA	
Protected Phases		4		3	3 4						2	
Permitted Phases			4	3 4						2		
Detector Phase		4	4	3	3 4					2	2	
Switch Phase												
Minimum Initial (s)		5.0	5.0	5.0						5.0	5.0	
Minimum Split (s)		22.5	22.5	9.5						22.5	22.5	
Total Split (s)		34.0	34.0	26.0						25.0	25.0	
Total Split (%)		40.0%	40.0%	30.6%						29.4%	29.4%	
Yellow Time (s)		3.5	3.5	3.5						3.5	3.5	
All-Red Time (s)		1.0	1.0	1.0						1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0						0.0	0.0	
Total Lost Time (s)		4.5	4.5	4.5						4.5	4.5	
Lead/Lag		Lead	Lead	Lag								
Lead-Lag Optimize?		Yes	Yes	Yes								
Recall Mode		C-Max	C-Max	None						Max	Max	
Act Effct Green (s)		29.5	29.5	41.7	46.2					29.8	29.8	
Actuated g/C Ratio		0.35	0.35	0.49	0.54					0.35	0.35	
v/c Ratio		0.74	0.45	0.66	0.44					0.17	0.39	
Control Delay (s/veh)		32.5	4.4	31.5	12.4					22.2	5.5	
Queue Delay		0.0	0.0	0.0	0.7					0.0	0.0	
Total Delay (s/veh)		32.5	4.4	31.5	13.0					22.2	5.5	
LOS		C	A	C	B					C	A	
Approach Delay (s/veh)		20.6			20.0						10.0	
Approach LOS		C			B						B	
Queue Length 50th (ft)		220	0	86	115					39	4	
Queue Length 95th (ft)		334	50	130	193					87	0	
Internal Link Dist (ft)		88			264			81			124	
Turn Bay Length (ft)				125								
Base Capacity (vph)		646	777	599	1216					620	738	
Starvation Cap Reductn		0	0	0	436					0	0	
Spillback Cap Reductn		0	0	0	0					0	0	
Storage Cap Reductn		0	0	0	0					0	0	
Reduced v/c Ratio		0.74	0.45	0.45	0.57					0.17	0.39	

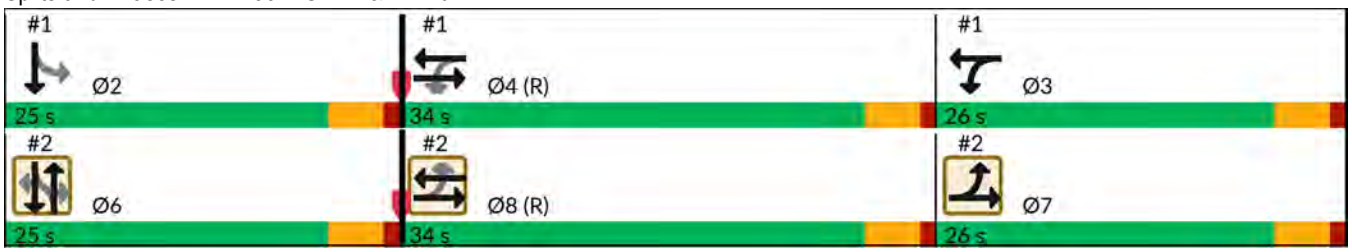
Intersection Summary
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 51 (60%), Referenced to phase 4:EBWB and 8:, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.74

Lane Group	Ø6	Ø7	Ø8
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Peak Hour Factor			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	6	7	8
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5
Total Split (s)	25.0	26.0	34.0
Total Split (%)	29%	31%	40%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag		Lag	Lead
Lead-Lag Optimize?		Yes	Yes
Recall Mode	Max	None	C-Max
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Intersection Signal Delay (s/veh): 18.2	Intersection LOS: B
Intersection Capacity Utilization 63.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: I-35W SBFR & FM 407



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	219	351	0	0	344	62	248	6	240	1	0	22
Future Volume (vph)	219	351	0	0	344	62	248	6	240	1	0	22
Peak Hour Factor	0.93	0.92	0.92	0.92	0.90	0.82	0.85	0.50	0.92	0.25	0.92	0.61
Adj. Flow (vph)	235	382	0	0	382	76	292	12	261	4	0	36
Shared Lane Traffic (%)												
Lane Group Flow (vph)	235	382	0	0	382	76	292	273	0	0	40	0
Turn Type	pm+pt	NA			NA	Perm	Perm	NA		Perm	NA	
Protected Phases	7	7 8			8			6			6	
Permitted Phases	7 8					8	6			6		
Detector Phase	7	7 8			8	8	6	6		6	6	
Switch Phase												
Minimum Initial (s)	5.0				5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5				22.5	22.5	22.5	22.5		22.5	22.5	
Total Split (s)	26.0				34.0	34.0	25.0	25.0		25.0	25.0	
Total Split (%)	30.6%				40.0%	40.0%	29.4%	29.4%		29.4%	29.4%	
Yellow Time (s)	3.5				3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0				1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0				0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.5				4.5	4.5	4.5	4.5			4.5	
Lead/Lag	Lag				Lead	Lead						
Lead-Lag Optimize?	Yes				Yes	Yes						
Recall Mode	None				C-Max	C-Max	Max	Max		Max	Max	
Act Effct Green (s)	41.7	46.2			29.5	29.5	29.8	29.8			29.8	
Actuated g/C Ratio	0.49	0.54			0.35	0.35	0.35	0.35			0.35	
v/c Ratio	0.49	0.38			0.59	0.13	0.61	0.37			0.07	
Control Delay (s/veh)	11.8	5.6			27.4	5.5	32.1	5.5			2.0	
Queue Delay	0.0	0.4			0.2	0.0	0.0	0.0			0.0	
Total Delay (s/veh)	11.8	6.0			27.6	5.5	32.1	5.5			2.0	
LOS	B	A			C	A	C	A			A	
Approach Delay (s/veh)		8.2			23.9			19.3			2.0	
Approach LOS		A			C			B			A	
Queue Length 50th (ft)	27	44			165	0	126	4			0	
Queue Length 95th (ft)	m51	m59			256	22	#252	0			8	
Internal Link Dist (ft)		264			606			121			540	
Turn Bay Length (ft)	125					200						
Base Capacity (vph)	671	1216			646	599	477	729			609	
Starvation Cap Reductn	0	430			0	0	0	0			0	
Spillback Cap Reductn	0	0			29	0	0	0			1	
Storage Cap Reductn	0	0			0	0	0	0			0	
Reduced v/c Ratio	0.35	0.49			0.62	0.13	0.61	0.37			0.07	

Intersection Summary

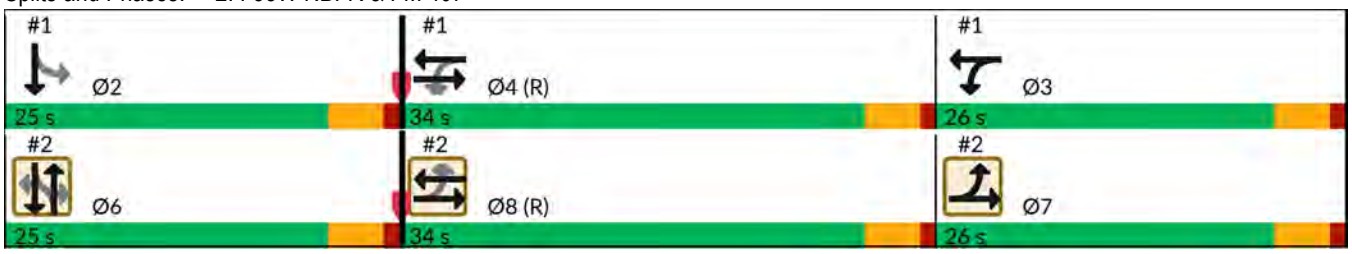
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 51 (60%), Referenced to phase 4:EBWB and 8:, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.74

Lane Group	Ø2	Ø3	Ø4
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Peak Hour Factor			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	2	3	4
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5
Total Split (s)	25.0	26.0	34.0
Total Split (%)	29%	31%	40%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag		Lag	Lead
Lead-Lag Optimize?		Yes	Yes
Recall Mode	Max	None	C-Max
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Intersection Signal Delay (s/veh): 16.1 Intersection LOS: B
Intersection Capacity Utilization 61.9% 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.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: I-35W NBFR & FM 407



Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	544	15	7	366	46	44
Future Vol, veh/h	544	15	7	366	46	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	400	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	75	29	92	82	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	567	20	24	398	56	56

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	587	0	1023	577
Stage 1	-	-	-	-	577	-
Stage 2	-	-	-	-	446	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	960	-	244	572
Stage 1	-	-	-	-	580	-
Stage 2	-	-	-	-	645	-
Platoon blocked, %	-	-	0	-	0	0
Mov Cap-1 Maneuver	-	-	960	-	238	572
Mov Cap-2 Maneuver	-	-	-	-	238	-
Stage 1	-	-	-	-	580	-
Stage 2	-	-	-	-	629	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.51	18.37
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	238	572	-	-	960	-
HCM Lane V/C Ratio	0.236	0.097	-	-	0.025	-
HCM Ctrl Dly (s/v)	24.7	12	-	-	8.8	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	0.9	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	534	59	14	373	12	8
Future Vol, veh/h	534	59	14	373	12	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	400	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	67	50	96	60	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	587	88	28	389	20	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	675	0	1031	587
Stage 1	-	-	-	-	587	-
Stage 2	-	-	-	-	445	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	868	-	239	578
Stage 1	-	-	-	-	579	-
Stage 2	-	-	-	-	646	-
Platoon blocked, %	-	-	0	-	0	0
Mov Cap-1 Maneuver	-	-	868	-	231	578
Mov Cap-2 Maneuver	-	-	-	-	231	-
Stage 1	-	-	-	-	579	-
Stage 2	-	-	-	-	625	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.62	18.53
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	298	-	-	868	-
HCM Lane V/C Ratio	0.107	-	-	0.032	-
HCM Ctrl Dly (s/v)	18.5	-	-	9.3	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	466	332	175	618	0	0	0	0	81	6	260
Future Volume (vph)	0	466	332	175	618	0	0	0	0	81	6	260
Peak Hour Factor	0.92	0.91	0.76	0.97	0.97	0.92	0.92	0.92	0.92	0.92	0.44	0.86
Adj. Flow (vph)	0	512	437	180	637	0	0	0	0	88	14	302
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	512	437	180	637	0	0	0	0	88	316	0
Turn Type		NA	Perm	pm+pt	NA					Perm	NA	
Protected Phases		4		3	3 4						2	
Permitted Phases			4	3 4						2		
Detector Phase		4	4	3	3 4					2	2	
Switch Phase												
Minimum Initial (s)		5.0	5.0	5.0						5.0	5.0	
Minimum Split (s)		22.5	22.5	9.5						22.5	22.5	
Total Split (s)		34.0	34.0	26.0						25.0	25.0	
Total Split (%)		40.0%	40.0%	30.6%						29.4%	29.4%	
Yellow Time (s)		3.5	3.5	3.5						3.5	3.5	
All-Red Time (s)		1.0	1.0	1.0						1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0						0.0	0.0	
Total Lost Time (s)		4.5	4.5	4.5						4.5	4.5	
Lead/Lag		Lead	Lead	Lag								
Lead-Lag Optimize?		Yes	Yes	Yes								
Recall Mode		C-Max	C-Max	None						Max	Max	
Act Effct Green (s)		29.5	29.5	40.0	44.5					31.5	31.5	
Actuated g/C Ratio		0.35	0.35	0.47	0.52					0.37	0.37	
v/c Ratio		0.79	0.52	0.52	0.65					0.13	0.40	
Control Delay (s/veh)		35.8	4.7	27.9	19.4					19.9	5.0	
Queue Delay		0.0	0.0	0.0	1.1					0.0	0.0	
Total Delay (s/veh)		35.8	4.7	27.9	20.6					19.9	5.0	
LOS		D	A	C	C					B	A	
Approach Delay (s/veh)		21.5			22.2						8.2	
Approach LOS		C			C						A	
Queue Length 50th (ft)		243	0	49	332					30	5	
Queue Length 95th (ft)		#400	23	m84	461					69	0	
Internal Link Dist (ft)		88			264			81			124	
Turn Bay Length (ft)				125								
Base Capacity (vph)		646	834	571	1216					655	781	
Starvation Cap Reductn		0	0	0	340					0	0	
Spillback Cap Reductn		0	0	0	0					0	0	
Storage Cap Reductn		0	0	0	0					0	0	
Reduced v/c Ratio		0.79	0.52	0.32	0.73					0.13	0.40	

Intersection Summary

Cycle Length: 85
Actuated Cycle Length: 85
Offset: 51 (60%), Referenced to phase 4:EBWB and 8:, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79

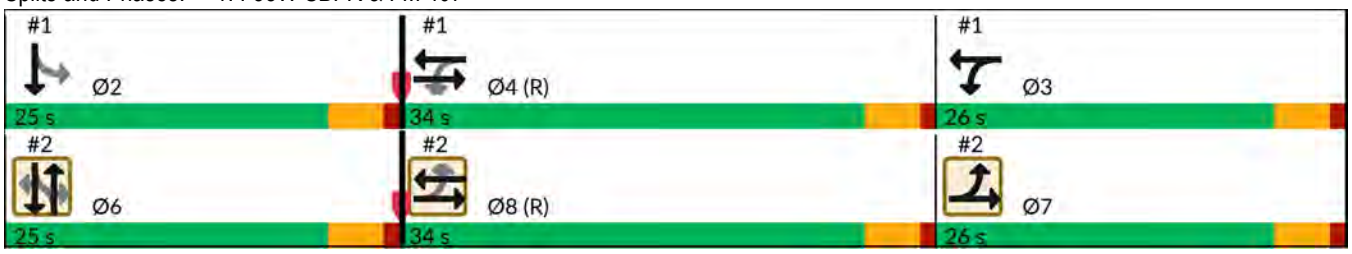
Lane Group	Ø6	Ø7	Ø8
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Peak Hour Factor			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	6	7	8
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5
Total Split (s)	25.0	26.0	34.0
Total Split (%)	29%	31%	40%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag		Lag	Lead
Lead-Lag Optimize?		Yes	Yes
Recall Mode	Max	None	C-Max
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Intersection Signal Delay (s/veh): 19.3	Intersection LOS: B
Intersection Capacity Utilization 61.9%	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.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: I-35W SBFR & FM 407



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	229	322	0	0	343	69	322	12	229	5	0	110
Future Volume (vph)	229	322	0	0	343	69	322	12	229	5	0	110
Peak Hour Factor	0.88	0.94	0.92	0.92	0.88	0.69	0.95	0.60	0.90	0.42	0.92	0.76
Adj. Flow (vph)	260	343	0	0	390	100	339	20	254	12	0	145
Shared Lane Traffic (%)												
Lane Group Flow (vph)	260	343	0	0	390	100	339	274	0	0	157	0
Turn Type	pm+pt	NA			NA	Perm	Perm	NA		Perm	NA	
Protected Phases	7	7 8			8			6			6	
Permitted Phases	7 8					8	6			6		
Detector Phase	7	7 8			8	8	6	6		6	6	
Switch Phase												
Minimum Initial (s)	5.0				5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5				22.5	22.5	22.5	22.5		22.5	22.5	
Total Split (s)	26.0				34.0	34.0	25.0	25.0		25.0	25.0	
Total Split (%)	30.6%				40.0%	40.0%	29.4%	29.4%		29.4%	29.4%	
Yellow Time (s)	3.5				3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0				1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0				0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.5				4.5	4.5	4.5	4.5			4.5	
Lead/Lag	Lag				Lead	Lead						
Lead-Lag Optimize?	Yes				Yes	Yes						
Recall Mode	None				C-Max	C-Max	Max	Max		Max	Max	
Act Effct Green (s)	40.0	44.5			29.5	29.5	31.5	31.5			31.5	
Actuated g/C Ratio	0.47	0.52			0.35	0.35	0.37	0.37			0.37	
v/c Ratio	0.60	0.35			0.60	0.16	0.76	0.36			0.23	
Control Delay (s/veh)	13.2	4.4			27.7	5.0	38.5	5.3			5.6	
Queue Delay	0.0	0.3			12.0	0.0	0.0	0.0			0.0	
Total Delay (s/veh)	13.2	4.7			39.7	5.0	38.5	5.3			5.7	
LOS	B	A			D	A	D	A			A	
Approach Delay (s/veh)		8.4			32.6			23.6			5.7	
Approach LOS		A			C			C			A	
Queue Length 50th (ft)	25	29			169	0	154	7			4	
Queue Length 95th (ft)	m70	m37			254	15	#334	6			46	
Internal Link Dist (ft)		264			606			121			540	
Turn Bay Length (ft)	125					200						
Base Capacity (vph)	664	1216			646	614	445	754			677	
Starvation Cap Reductn	0	395			0	0	0	0			0	
Spillback Cap Reductn	0	0			230	0	0	0			21	
Storage Cap Reductn	0	0			0	0	0	0			0	
Reduced v/c Ratio	0.39	0.42			0.94	0.16	0.76	0.36			0.24	

Intersection Summary
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 51 (60%), Referenced to phase 4:EBWB and 8:, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79

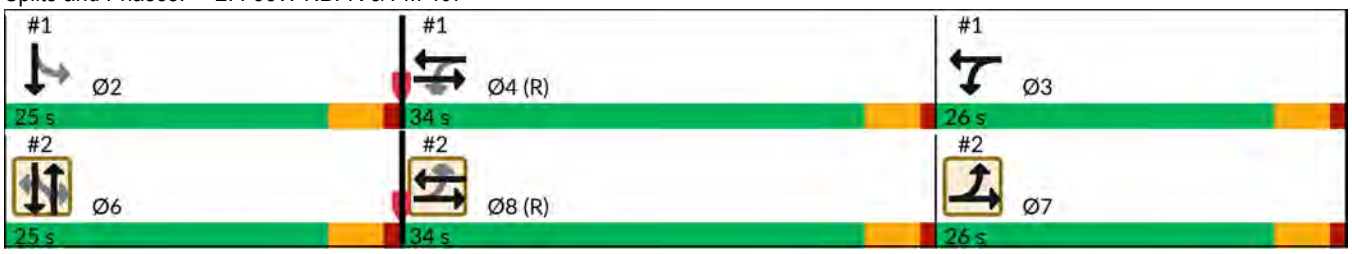
Lane Group	Ø2	Ø3	Ø4
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Peak Hour Factor			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	2	3	4
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5
Total Split (s)	25.0	26.0	34.0
Total Split (%)	29%	31%	40%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag		Lag	Lead
Lead-Lag Optimize?		Yes	Yes
Recall Mode	Max	None	C-Max
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Intersection Signal Delay (s/veh): 19.5	Intersection LOS: B
Intersection Capacity Utilization 66.5%	ICU Level of Service C
Analysis Period (min) 15	

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

Splits and Phases: 2: I-35W NBFR & FM 407



Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	562	48	33	409	20	23
Future Vol, veh/h	562	48	33	409	20	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	400	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	63	92	87	71	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	661	76	36	470	28	28

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	737	0	1241	699
Stage 1	-	-	-	-	699	-
Stage 2	-	-	-	-	542	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	811	-	165	465
Stage 1	-	-	-	-	490	-
Stage 2	-	-	-	-	583	-
Platoon blocked, %	-	-	0	-	0	0
Mov Cap-1 Maneuver	-	-	811	-	157	465
Mov Cap-2 Maneuver	-	-	-	-	157	-
Stage 1	-	-	-	-	490	-
Stage 2	-	-	-	-	557	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.68	23.04
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	157	465	-	-	811	-
HCM Lane V/C Ratio	0.179	0.06	-	-	0.044	-
HCM Ctrl Dly (s/v)	32.8	13.2	-	-	9.6	-
HCM Lane LOS	D	B	-	-	A	-
HCM 95th %tile Q(veh)	0.6	0.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	568	26	17	396	48	33
Future Vol, veh/h	568	26	17	396	48	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	400	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	65	71	88	75	59
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	693	40	24	450	64	56

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	733	0	1191	693
Stage 1	-	-	-	-	693	-
Stage 2	-	-	-	-	498	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	809	-	175	486
Stage 1	-	-	-	-	500	-
Stage 2	-	-	-	-	611	-
Platoon blocked, %	-	-	0	-	0	0
Mov Cap-1 Maneuver	-	-	809	-	169	486
Mov Cap-2 Maneuver	-	-	-	-	169	-
Stage 1	-	-	-	-	500	-
Stage 2	-	-	-	-	593	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.48	33.36
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	243	-	-	809	-
HCM Lane V/C Ratio	0.493	-	-	0.03	-
HCM Ctrl Dly (s/v)	33.4	-	-	9.6	-
HCM Lane LOS	D	-	-	A	-
HCM 95th %tile Q(veh)	2.5	-	-	0.1	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	517	348	252	460	0	0	0	0	117	3	278
Future Volume (vph)	0	517	348	252	460	0	0	0	0	117	3	278
Peak Hour Factor	0.92	0.96	0.88	0.83	0.91	0.92	0.92	0.92	0.92	0.95	0.25	0.89
Adj. Flow (vph)	0	539	395	304	505	0	0	0	0	123	12	312
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	934	0	304	505	0	0	0	0	61	74	312
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		4		3	3 4						2	
Permitted Phases				3 4						2		2
Detector Phase		4		3	3 4					2	2	2
Switch Phase												
Minimum Initial (s)		5.0		5.0						5.0	5.0	5.0
Minimum Split (s)		22.5		9.5						22.5	22.5	22.5
Total Split (s)		34.0		26.0						25.0	25.0	25.0
Total Split (%)		40.0%		30.6%						29.4%	29.4%	29.4%
Yellow Time (s)		3.5		3.5						3.5	3.5	3.5
All-Red Time (s)		1.0		1.0						1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0						0.0	0.0	0.0
Total Lost Time (s)		4.5		4.5						4.5	4.5	4.5
Lead/Lag		Lead		Lag								
Lead-Lag Optimize?		Yes		Yes								
Recall Mode		C-Max		None						Max	Max	Max
Act Effct Green (s)		29.5		45.7	50.2					25.8	25.8	25.8
Actuated g/C Ratio		0.35		0.54	0.59					0.30	0.30	0.30
v/c Ratio		0.72		0.72	0.24					0.12	0.07	0.45
Control Delay (s/veh)		21.2		37.9	7.1					24.8	23.7	5.6
Queue Delay		0.0		0.0	0.0					0.0	0.0	0.0
Total Delay (s/veh)		21.2		37.9	7.1					24.8	23.7	5.6
LOS		C		D	A					C	C	A
Approach Delay (s/veh)		21.2			18.7						11.2	
Approach LOS		C			B						B	
Queue Length 50th (ft)		170		123	54					26	15	0
Queue Length 95th (ft)		242		185	76					64	9	60
Internal Link Dist (ft)		88			264			81			95	
Turn Bay Length (ft)												
Base Capacity (vph)		1306		535	2310					489	989	698
Starvation Cap Reductn		0		0	0					0	0	0
Spillback Cap Reductn		0		0	0					0	0	0
Storage Cap Reductn		0		0	0					0	0	0
Reduced v/c Ratio		0.72		0.57	0.22					0.12	0.07	0.45

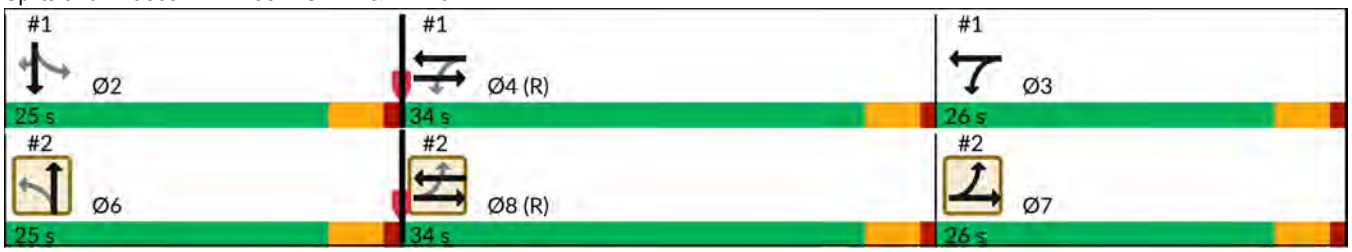
Intersection Summary
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 51 (60%), Referenced to phase 4:EBWB and 8:, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.72

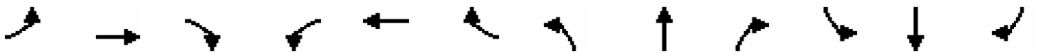
Lane Group	Ø6	Ø7	Ø8
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Peak Hour Factor			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	6	7	8
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5
Total Split (s)	25.0	26.0	34.0
Total Split (%)	29%	31%	40%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag		Lag	Lead
Lead-Lag Optimize?		Yes	Yes
Recall Mode	Max	None	C-Max
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Intersection Signal Delay (s/veh): 18.2	Intersection LOS: B
Intersection Capacity Utilization 55.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: I-35W SBFR & FM 407





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	248	397	0	0	389	70	281	7	272	0	0	0
Future Volume (vph)	248	397	0	0	389	70	281	7	272	0	0	0
Peak Hour Factor	0.93	0.92	0.92	0.92	0.90	0.82	0.85	0.50	0.92	0.92	0.92	0.92
Adj. Flow (vph)	267	432	0	0	432	85	331	14	296	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	267	432	0	0	517	0	0	641	0	0	0	0
Turn Type	pm+pt	NA			NA		Perm	NA				
Protected Phases	7	7 8			8			6				
Permitted Phases	7 8						6					
Detector Phase	7	7 8			8		6	6				
Switch Phase												
Minimum Initial (s)	5.0				5.0		5.0	5.0				
Minimum Split (s)	9.5				22.5		22.5	22.5				
Total Split (s)	26.0				34.0		25.0	25.0				
Total Split (%)	30.6%				40.0%		29.4%	29.4%				
Yellow Time (s)	3.5				3.5		3.5	3.5				
All-Red Time (s)	1.0				1.0		1.0	1.0				
Lost Time Adjust (s)	0.0				0.0			0.0				
Total Lost Time (s)	4.5				4.5			4.5				
Lead/Lag	Lag				Lead							
Lead-Lag Optimize?	Yes				Yes							
Recall Mode	None				C-Max		Max	Max				
Act Effct Green (s)	45.7	50.2			29.5			25.8				
Actuated g/C Ratio	0.54	0.59			0.35			0.30				
v/c Ratio	0.46	0.21			0.43			0.56				
Control Delay (s/veh)	13.2	5.6			21.3			18.3				
Queue Delay	0.0	0.0			0.0			0.0				
Total Delay (s/veh)	13.2	5.6			21.3			18.3				
LOS	B	A			C			B				
Approach Delay (s/veh)		8.5			21.3			18.3				
Approach LOS		A			C			B				
Queue Length 50th (ft)	42	35			104			94				
Queue Length 95th (ft)	m58	44			149			50				
Internal Link Dist (ft)		264			606			121			66	
Turn Bay Length (ft)												
Base Capacity (vph)	691	2310			1216			1143				
Starvation Cap Reductn	2	0			0			0				
Spillback Cap Reductn	0	0			0			0				
Storage Cap Reductn	0	0			0			0				
Reduced v/c Ratio	0.39	0.19			0.43			0.56				

Intersection Summary
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 51 (60%), Referenced to phase 4:EBWB and 8:, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.72

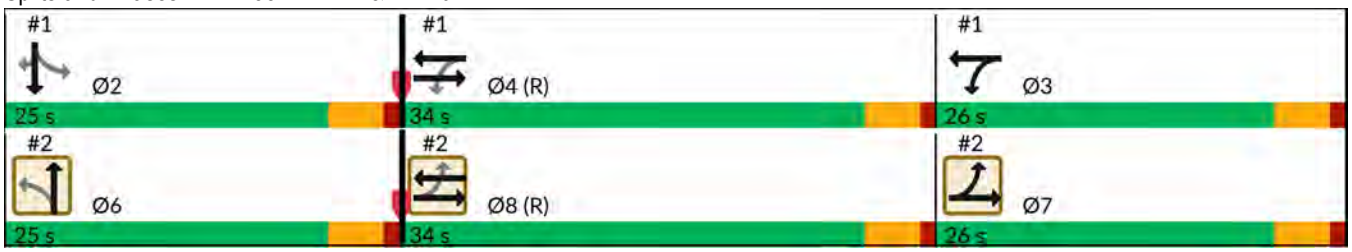
Lane Group	Ø2	Ø3	Ø4
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Peak Hour Factor			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	2	3	4
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5
Total Split (s)	25.0	26.0	34.0
Total Split (%)	29%	31%	40%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag		Lag	Lead
Lead-Lag Optimize?		Yes	Yes
Recall Mode	Max	None	C-Max
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Intersection Signal Delay (s/veh): 15.4	Intersection LOS: B
Intersection Capacity Utilization 55.1%	ICU Level of Service B
Analysis Period (min) 15	

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

Splits and Phases: 2: I-35W NBFR & FM 407

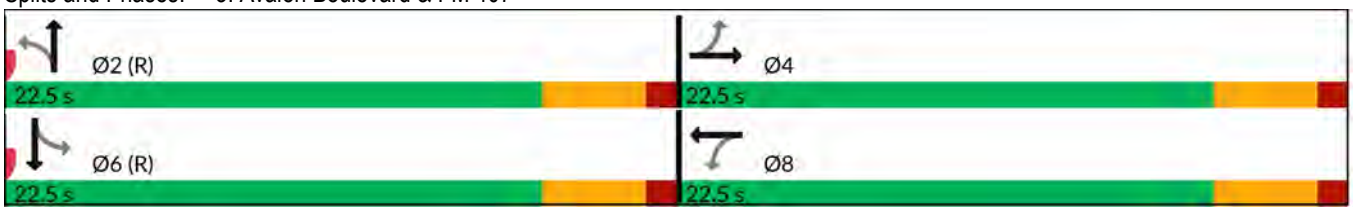


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	615	17	8	414	0	52	0	50	0	0	0
Future Volume (vph)	0	615	17	8	414	0	52	0	50	0	0	0
Peak Hour Factor	0.92	0.96	0.75	0.29	0.92	0.92	0.82	0.92	0.79	0.92	0.92	0.92
Adj. Flow (vph)	0	641	23	28	450	0	63	0	63	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	664	0	28	450	0	63	63	0	0	0	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)		14.0		14.0	14.0		22.0	22.0				
Actuated g/C Ratio		0.31		0.31	0.31		0.49	0.49				
v/c Ratio		0.60		0.15	0.41		0.09	0.04				
Control Delay (s/veh)		15.0		11.9	12.8		8.0	0.6				
Queue Delay		0.0		0.0	0.0		0.0	0.0				
Total Delay (s/veh)		15.0		11.9	12.8		8.0	0.6				
LOS		B		B	B		A	A				
Approach Delay (s/veh)		15.0			12.7			4.3				
Approach LOS		B			B			A				
Queue Length 50th (ft)		73		5	47		8	0				
Queue Length 95th (ft)		98		5	66		25	2				
Internal Link Dist (ft)		606			1077			125			168	
Turn Bay Length (ft)				150			150					
Base Capacity (vph)		1414		234	1415		690	1539				
Starvation Cap Reductn		0		0	0		0	0				
Spillback Cap Reductn		0		0	0		0	0				
Storage Cap Reductn		0		0	0		0	0				
Reduced v/c Ratio		0.47		0.12	0.32		0.09	0.04				

Intersection Summary
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.60

Intersection Signal Delay (s/veh): 13.1 Intersection LOS: B
Intersection Capacity Utilization 29.2% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 3: Avalon Boulevard & FM 407

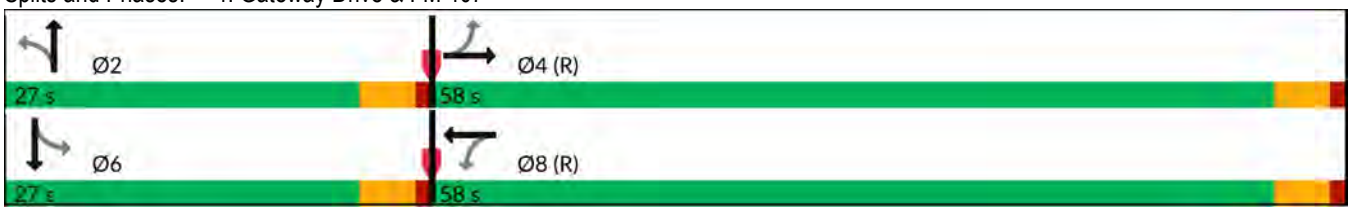


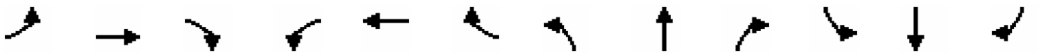
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	604	67	16	422	0	14	0	9	0	0	0
Future Volume (vph)	0	604	67	16	422	0	14	0	9	0	0	0
Peak Hour Factor	0.92	0.91	0.67	0.50	0.96	0.92	0.60	0.92	0.67	0.92	0.92	0.92
Adj. Flow (vph)	0	664	100	32	440	0	23	0	13	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	764	0	32	440	0	23	13	0	0	0	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	58.0	58.0		58.0	58.0		27.0	27.0		27.0	27.0	
Total Split (%)	68.2%	68.2%		68.2%	68.2%		31.8%	31.8%		31.8%	31.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		Max	Max		Max	Max	
Act Effct Green (s)		53.5		53.5	53.5		22.5	22.5				
Actuated g/C Ratio		0.63		0.63	0.63		0.26	0.26				
v/c Ratio		0.35		0.08	0.20		0.06	0.01				
Control Delay (s/veh)		7.6		6.9	6.9		24.1	0.0				
Queue Delay		0.0		0.0	0.0		0.0	0.0				
Total Delay (s/veh)		7.6		6.9	6.9		24.1	0.0				
LOS		A		A	A		C	A				
Approach Delay (s/veh)		7.6			6.9			15.4				
Approach LOS		A			A			B				
Queue Length 50th (ft)		86		6	47		9	0				
Queue Length 95th (ft)		118		9	68		18	0				
Internal Link Dist (ft)		254			354			153			178	
Turn Bay Length (ft)				150			150					
Base Capacity (vph)		2196		388	2227		373	999				
Starvation Cap Reductn		0		0	0		0	0				
Spillback Cap Reductn		0		0	0		0	0				
Storage Cap Reductn		0		0	0		0	0				
Reduced v/c Ratio		0.35		0.08	0.20		0.06	0.01				

Intersection Summary
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 27 (32%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.35

Intersection Signal Delay (s/veh): 7.6	Intersection LOS: A
Intersection Capacity Utilization 30.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4: Gateway Drive & FM 407





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	527	376	198	699	0	0	0	0	92	7	294
Future Volume (vph)	0	527	376	198	699	0	0	0	0	92	7	294
Peak Hour Factor	0.92	0.91	0.76	0.97	0.97	0.92	0.92	0.92	0.92	0.92	0.44	0.86
Adj. Flow (vph)	0	579	495	204	721	0	0	0	0	100	16	342
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1074	0	204	721	0	0	0	0	50	66	342
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		4		3	3 4						2	
Permitted Phases				3 4						2		2
Detector Phase		4		3	3 4					2	2	2
Switch Phase												
Minimum Initial (s)		5.0		5.0						5.0	5.0	5.0
Minimum Split (s)		22.5		9.5						22.5	22.5	22.5
Total Split (s)		34.0		26.0						25.0	25.0	25.0
Total Split (%)		40.0%		30.6%						29.4%	29.4%	29.4%
Yellow Time (s)		3.5		3.5						3.5	3.5	3.5
All-Red Time (s)		1.0		1.0						1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0						0.0	0.0	0.0
Total Lost Time (s)		4.5		4.5						4.5	4.5	4.5
Lead/Lag		Lead		Lag								
Lead-Lag Optimize?		Yes		Yes								
Recall Mode		C-Max		None						Max	Max	Max
Act Effct Green (s)		29.5		42.2	46.7					29.3	29.3	29.3
Actuated g/C Ratio		0.35		0.50	0.55					0.34	0.34	0.34
v/c Ratio		0.81		0.58	0.37					0.09	0.06	0.48
Control Delay (s/veh)		24.2		32.7	10.6					22.0	21.2	9.3
Queue Delay		0.0		0.0	0.2					0.0	0.0	0.0
Total Delay (s/veh)		24.2		32.7	10.8					22.0	21.2	9.3
LOS		C		C	B					C	C	A
Approach Delay (s/veh)		24.2			15.6						12.4	
Approach LOS		C			B						B	
Queue Length 50th (ft)		207		68	95					19	13	31
Queue Length 95th (ft)		292		133	118					53	14	100
Internal Link Dist (ft)		88			264			81			95	
Turn Bay Length (ft)												
Base Capacity (vph)		1325		535	2310					555	1126	715
Starvation Cap Reductn		0		0	811					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		0.81		0.38	0.48					0.09	0.06	0.48

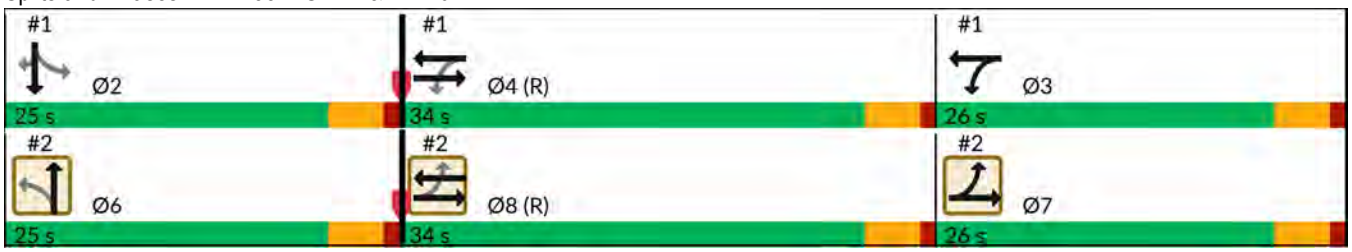
Intersection Summary
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 51 (60%), Referenced to phase 4:EBWB and 8:, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.81

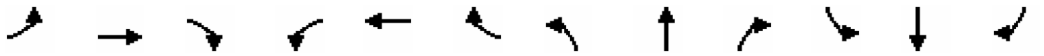
Lane Group	Ø6	Ø7	Ø8
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Peak Hour Factor			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	6	7	8
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5
Total Split (s)	25.0	26.0	34.0
Total Split (%)	29%	31%	40%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag		Lag	Lead
Lead-Lag Optimize?		Yes	Yes
Recall Mode	Max	None	C-Max
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Intersection Signal Delay (s/veh): 18.8	Intersection LOS: B
Intersection Capacity Utilization 58.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: I-35W SBFR & FM 407





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	259	364	0	0	388	78	364	14	259	0	0	0
Future Volume (vph)	259	364	0	0	388	78	364	14	259	0	0	0
Peak Hour Factor	0.88	0.94	0.92	0.92	0.88	0.69	0.95	0.60	0.90	0.92	0.92	0.92
Adj. Flow (vph)	294	387	0	0	441	113	383	23	288	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	294	387	0	0	554	0	0	694	0	0	0	0
Turn Type	pm+pt	NA			NA		Perm	NA				
Protected Phases	7	7 8			8			6				
Permitted Phases	7 8						6					
Detector Phase	7	7 8			8		6	6				
Switch Phase												
Minimum Initial (s)	5.0				5.0		5.0	5.0				
Minimum Split (s)	9.5				22.5		22.5	22.5				
Total Split (s)	26.0				34.0		25.0	25.0				
Total Split (%)	30.6%				40.0%		29.4%	29.4%				
Yellow Time (s)	3.5				3.5		3.5	3.5				
All-Red Time (s)	1.0				1.0		1.0	1.0				
Lost Time Adjust (s)	0.0				0.0			0.0				
Total Lost Time (s)	4.5				4.5			4.5				
Lead/Lag	Lag				Lead							
Lead-Lag Optimize?	Yes				Yes							
Recall Mode	None				C-Max		Max	Max				
Act Effct Green (s)	42.2	46.7			29.5			29.3				
Actuated g/C Ratio	0.50	0.55			0.35			0.34				
v/c Ratio	0.60	0.20			0.46			0.56				
Control Delay (s/veh)	16.1	5.4			21.3			18.8				
Queue Delay	0.0	0.0			0.0			0.0				
Total Delay (s/veh)	16.1	5.4			21.3			18.8				
LOS	B	A			C			B				
Approach Delay (s/veh)		10.0			21.3			18.8				
Approach LOS		A			C			B				
Queue Length 50th (ft)	42	28			111			111				
Queue Length 95th (ft)	m78	m30			153			94				
Internal Link Dist (ft)		264			606			121			66	
Turn Bay Length (ft)												
Base Capacity (vph)	674	2310			1217			1243				
Starvation Cap Reductn	0	0			0			0				
Spillback Cap Reductn	0	0			0			0				
Storage Cap Reductn	0	0			0			0				
Reduced v/c Ratio	0.44	0.17			0.46			0.56				

Intersection Summary
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 51 (60%), Referenced to phase 4:EBWB and 8:, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.81

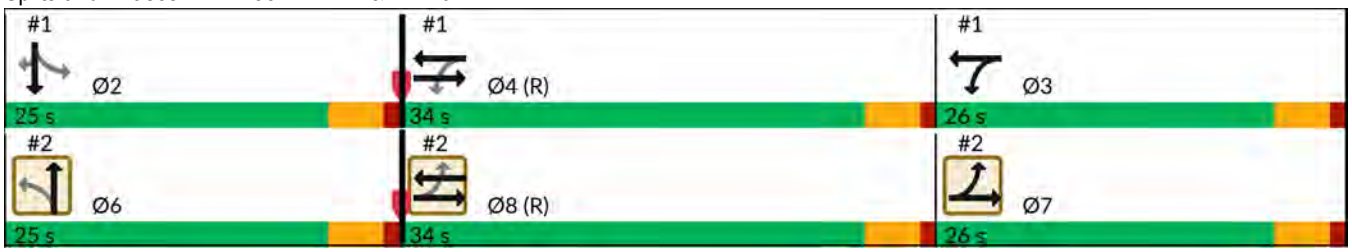
Lane Group	Ø2	Ø3	Ø4
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Peak Hour Factor			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	2	3	4
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5
Total Split (s)	25.0	26.0	34.0
Total Split (%)	29%	31%	40%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag		Lag	Lead
Lead-Lag Optimize?		Yes	Yes
Recall Mode	Max	None	C-Max
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Intersection Signal Delay (s/veh): 16.4	Intersection LOS: B
Intersection Capacity Utilization 58.1%	ICU Level of Service B
Analysis Period (min) 15	

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

Splits and Phases: 2: I-35W NBFR & FM 407

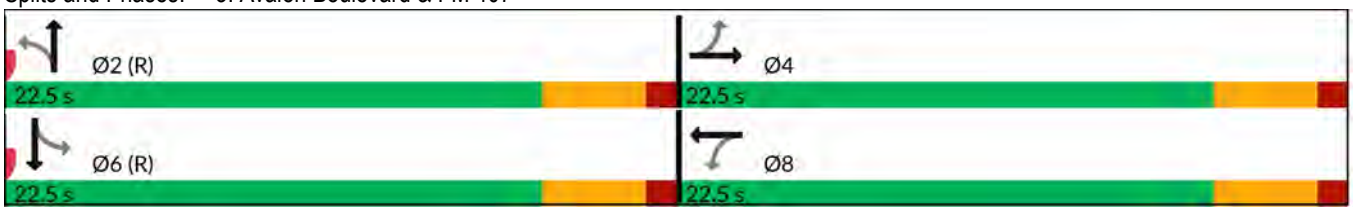


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	636	54	37	463	0	23	0	26	0	0	0
Future Volume (vph)	0	636	54	37	463	0	23	0	26	0	0	0
Peak Hour Factor	0.92	0.85	0.63	0.92	0.87	0.92	0.71	0.92	0.82	0.92	0.92	0.92
Adj. Flow (vph)	0	748	86	40	532	0	32	0	32	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	834	0	40	532	0	32	32	0	0	0	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)		15.8		15.8	15.8		20.2	20.2				
Actuated g/C Ratio		0.35		0.35	0.35		0.45	0.45				
v/c Ratio		0.67		0.24	0.43		0.05	0.02				
Control Delay (s/veh)		14.5		13.6	11.9		8.5	0.3				
Queue Delay		0.0		0.0	0.0		0.0	0.0				
Total Delay (s/veh)		14.5		13.6	11.9		8.5	0.3				
LOS		B		B	B		A	A				
Approach Delay (s/veh)		14.5			12.0			4.4				
Approach LOS		B			B			A				
Queue Length 50th (ft)		85		7	51		5	0				
Queue Length 95th (ft)		116		24	75		13	1				
Internal Link Dist (ft)		606			1077			125			168	
Turn Bay Length (ft)				150			150					
Base Capacity (vph)		1413		188	1415		633	1401				
Starvation Cap Reductn		0		0	0		0	0				
Spillback Cap Reductn		0		0	0		0	0				
Storage Cap Reductn		0		0	0		0	0				
Reduced v/c Ratio		0.59		0.21	0.38		0.05	0.02				

Intersection Summary
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.67

Intersection Signal Delay (s/veh): 13.1 Intersection LOS: B
Intersection Capacity Utilization 38.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 3: Avalon Boulevard & FM 407

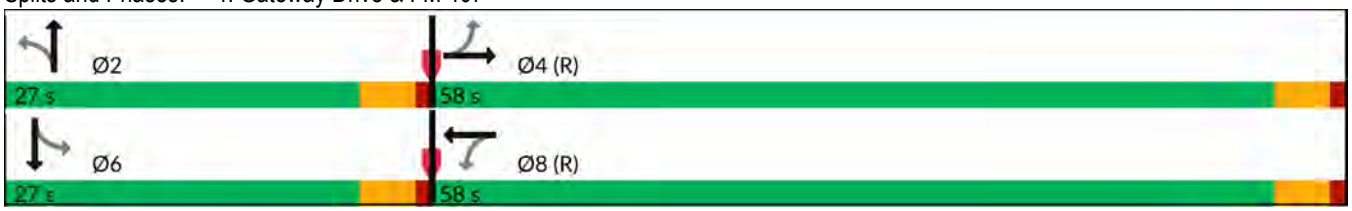


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	643	29	19	448	0	54	0	37	0	0	0
Future Volume (vph)	0	643	29	19	448	0	54	0	37	0	0	0
Peak Hour Factor	0.92	0.82	0.65	0.71	0.88	0.92	0.75	0.92	0.59	0.92	0.92	0.92
Adj. Flow (vph)	0	784	45	27	509	0	72	0	63	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	829	0	27	509	0	72	63	0	0	0	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	58.0	58.0		58.0	58.0		27.0	27.0		27.0	27.0	
Total Split (%)	68.2%	68.2%		68.2%	68.2%		31.8%	31.8%		31.8%	31.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		Max	Max		Max	Max	
Act Effct Green (s)		53.5		53.5	53.5		22.5	22.5				
Actuated g/C Ratio		0.63		0.63	0.63		0.26	0.26				
v/c Ratio		0.37		0.08	0.23		0.19	0.07				
Control Delay (s/veh)		8.1		6.8	7.1		26.0	0.1				
Queue Delay		0.0		0.0	0.0		0.0	0.0				
Total Delay (s/veh)		8.1		6.8	7.1		26.0	0.1				
LOS		A		A	A		C	A				
Approach Delay (s/veh)		8.1			7.1			13.9				
Approach LOS		A			A			B				
Queue Length 50th (ft)		101		5	56		30	0				
Queue Length 95th (ft)		118		12	76		53	0				
Internal Link Dist (ft)		254			354			153			178	
Turn Bay Length (ft)				150			150					
Base Capacity (vph)		2214		356	2227		373	953				
Starvation Cap Reductn		0		0	0		0	0				
Spillback Cap Reductn		0		0	0		0	0				
Storage Cap Reductn		0		0	0		0	0				
Reduced v/c Ratio		0.37		0.08	0.23		0.19	0.07				

Intersection Summary
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 27 (32%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.37

Intersection Signal Delay (s/veh): 8.3	Intersection LOS: A
Intersection Capacity Utilization 30.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4: Gateway Drive & FM 407



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	528	348	302	469	0	0	0	0	164	3	278
Future Volume (vph)	0	528	348	302	469	0	0	0	0	164	3	278
Peak Hour Factor	0.92	0.96	0.88	0.83	0.91	0.92	0.92	0.92	0.92	0.95	0.25	0.89
Adj. Flow (vph)	0	550	395	364	515	0	0	0	0	173	12	312
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	945	0	364	515	0	0	0	0	86	99	312
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		4		3	3 4						2	
Permitted Phases				3 4						2		2
Detector Phase		4		3	3 4					2	2	2
Switch Phase												
Minimum Initial (s)		5.0		5.0						5.0	5.0	5.0
Minimum Split (s)		22.5		9.5						22.5	22.5	22.5
Total Split (s)		34.0		26.0						25.0	25.0	25.0
Total Split (%)		40.0%		30.6%						29.4%	29.4%	29.4%
Yellow Time (s)		3.5		3.5						3.5	3.5	3.5
All-Red Time (s)		1.0		1.0						1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0						0.0	0.0	0.0
Total Lost Time (s)		4.5		4.5						4.5	4.5	4.5
Lead/Lag		Lead		Lag								
Lead-Lag Optimize?		Yes		Yes								
Recall Mode		C-Max		None						Max	Max	Max
Act Effct Green (s)		29.5		47.5	52.0					24.0	24.0	24.0
Actuated g/C Ratio		0.35		0.56	0.61					0.28	0.28	0.28
v/c Ratio		0.73		0.79	0.24					0.19	0.11	0.46
Control Delay (s/veh)		21.7		40.3	5.9					26.4	24.7	5.9
Queue Delay		0.0		0.0	0.0					0.0	0.0	0.0
Total Delay (s/veh)		21.7		40.3	5.9					26.4	24.7	5.9
LOS		C		D	A					C	C	A
Approach Delay (s/veh)		21.7			20.1						13.2	
Approach LOS		C			C						B	
Queue Length 50th (ft)		176		158	49					39	22	0
Queue Length 95th (ft)		248		224	71					84	12	60
Internal Link Dist (ft)		88			264			81			95	
Turn Bay Length (ft)												
Base Capacity (vph)		1302		535	2310					455	917	671
Starvation Cap Reductn		0		0	0					0	0	0
Spillback Cap Reductn		0		0	0					0	0	0
Storage Cap Reductn		0		0	0					0	0	0
Reduced v/c Ratio		0.73		0.68	0.22					0.19	0.11	0.46

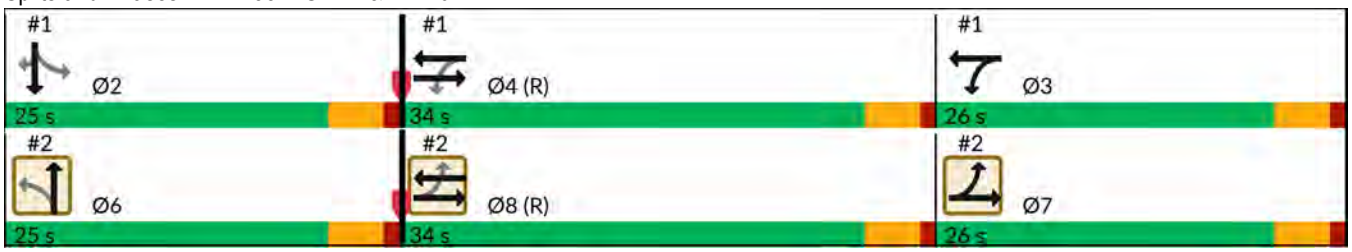
Intersection Summary
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 51 (60%), Referenced to phase 4:EBWB and 8:, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79

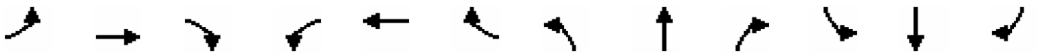
Lane Group	Ø6	Ø7	Ø8
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Peak Hour Factor			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	6	7	8
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5
Total Split (s)	25.0	26.0	34.0
Total Split (%)	29%	31%	40%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag		Lag	Lead
Lead-Lag Optimize?		Yes	Yes
Recall Mode	Max	None	C-Max
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Intersection Signal Delay (s/veh): 19.3 Intersection LOS: B
Intersection Capacity Utilization 59.3% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 1: I-35W SBFR & FM 407





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	248	456	0	0	448	93	281	13	325	0	0	0
Future Volume (vph)	248	456	0	0	448	93	281	13	325	0	0	0
Peak Hour Factor	0.93	0.92	0.92	0.92	0.90	0.82	0.85	0.50	0.92	0.92	0.92	0.92
Adj. Flow (vph)	267	496	0	0	498	113	331	26	353	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	267	496	0	0	611	0	0	710	0	0	0	0
Turn Type	pm+pt	NA			NA		Perm	NA				
Protected Phases	7	7 8			8			6				
Permitted Phases	7 8						6					
Detector Phase	7	7 8			8		6	6				
Switch Phase												
Minimum Initial (s)	5.0				5.0		5.0	5.0				
Minimum Split (s)	9.5				22.5		22.5	22.5				
Total Split (s)	26.0				34.0		25.0	25.0				
Total Split (%)	30.6%				40.0%		29.4%	29.4%				
Yellow Time (s)	3.5				3.5		3.5	3.5				
All-Red Time (s)	1.0				1.0		1.0	1.0				
Lost Time Adjust (s)	0.0				0.0			0.0				
Total Lost Time (s)	4.5				4.5			4.5				
Lead/Lag	Lag				Lead							
Lead-Lag Optimize?	Yes				Yes							
Recall Mode	None				C-Max		Max	Max				
Act Effct Green (s)	47.5	52.0			29.5			24.0				
Actuated g/C Ratio	0.56	0.61			0.35			0.28				
v/c Ratio	0.46	0.23			0.50			0.64				
Control Delay (s/veh)	17.1	6.6			22.3			19.8				
Queue Delay	0.0	0.0			0.0			0.0				
Total Delay (s/veh)	17.1	6.6			22.3			19.8				
LOS	B	A			C			B				
Approach Delay (s/veh)		10.3			22.3			19.8				
Approach LOS		B			C			B				
Queue Length 50th (ft)	48	46			127			109				
Queue Length 95th (ft)	m95	60			178			51				
Internal Link Dist (ft)		264			606			121			66	
Turn Bay Length (ft)												
Base Capacity (vph)	650	2310			1216			1102				
Starvation Cap Reductn	0	0			0			0				
Spillback Cap Reductn	0	0			0			0				
Storage Cap Reductn	0	0			0			0				
Reduced v/c Ratio	0.41	0.21			0.50			0.64				

Intersection Summary
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 51 (60%), Referenced to phase 4:EBWB and 8:, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79

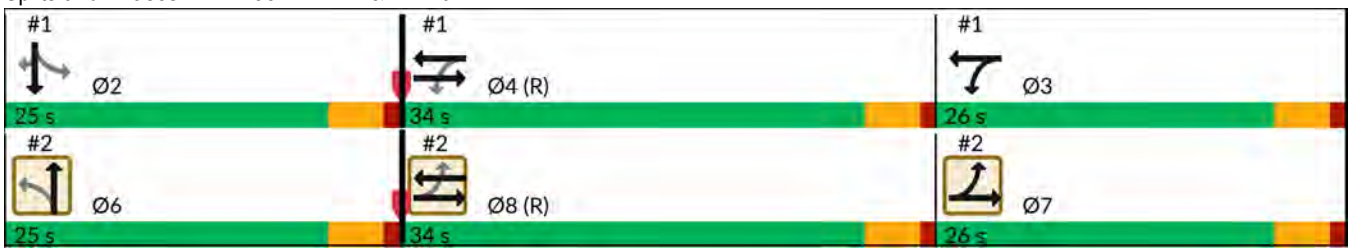
Lane Group	Ø2	Ø3	Ø4
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Peak Hour Factor			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	2	3	4
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5
Total Split (s)	25.0	26.0	34.0
Total Split (%)	29%	31%	40%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag		Lag	Lead
Lead-Lag Optimize?		Yes	Yes
Recall Mode	Max	None	C-Max
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Intersection Signal Delay (s/veh): 17.0	Intersection LOS: B
Intersection Capacity Utilization 59.3%	ICU Level of Service B
Analysis Period (min) 15	

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

Splits and Phases: 2: I-35W NBFR & FM 407

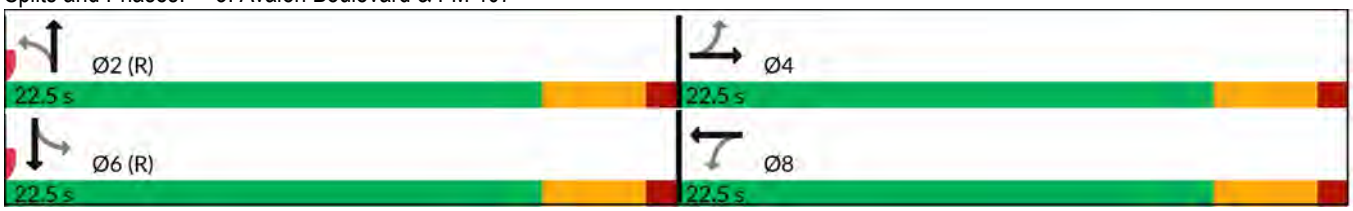


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	677	17	8	455	32	52	0	50	27	0	44
Future Volume (vph)	50	677	17	8	455	32	52	0	50	27	0	44
Peak Hour Factor	0.92	0.96	0.75	0.29	0.92	0.92	0.82	0.92	0.79	0.92	0.92	0.92
Adj. Flow (vph)	54	705	23	28	495	35	63	0	63	29	0	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	54	728	0	28	530	0	63	63	0	29	48	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)	14.9	14.9		14.9	14.9		21.1	21.1		21.1	21.1	
Actuated g/C Ratio	0.33	0.33		0.33	0.33		0.47	0.47		0.47	0.47	
v/c Ratio	0.21	0.62		0.16	0.45		0.10	0.04		0.05	0.03	
Control Delay (s/veh)	11.8	14.6		11.8	12.2		8.5	1.2		8.2	0.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	11.8	14.6		11.8	12.2		8.5	1.2		8.2	0.0	
LOS	B	B		B	B		A	A		A	A	
Approach Delay (s/veh)		14.4			12.2			4.9			3.1	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)	10	80		5	53		8	0		4	0	
Queue Length 95th (ft)	27	110		5	76		25	4		16	0	
Internal Link Dist (ft)		606			1077			125			168	
Turn Bay Length (ft)	150			150			150			150		
Base Capacity (vph)	316	1414		210	1413		633	1467		624	1526	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.17	0.51		0.13	0.38		0.10	0.04		0.05	0.03	

Intersection Summary
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.62

Intersection Signal Delay (s/veh): 12.3	Intersection LOS: B
Intersection Capacity Utilization 44.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: Avalon Boulevard & FM 407

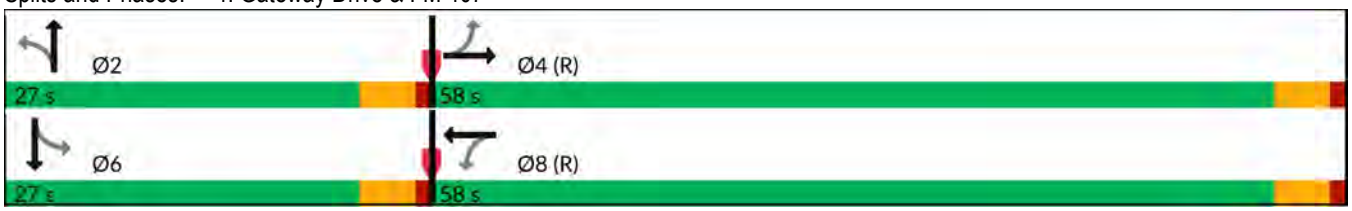


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	660	67	16	476	5	14	0	9	3	0	20
Future Volume (vph)	33	660	67	16	476	5	14	0	9	3	0	20
Peak Hour Factor	0.92	0.91	0.67	0.50	0.96	0.92	0.60	0.92	0.67	0.92	0.92	0.92
Adj. Flow (vph)	36	725	100	32	496	5	23	0	13	3	0	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	825	0	32	501	0	23	13	0	3	22	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	58.0	58.0		58.0	58.0		27.0	27.0		27.0	27.0	
Total Split (%)	68.2%	68.2%		68.2%	68.2%		31.8%	31.8%		31.8%	31.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		Max	Max		Max	Max	
Act Effct Green (s)	53.5	53.5		53.5	53.5		22.5	22.5		22.5	22.5	
Actuated g/C Ratio	0.63	0.63		0.63	0.63		0.26	0.26		0.26	0.26	
v/c Ratio	0.07	0.38		0.09	0.23		0.06	0.01		0.01	0.02	
Control Delay (s/veh)	6.5	7.9		7.0	7.1		24.1	0.0		23.3	0.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	6.5	7.9		7.0	7.1		24.1	0.0		23.3	0.1	
LOS	A	A		A	A		C	A		C	A	
Approach Delay (s/veh)		7.8			7.1			15.4			2.8	
Approach LOS		A			A			B			A	
Queue Length 50th (ft)	7	97		6	54		9	0		1	0	
Queue Length 95th (ft)	18	131		9	77		18	0		8	0	
Internal Link Dist (ft)		254			354			153			178	
Turn Bay Length (ft)	150			150			150			150		
Base Capacity (vph)	539	2200		358	2226		365	974		369	1085	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.07	0.38		0.09	0.23		0.06	0.01		0.01	0.02	

Intersection Summary
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 27 (32%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.38

Intersection Signal Delay (s/veh): 7.6	Intersection LOS: A
Intersection Capacity Utilization 42.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4: Gateway Drive & FM 407



Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	760	505	5	0	3
Future Vol, veh/h	0	760	505	5	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	826	549	5	0	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	277
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	914
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		0
Mov Cap-1 Maneuver	-	-	-	-	-	914
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	8.95
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	914
HCM Lane V/C Ratio	-	-	-	0.004
HCM Ctrl Dly (s/v)	-	-	-	9
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	643	479	14	9	17
Future Vol, veh/h	29	643	479	14	9	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	699	521	15	10	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	536	0	-	0	1290	528
Stage 1	-	-	-	-	528	-
Stage 2	-	-	-	-	762	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1032	-	-	-	143	550
Stage 1	-	-	-	-	591	-
Stage 2	-	-	-	-	452	-
Platoon blocked, %		-	-	-	0	
Mov Cap-1 Maneuver	1032	-	-	-	138	550
Mov Cap-2 Maneuver	-	-	-	-	138	-
Stage 1	-	-	-	-	573	-
Stage 2	-	-	-	-	452	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.37	0	19.11
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1032	-	-	-	138	550
HCM Lane V/C Ratio	0.031	-	-	-	0.071	0.034
HCM Ctrl Dly (s/v)	8.6	-	-	-	33	11.8
HCM Lane LOS	A	-	-	-	D	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2	0.1

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	22	348	25	0	0
Future Vol, veh/h	0	22	348	25	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	24	378	27	0	0

Major/Minor	Minor1		Major1	
Conflicting Flow All	-	203	0	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	6.94	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	3.32	-	-
Pot Cap-1 Maneuver	0	804	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	-	804	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	WB	NB
HCM Ctrl Dly, s/v	9.61	0
HCM LOS	A	

Minor Lane/Major Mvmt	NBT	NBR	WBLn1
Capacity (veh/h)	-	-	804
HCM Lane V/C Ratio	-	-	0.03
HCM Ctrl Dly (s/v)	-	-	9.6
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	0.1

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	5	369	6	0	0
Future Vol, veh/h	0	5	369	6	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	5	401	7	0	0

Major/Minor	Minor1		Major1	
Conflicting Flow All	-	204	0	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	6.94	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	3.32	-	-
Pot Cap-1 Maneuver	0	803	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	-	803	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	WB	NB
HCM Ctrl Dly, s/v	9.51	0
HCM LOS	A	

Minor Lane/Major Mvmt	NBT	NBR	WBLn1
Capacity (veh/h)	-	-	803
HCM Lane V/C Ratio	-	-	0.007
HCM Ctrl Dly (s/v)	-	-	9.5
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	550	376	338	723	0	0	0	0	92	7	294
Future Volume (vph)	0	550	376	338	723	0	0	0	0	92	7	294
Peak Hour Factor	0.92	0.91	0.76	0.97	0.97	0.92	0.92	0.92	0.92	0.92	0.44	0.86
Adj. Flow (vph)	0	604	495	348	745	0	0	0	0	100	16	342
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1099	0	348	745	0	0	0	0	50	66	342
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		4		3	3 4						2	
Permitted Phases				3 4						2		2
Detector Phase		4		3	3 4					2	2	2
Switch Phase												
Minimum Initial (s)		5.0		5.0						5.0	5.0	5.0
Minimum Split (s)		22.5		9.5						22.5	22.5	22.5
Total Split (s)		34.0		26.0						25.0	25.0	25.0
Total Split (%)		40.0%		30.6%						29.4%	29.4%	29.4%
Yellow Time (s)		3.5		3.5						3.5	3.5	3.5
All-Red Time (s)		1.0		1.0						1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0						0.0	0.0	0.0
Total Lost Time (s)		4.5		4.5						4.5	4.5	4.5
Lead/Lag		Lead		Lag								
Lead-Lag Optimize?		Yes		Yes								
Recall Mode		C-Max		None						Max	Max	Max
Act Effct Green (s)		29.5		47.6	52.1					23.9	23.9	23.9
Actuated g/C Ratio		0.35		0.56	0.61					0.28	0.28	0.28
v/c Ratio		0.83		0.75	0.34					0.11	0.07	0.55
Control Delay (s/veh)		25.8		34.9	6.3					25.6	24.7	12.2
Queue Delay		0.0		0.0	0.5					0.0	0.0	0.0
Total Delay (s/veh)		25.8		34.9	6.8					25.6	24.7	12.2
LOS		C		C	A					C	C	B
Approach Delay (s/veh)		25.8			15.8						15.5	
Approach LOS		C			B						B	
Queue Length 50th (ft)		220		148	75					23	14	41
Queue Length 95th (ft)		307		m226	96					54	15	112
Internal Link Dist (ft)		88			264			81			95	
Turn Bay Length (ft)												
Base Capacity (vph)		1319		535	2310					453	919	623
Starvation Cap Reductn		0		0	1072					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		0.83		0.65	0.60					0.11	0.07	0.55

Intersection Summary
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 51 (60%), Referenced to phase 4:EBWB and 8:, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83

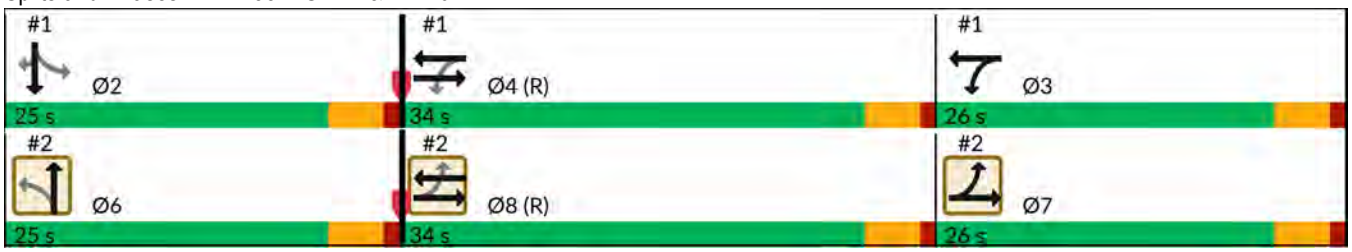
Lane Group	Ø6	Ø7	Ø8
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Peak Hour Factor			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	6	7	8
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5
Total Split (s)	25.0	26.0	34.0
Total Split (%)	29%	31%	40%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag		Lag	Lead
Lead-Lag Optimize?		Yes	Yes
Recall Mode	Max	None	C-Max
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

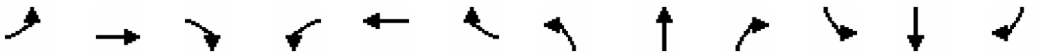
Intersection Summary

Intersection Signal Delay (s/veh): 19.9	Intersection LOS: B
Intersection Capacity Utilization 69.8%	ICU Level of Service C
Analysis Period (min) 15	

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

Splits and Phases: 1: I-35W SBFR & FM 407





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	259	498	0	0	552	174	364	23	379	0	0	0
Future Volume (vph)	259	498	0	0	552	174	364	23	379	0	0	0
Peak Hour Factor	0.88	0.94	0.92	0.92	0.88	0.69	0.95	0.60	0.90	0.92	0.92	0.92
Adj. Flow (vph)	294	530	0	0	627	252	383	38	421	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	294	530	0	0	879	0	0	842	0	0	0	0
Turn Type	pm+pt	NA			NA		Perm	NA				
Protected Phases	7	7 8			8			6				
Permitted Phases	7 8						6					
Detector Phase	7	7 8			8		6	6				
Switch Phase												
Minimum Initial (s)	5.0				5.0		5.0	5.0				
Minimum Split (s)	9.5				22.5		22.5	22.5				
Total Split (s)	26.0				34.0		25.0	25.0				
Total Split (%)	30.6%				40.0%		29.4%	29.4%				
Yellow Time (s)	3.5				3.5		3.5	3.5				
All-Red Time (s)	1.0				1.0		1.0	1.0				
Lost Time Adjust (s)	0.0				0.0			0.0				
Total Lost Time (s)	4.5				4.5			4.5				
Lead/Lag	Lag				Lead							
Lead-Lag Optimize?	Yes				Yes							
Recall Mode	None				C-Max		Max	Max				
Act Effct Green (s)	47.6	52.1			29.5			23.9				
Actuated g/C Ratio	0.56	0.61			0.35			0.28				
v/c Ratio	0.61	0.24			0.72			0.76				
Control Delay (s/veh)	24.7	4.7			25.8			24.8				
Queue Delay	0.0	0.0			0.0			0.0				
Total Delay (s/veh)	24.7	4.7			25.8			24.8				
LOS	C	A			C			C				
Approach Delay (s/veh)		11.8			25.8			24.8				
Approach LOS		B			C			C				
Queue Length 50th (ft)	102	37			196			152				
Queue Length 95th (ft)	m148	m43			257			106				
Internal Link Dist (ft)		264			606			121			66	
Turn Bay Length (ft)												
Base Capacity (vph)	552	2310			1225			1102				
Starvation Cap Reductn	2	0			0			0				
Spillback Cap Reductn	0	0			0			0				
Storage Cap Reductn	0	0			0			0				
Reduced v/c Ratio	0.53	0.23			0.72			0.76				

Intersection Summary
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 51 (60%), Referenced to phase 4:EBWB and 8:, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83

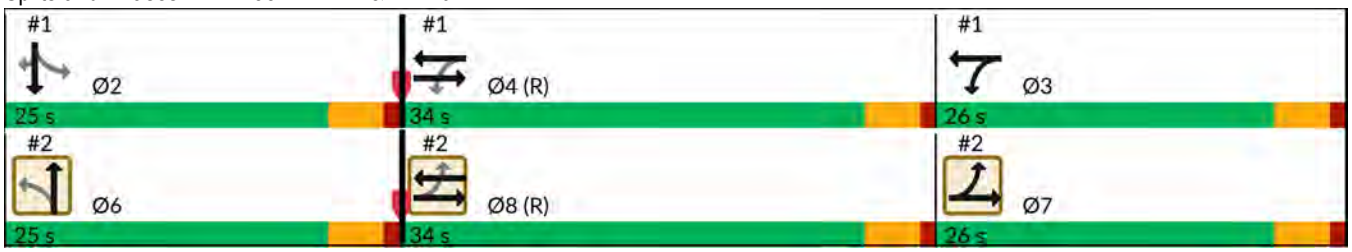
Lane Group	Ø2	Ø3	Ø4
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Peak Hour Factor			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	2	3	4
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5
Total Split (s)	25.0	26.0	34.0
Total Split (%)	29%	31%	40%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag		Lag	Lead
Lead-Lag Optimize?		Yes	Yes
Recall Mode	Max	None	C-Max
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Intersection Signal Delay (s/veh): 21.0	Intersection LOS: C
Intersection Capacity Utilization 69.8%	ICU Level of Service C
Analysis Period (min) 15	

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

Splits and Phases: 2: I-35W NBFR & FM 407

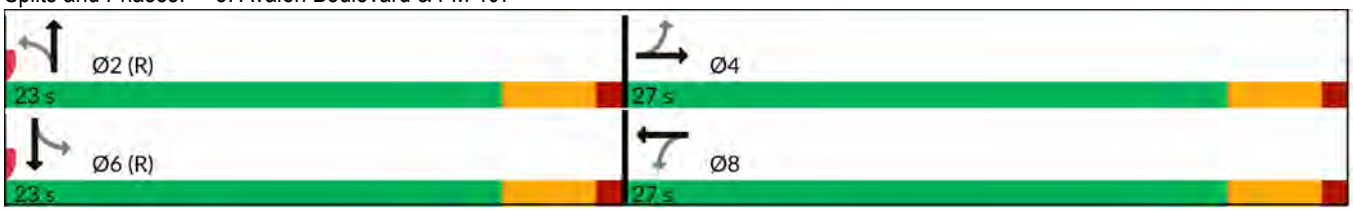


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	817	54	37	666	45	23	0	26	44	0	71
Future Volume (vph)	72	817	54	37	666	45	23	0	26	44	0	71
Peak Hour Factor	0.92	0.85	0.63	0.92	0.87	0.92	0.71	0.92	0.82	0.92	0.92	0.92
Adj. Flow (vph)	78	961	86	40	766	49	32	0	32	48	0	77
Shared Lane Traffic (%)												
Lane Group Flow (vph)	78	1047	0	40	815	0	32	32	0	48	77	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	27.0	27.0		27.0	27.0		23.0	23.0		23.0	23.0	
Total Split (%)	54.0%	54.0%		54.0%	54.0%		46.0%	46.0%		46.0%	46.0%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)	20.3	20.3		20.3	20.3		20.7	20.7		20.7	20.7	
Actuated g/C Ratio	0.41	0.41		0.41	0.41		0.41	0.41		0.41	0.41	
v/c Ratio	0.39	0.73		0.27	0.57		0.06	0.03		0.08	0.06	
Control Delay (s/veh)	16.4	15.3		14.4	12.6		10.5	1.7		10.7	1.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	16.4	15.3		14.4	12.6		10.5	1.7		10.7	1.5	
LOS	B	B		B	B		B	A		B	A	
Approach Delay (s/veh)		15.4			12.7			6.1			5.0	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)	15	121		7	86		6	0		9	0	
Queue Length 95th (ft)	44	156		25	117		15	3		26	6	
Internal Link Dist (ft)		606			1077			125			168	
Turn Bay Length (ft)	150			150			150			150		
Base Capacity (vph)	220	1586		165	1587		541	1279		565	1310	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.35	0.66		0.24	0.51		0.06	0.03		0.08	0.06	

Intersection Summary
Cycle Length: 50
Actuated Cycle Length: 50
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 50
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.73

Intersection Signal Delay (s/veh): 13.4	Intersection LOS: B
Intersection Capacity Utilization 48.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: Avalon Boulevard & FM 407

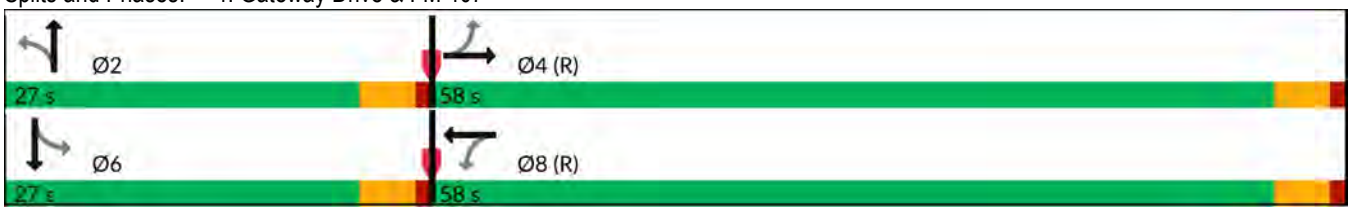


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	771	29	19	594	14	54	0	37	15	0	102
Future Volume (vph)	98	771	29	19	594	14	54	0	37	15	0	102
Peak Hour Factor	0.92	0.82	0.65	0.71	0.88	0.92	0.75	0.92	0.59	0.92	0.92	0.92
Adj. Flow (vph)	107	940	45	27	675	15	72	0	63	16	0	111
Shared Lane Traffic (%)												
Lane Group Flow (vph)	107	985	0	27	690	0	72	63	0	16	111	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	58.0	58.0		58.0	58.0		27.0	27.0		27.0	27.0	
Total Split (%)	68.2%	68.2%		68.2%	68.2%		31.8%	31.8%		31.8%	31.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		Max	Max		Max	Max	
Act Effct Green (s)	53.5	53.5		53.5	53.5		22.5	22.5		22.5	22.5	
Actuated g/C Ratio	0.63	0.63		0.63	0.63		0.26	0.26		0.26	0.26	
v/c Ratio	0.25	0.44		0.09	0.31		0.21	0.07		0.05	0.11	
Control Delay (s/veh)	8.8	8.8		7.2	7.6		26.5	0.1		23.9	0.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	8.8	8.8		7.2	7.6		26.5	0.1		23.9	0.2	
LOS	A	A		A	A		C	A		C	A	
Approach Delay (s/veh)		8.8			7.6			14.2			3.2	
Approach LOS		A			A			B			A	
Queue Length 50th (ft)	23	127		5	80		31	0		6	0	
Queue Length 95th (ft)	50	146		12	105		54	0		22	0	
Internal Link Dist (ft)		254			354			153			178	
Turn Bay Length (ft)	150			150			150			150		
Base Capacity (vph)	426	2215		288	2223		336	908		352	994	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.25	0.44		0.09	0.31		0.21	0.07		0.05	0.11	

Intersection Summary
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 27 (32%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.44

Intersection Signal Delay (s/veh): 8.4	Intersection LOS: A
Intersection Capacity Utilization 47.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4: Gateway Drive & FM 407



Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	898	736	14	0	15
Future Vol, veh/h	0	898	736	14	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	976	800	15	0	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	408
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	860
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		0
Mov Cap-1 Maneuver	-	-	-	-	-	860
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	9.27
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	860
HCM Lane V/C Ratio	-	-	-	0.019
HCM Ctrl Dly (s/v)	-	-	-	9.3
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	84	739	540	42	44	87
Future Vol, veh/h	84	739	540	42	44	87
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	91	803	587	46	48	95

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	633	0	-	0	1596	610
Stage 1	-	-	-	-	610	-
Stage 2	-	-	-	-	986	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	950	-	-	-	69	495
Stage 1	-	-	-	-	542	-
Stage 2	-	-	-	-	316	-
Platoon blocked, %		-	-	-	0	
Mov Cap-1 Maneuver	950	-	-	-	62	495
Mov Cap-2 Maneuver	-	-	-	-	62	-
Stage 1	-	-	-	-	490	-
Stage 2	-	-	-	-	316	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.94	0	63.75
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	950	-	-	-	62	495
HCM Lane V/C Ratio	0.096	-	-	-	0.77	0.191
HCM Ctrl Dly (s/v)	9.2	-	-	-	162.1	14
HCM Lane LOS	A	-	-	-	F	B
HCM 95th %tile Q(veh)	0.3	-	-	-	3.4	0.7

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	35	447	36	0	0
Future Vol, veh/h	0	35	447	36	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	38	486	39	0	0

Major/Minor	Minor1		Major1	
Conflicting Flow All	-	263	0	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	6.94	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	3.32	-	-
Pot Cap-1 Maneuver	0	736	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	-	736	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	WB	NB
HCM Ctrl Dly, s/v	10.16	0
HCM LOS	B	

Minor Lane/Major Mvmt	NBT	NBR	WBLn1
Capacity (veh/h)	-	-	736
HCM Lane V/C Ratio	-	-	0.052
HCM Ctrl Dly (s/v)	-	-	10.2
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.2

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	9	482	9	0	0
Future Vol, veh/h	0	9	482	9	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	10	524	10	0	0

Major/Minor	Minor1		Major1	
Conflicting Flow All	-	267	0	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	6.94	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	3.32	-	-
Pot Cap-1 Maneuver	0	731	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	-	731	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	WB	NB
HCM Ctrl Dly, s/v	9.99	0
HCM LOS	A	

Minor Lane/Major Mvmt	NBT	NBR	WBLn1
Capacity (veh/h)	-	-	731
HCM Lane V/C Ratio	-	-	0.013
HCM Ctrl Dly (s/v)	-	-	10
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	603	394	360	533	0	0	0	0	199	4	315
Future Volume (vph)	0	603	394	360	533	0	0	0	0	199	4	315
Peak Hour Factor	0.92	0.96	0.88	0.83	0.91	0.92	0.92	0.92	0.92	0.95	0.25	0.89
Adj. Flow (vph)	0	628	448	434	586	0	0	0	0	209	16	354
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1076	0	434	586	0	0	0	0	104	121	354
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		4		3	3 4						2	
Permitted Phases				3 4						2		2
Detector Phase		4		3	3 4					2	2	2
Switch Phase												
Minimum Initial (s)		5.0		5.0						5.0	5.0	5.0
Minimum Split (s)		22.5		9.5						22.5	22.5	22.5
Total Split (s)		34.0		26.0						25.0	25.0	25.0
Total Split (%)		40.0%		30.6%						29.4%	29.4%	29.4%
Yellow Time (s)		3.5		3.5						3.5	3.5	3.5
All-Red Time (s)		1.0		1.0						1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0						0.0	0.0	0.0
Total Lost Time (s)		4.5		4.5						4.5	4.5	4.5
Lead/Lag		Lead		Lag								
Lead-Lag Optimize?		Yes		Yes								
Recall Mode		C-Max		None						Max	Max	Max
Act Effct Green (s)		29.5		49.6	54.1					21.9	21.9	21.9
Actuated g/C Ratio		0.35		0.58	0.64					0.26	0.26	0.26
v/c Ratio		0.83		0.86	0.26					0.25	0.14	0.54
Control Delay (s/veh)		26.3		44.3	5.3					27.9	25.7	7.1
Queue Delay		0.0		0.0	0.4					0.0	0.0	0.0
Total Delay (s/veh)		26.3		44.3	5.7					27.9	25.7	7.1
LOS		C		D	A					C	C	A
Approach Delay (s/veh)		26.3			22.1						14.7	
Approach LOS		C			C						B	
Queue Length 50th (ft)		222		200	55					50	28	5
Queue Length 95th (ft)		307		#277	m77					98	13	71
Internal Link Dist (ft)		88			264			81			95	
Turn Bay Length (ft)												
Base Capacity (vph)		1303		535	2310					415	838	661
Starvation Cap Reductn		0		0	1141					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		0.83		0.81	0.50					0.25	0.14	0.54

Intersection Summary
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 51 (60%), Referenced to phase 4:EBWB and 8:, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.86

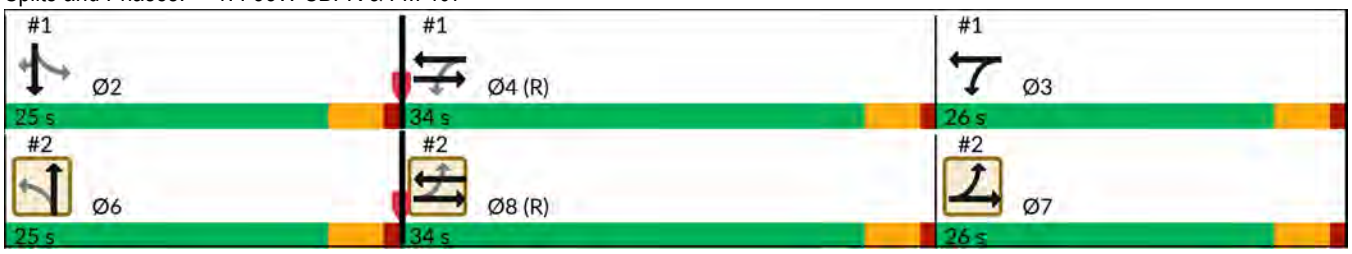
Lane Group	Ø6	Ø7	Ø8
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Peak Hour Factor			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	6	7	8
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5
Total Split (s)	25.0	26.0	34.0
Total Split (%)	29%	31%	40%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag		Lag	Lead
Lead-Lag Optimize?		Yes	Yes
Recall Mode	Max	None	C-Max
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Intersection Signal Delay (s/veh): 22.2	Intersection LOS: C
Intersection Capacity Utilization 67.1%	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: 1: I-35W SBFR & FM 407



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	284	531	0	0	528	115	317	14	381	0	0	0
Future Volume (vph)	284	531	0	0	528	115	317	14	381	0	0	0
Peak Hour Factor	0.93	0.92	0.92	0.92	0.90	0.82	0.85	0.50	0.92	0.92	0.92	0.92
Adj. Flow (vph)	305	577	0	0	587	140	373	28	414	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	305	577	0	0	727	0	0	815	0	0	0	0
Turn Type	pm+pt	NA			NA		Perm	NA				
Protected Phases	7	7 8			8			6				
Permitted Phases	7 8						6					
Detector Phase	7	7 8			8		6	6				
Switch Phase												
Minimum Initial (s)	5.0				5.0		5.0	5.0				
Minimum Split (s)	9.5				22.5		22.5	22.5				
Total Split (s)	26.0				34.0		25.0	25.0				
Total Split (%)	30.6%				40.0%		29.4%	29.4%				
Yellow Time (s)	3.5				3.5		3.5	3.5				
All-Red Time (s)	1.0				1.0		1.0	1.0				
Lost Time Adjust (s)	0.0				0.0			0.0				
Total Lost Time (s)	4.5				4.5			4.5				
Lead/Lag	Lag				Lead							
Lead-Lag Optimize?	Yes				Yes							
Recall Mode	None				C-Max		Max	Max				
Act Effct Green (s)	49.6	54.1			29.5			21.9				
Actuated g/C Ratio	0.58	0.64			0.35			0.26				
v/c Ratio	0.53	0.26			0.60			0.78				
Control Delay (s/veh)	21.8	6.2			24.1			25.5				
Queue Delay	0.0	0.5			0.1			0.1				
Total Delay (s/veh)	21.8	6.7			24.1			25.6				
LOS	C	A			C			C				
Approach Delay (s/veh)		11.9			24.1			25.6				
Approach LOS		B			C			C				
Queue Length 50th (ft)	80	54			160			144				
Queue Length 95th (ft)	m133	m66			218			64				
Internal Link Dist (ft)		264			606			121			66	
Turn Bay Length (ft)												
Base Capacity (vph)	604	2310			1217			1039				
Starvation Cap Reductn	0	1202			0			0				
Spillback Cap Reductn	0	0			30			10				
Storage Cap Reductn	0	0			0			0				
Reduced v/c Ratio	0.50	0.52			0.61			0.79				

Intersection Summary
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 51 (60%), Referenced to phase 4:EBWB and 8:, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.86

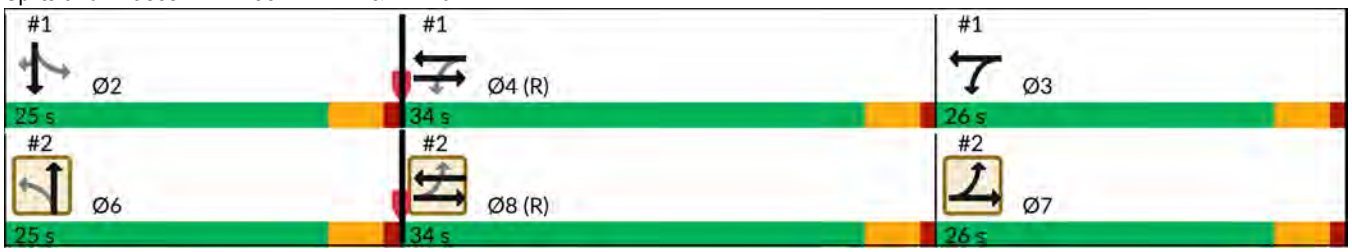
Lane Group	Ø2	Ø3	Ø4
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Peak Hour Factor			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	2	3	4
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5
Total Split (s)	25.0	26.0	34.0
Total Split (%)	29%	31%	40%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag		Lag	Lead
Lead-Lag Optimize?		Yes	Yes
Recall Mode	Max	None	C-Max
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Intersection Signal Delay (s/veh): 20.2	Intersection LOS: C
Intersection Capacity Utilization 67.1%	ICU Level of Service C
Analysis Period (min) 15	

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

Splits and Phases: 2: I-35W NBFR & FM 407

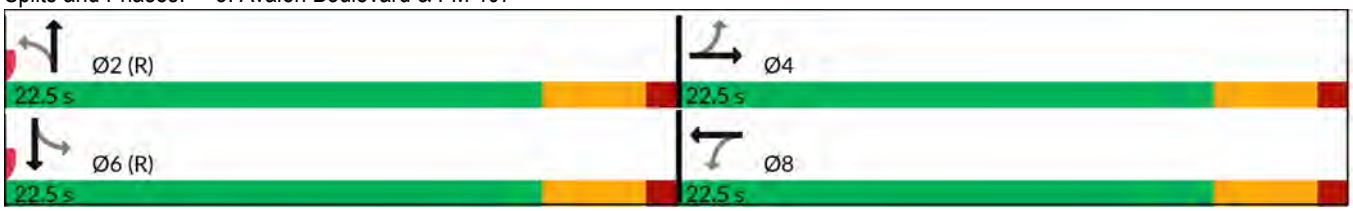


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	801	19	9	551	32	59	0	56	27	0	44
Future Volume (vph)	50	801	19	9	551	32	59	0	56	27	0	44
Peak Hour Factor	0.92	0.96	0.75	0.29	0.92	0.92	0.82	0.92	0.79	0.92	0.92	0.92
Adj. Flow (vph)	54	834	25	31	599	35	72	0	71	29	0	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	54	859	0	31	634	0	72	71	0	29	48	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)	16.0	16.0		16.0	16.0		20.0	20.0		20.0	20.0	
Actuated g/C Ratio	0.36	0.36		0.36	0.36		0.44	0.44		0.44	0.44	
v/c Ratio	0.23	0.68		0.19	0.50		0.12	0.05		0.05	0.03	
Control Delay (s/veh)	12.0	15.0		12.2	12.2		9.1	3.3		8.6	0.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	12.0	15.0		12.2	12.2		9.1	3.3		8.6	0.0	
LOS	B	B		B	B		A	A		A	A	
Approach Delay (s/veh)		14.8			12.2			6.2			3.3	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)	9	91		5	60		11	0		4	0	
Queue Length 95th (ft)	28	133		5	93		27	8		16	0	
Internal Link Dist (ft)		606			1077			125			168	
Turn Bay Length (ft)	150			150			150			150		
Base Capacity (vph)	266	1414		186	1414		599	1374		586	1421	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.20	0.61		0.17	0.45		0.12	0.05		0.05	0.03	

Intersection Summary
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.68

Intersection Signal Delay (s/veh): 12.7	Intersection LOS: B
Intersection Capacity Utilization 48.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: Avalon Boulevard & FM 407

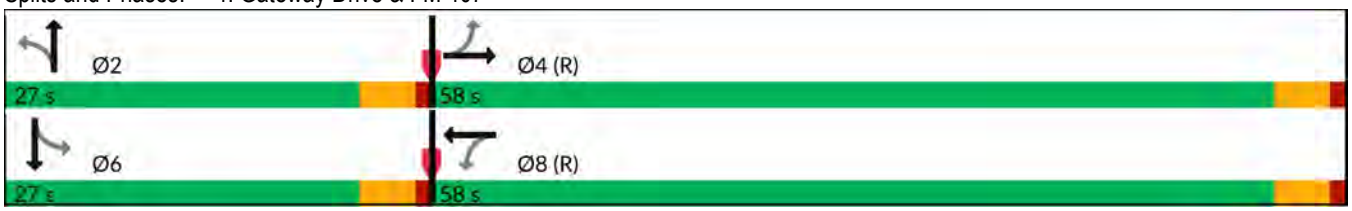


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	77	739	76	18	531	38	15	0	10	24	0	62
Future Volume (vph)	77	739	76	18	531	38	15	0	10	24	0	62
Peak Hour Factor	0.92	0.91	0.67	0.50	0.96	0.92	0.60	0.92	0.67	0.92	0.92	0.92
Adj. Flow (vph)	84	812	113	36	553	41	25	0	15	26	0	67
Shared Lane Traffic (%)												
Lane Group Flow (vph)	84	925	0	36	594	0	25	15	0	26	67	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	58.0	58.0		58.0	58.0		27.0	27.0		27.0	27.0	
Total Split (%)	68.2%	68.2%		68.2%	68.2%		31.8%	31.8%		31.8%	31.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		Max	Max		Max	Max	
Act Effct Green (s)	53.5	53.5		53.5	53.5		22.5	22.5		22.5	22.5	
Actuated g/C Ratio	0.63	0.63		0.63	0.63		0.26	0.26		0.26	0.26	
v/c Ratio	0.17	0.42		0.12	0.27		0.07	0.02		0.07	0.06	
Control Delay (s/veh)	7.7	8.3		7.4	7.2		24.3	0.0		24.2	0.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	7.7	8.3		7.4	7.2		24.3	0.0		24.2	0.1	
LOS	A	A		A	A		C	A		C	A	
Approach Delay (s/veh)		8.2			7.2			15.2			6.8	
Approach LOS		A			A			B			A	
Queue Length 50th (ft)	17	113		7	65		10	0		11	0	
Queue Length 95th (ft)	38	152		10	91		19	0		31	0	
Internal Link Dist (ft)		254			354			153			178	
Turn Bay Length (ft)	150			150			150			150		
Base Capacity (vph)	482	2200		312	2211		350	944		368	1053	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.17	0.42		0.12	0.27		0.07	0.02		0.07	0.06	

Intersection Summary
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 27 (32%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.42

Intersection Signal Delay (s/veh): 7.9	Intersection LOS: A
Intersection Capacity Utilization 46.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4: Gateway Drive & FM 407



Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	891	604	5	0	3
Future Vol, veh/h	0	891	604	5	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	968	657	5	0	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	331
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	881
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		0
Mov Cap-1 Maneuver	-	-	-	-	-	881
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	881
HCM Lane V/C Ratio	-	-	-	0.004
HCM Ctrl Dly (s/v)	-	-	-	9.1
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	745	570	14	9	17
Future Vol, veh/h	29	745	570	14	9	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	810	620	15	10	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	635	0	-	0	1500	627
Stage 1	-	-	-	-	627	-
Stage 2	-	-	-	-	873	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	948	-	-	-	85	483
Stage 1	-	-	-	-	532	-
Stage 2	-	-	-	-	382	-
Platoon blocked, %		-	-	-	0	
Mov Cap-1 Maneuver	948	-	-	-	82	483
Mov Cap-2 Maneuver	-	-	-	-	82	-
Stage 1	-	-	-	-	515	-
Stage 2	-	-	-	-	382	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.33	0	27.23
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	948	-	-	-	82	483
HCM Lane V/C Ratio	0.033	-	-	-	0.119	0.038
HCM Ctrl Dly (s/v)	8.9	-	-	-	54.6	12.7
HCM Lane LOS	A	-	-	-	F	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4	0.1

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	22	426	25	0	0
Future Vol, veh/h	0	22	426	25	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	24	463	27	0	0

Major/Minor	Minor1		Major1	
Conflicting Flow All	-	245	0	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	6.94	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	3.32	-	-
Pot Cap-1 Maneuver	0	755	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	-	755	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1
Capacity (veh/h)	-	-	755
HCM Lane V/C Ratio	-	-	0.032
HCM Ctrl Dly (s/v)	-	-	9.9
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	0.1

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	18	425	50	0	0
Future Vol, veh/h	0	18	425	50	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	20	462	54	0	0

Major/Minor	Minor1		Major1	
Conflicting Flow All	-	258	0	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	6.94	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	3.32	-	-
Pot Cap-1 Maneuver	0	741	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	-	741	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	WB	NB
HCM Ctrl Dly, s/v	9.99	0
HCM LOS	A	

Minor Lane/Major Mvmt	NBT	NBR	WBLn1
Capacity (veh/h)	-	-	741
HCM Lane V/C Ratio	-	-	0.026
HCM Ctrl Dly (s/v)	-	-	10
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	635	425	463	831	0	0	0	0	104	8	333
Future Volume (vph)	0	635	425	463	831	0	0	0	0	104	8	333
Peak Hour Factor	0.92	0.91	0.76	0.97	0.97	0.92	0.92	0.92	0.92	0.92	0.44	0.86
Adj. Flow (vph)	0	698	559	477	857	0	0	0	0	113	18	387
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1257	0	477	857	0	0	0	0	56	75	387
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		4		3	3 4						2	
Permitted Phases				3 4						2		2
Detector Phase		4		3	3 4					2	2	2
Switch Phase												
Minimum Initial (s)		5.0		5.0						5.0	5.0	5.0
Minimum Split (s)		22.5		9.5						22.5	22.5	22.5
Total Split (s)		34.0		26.0						25.0	25.0	25.0
Total Split (%)		40.0%		30.6%						29.4%	29.4%	29.4%
Yellow Time (s)		3.5		3.5						3.5	3.5	3.5
All-Red Time (s)		1.0		1.0						1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0						0.0	0.0	0.0
Total Lost Time (s)		4.5		4.5						4.5	4.5	4.5
Lead/Lag		Lead		Lag								
Lead-Lag Optimize?		Yes		Yes								
Recall Mode		C-Max		None						Max	Max	Max
Act Effct Green (s)		29.5		50.5	55.0					21.0	21.0	21.0
Actuated g/C Ratio		0.35		0.59	0.65					0.25	0.25	0.25
v/c Ratio		0.96		0.91	0.37					0.14	0.09	0.72
Control Delay (s/veh)		38.8		40.9	5.0					26.6	25.5	23.1
Queue Delay		0.0		0.0	1.1					0.0	0.0	0.0
Total Delay (s/veh)		38.8		40.9	6.1					26.6	25.5	23.1
LOS		D		D	A					C	C	C
Approach Delay (s/veh)		38.8			18.5						23.8	
Approach LOS		D			B						C	
Queue Length 50th (ft)		286		227	80					26	17	94
Queue Length 95th (ft)		#438		m248	m85					59	17	182
Internal Link Dist (ft)		88			264			81			95	
Turn Bay Length (ft)												
Base Capacity (vph)		1316		535	2310					398	807	538
Starvation Cap Reductn		0		0	1132					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		0.96		0.89	0.73					0.14	0.09	0.72

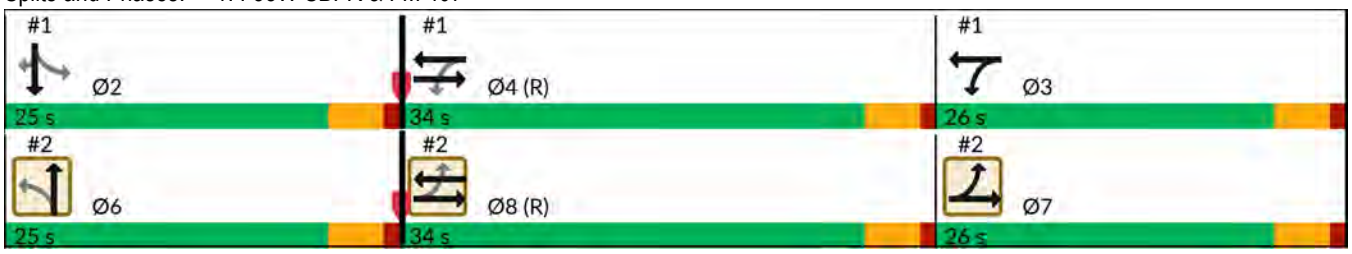
Intersection Summary
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 51 (60%), Referenced to phase 4:EBWB and 8:, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.97

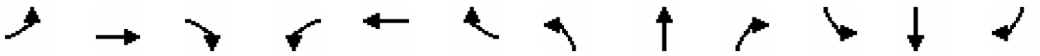
Lane Group	Ø6	Ø7	Ø8
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Peak Hour Factor			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	6	7	8
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5
Total Split (s)	25.0	26.0	34.0
Total Split (%)	29%	31%	40%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag		Lag	Lead
Lead-Lag Optimize?		Yes	Yes
Recall Mode	Max	None	C-Max
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Intersection Signal Delay (s/veh): 27.6 Intersection LOS: C
Intersection Capacity Utilization 82.7% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: I-35W SBFR & FM 407





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	301	601	0	0	718	234	412	24	461	0	0	0
Future Volume (vph)	301	601	0	0	718	234	412	24	461	0	0	0
Peak Hour Factor	0.88	0.94	0.92	0.92	0.88	0.69	0.95	0.60	0.90	0.92	0.92	0.92
Adj. Flow (vph)	342	639	0	0	816	339	434	40	512	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	342	639	0	0	1155	0	0	986	0	0	0	0
Turn Type	pm+pt	NA			NA		Perm	NA				
Protected Phases	7	7 8			8			6				
Permitted Phases	7 8						6					
Detector Phase	7	7 8			8		6	6				
Switch Phase												
Minimum Initial (s)	5.0				5.0		5.0	5.0				
Minimum Split (s)	9.5				22.5		22.5	22.5				
Total Split (s)	26.0				34.0		25.0	25.0				
Total Split (%)	30.6%				40.0%		29.4%	29.4%				
Yellow Time (s)	3.5				3.5		3.5	3.5				
All-Red Time (s)	1.0				1.0		1.0	1.0				
Lost Time Adjust (s)	0.0				0.0			0.0				
Total Lost Time (s)	4.5				4.5			4.5				
Lead/Lag	Lag				Lead							
Lead-Lag Optimize?	Yes				Yes							
Recall Mode	None				C-Max		Max	Max				
Act Effct Green (s)	50.5	55.0			29.5			21.0				
Actuated g/C Ratio	0.59	0.65			0.35			0.25				
v/c Ratio	0.65	0.28			0.94			0.97				
Control Delay (s/veh)	26.4	4.2			41.1			45.1				
Queue Delay	0.0	0.5			2.2			1.5				
Total Delay (s/veh)	26.4	4.7			43.3			46.6				
LOS	C	A			D			D				
Approach Delay (s/veh)		12.3			43.3			46.6				
Approach LOS		B			D			D				
Queue Length 50th (ft)	140	43			296			204				
Queue Length 95th (ft)	m171	m48			#420			132				
Internal Link Dist (ft)		264			606			121			66	
Turn Bay Length (ft)												
Base Capacity (vph)	535	2310			1227			1018				
Starvation Cap Reductn	0	1175			0			0				
Spillback Cap Reductn	0	0			28			10				
Storage Cap Reductn	0	0			0			0				
Reduced v/c Ratio	0.64	0.56			0.96			0.98				

Intersection Summary
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 51 (60%), Referenced to phase 4:EBWB and 8:, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.97

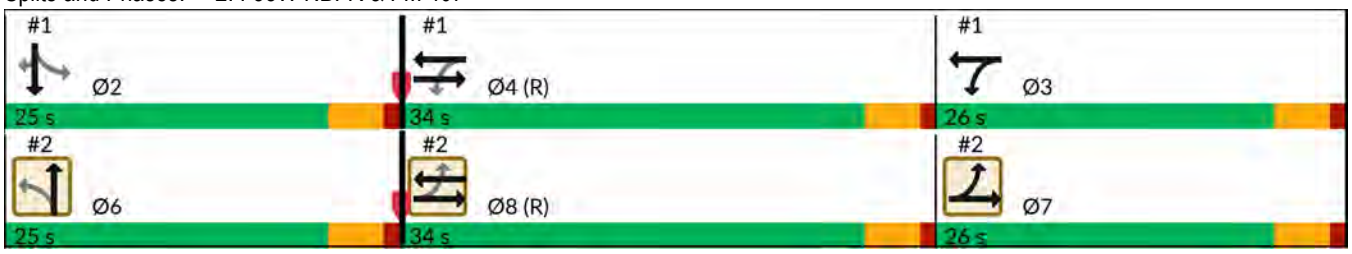
Lane Group	Ø2	Ø3	Ø4
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Peak Hour Factor			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	2	3	4
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5
Total Split (s)	25.0	26.0	34.0
Total Split (%)	29%	31%	40%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag		Lag	Lead
Lead-Lag Optimize?		Yes	Yes
Recall Mode	Max	None	C-Max
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Intersection Signal Delay (s/veh): 34.6	Intersection LOS: C
Intersection Capacity Utilization 82.7%	ICU Level of Service E
Analysis Period (min) 15	

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

Splits and Phases: 2: I-35W NBFR & FM 407



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	1004	61	42	891	45	26	0	29	44	0	71
Future Volume (vph)	72	1004	61	42	891	45	26	0	29	44	0	71
Peak Hour Factor	0.92	0.85	0.63	0.92	0.87	0.92	0.71	0.92	0.82	0.92	0.92	0.92
Adj. Flow (vph)	78	1181	97	46	1024	49	37	0	35	48	0	77
Shared Lane Traffic (%)												
Lane Group Flow (vph)	78	1278	0	46	1073	0	37	35	0	48	77	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	36.0	36.0		36.0	36.0		24.0	24.0		24.0	24.0	
Total Split (%)	60.0%	60.0%		60.0%	60.0%		40.0%	40.0%		40.0%	40.0%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)	28.7	28.7		28.7	28.7		22.3	22.3		22.3	22.3	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.37	0.37		0.37	0.37	
v/c Ratio	0.50	0.76		0.37	0.64		0.08	0.03		0.09	0.07	
Control Delay (s/veh)	22.8	15.7		19.0	13.2		14.4	3.3		14.5	4.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	22.8	15.7		19.0	13.2		14.4	3.3		14.5	4.2	
LOS	C	B		B	B		B	A		B	A	
Approach Delay (s/veh)		16.1			13.4			9.0			8.2	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)	17	175		9	135		9	0		12	0	
Queue Length 95th (ft)	#59	209		35	169		21	5		33	11	
Internal Link Dist (ft)		606			1077			125			168	
Turn Bay Length (ft)	150			150			150			150		
Base Capacity (vph)	171	1847		135	1850		487	1152		507	1169	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.46	0.69		0.34	0.58		0.08	0.03		0.09	0.07	

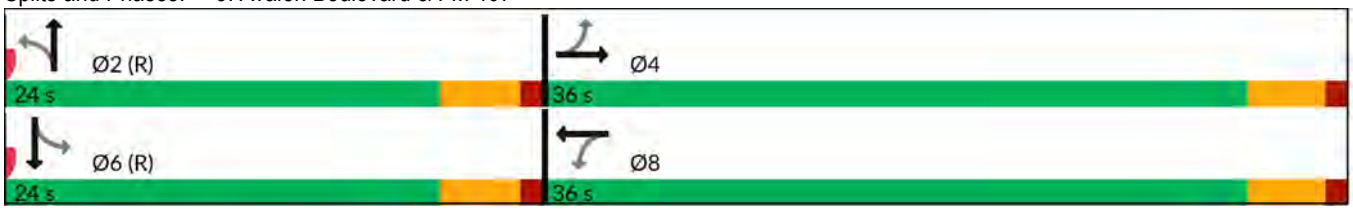
Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.76

Intersection Signal Delay (s/veh): 14.4	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.

Splits and Phases: 3: Avalon Boulevard & FM 407

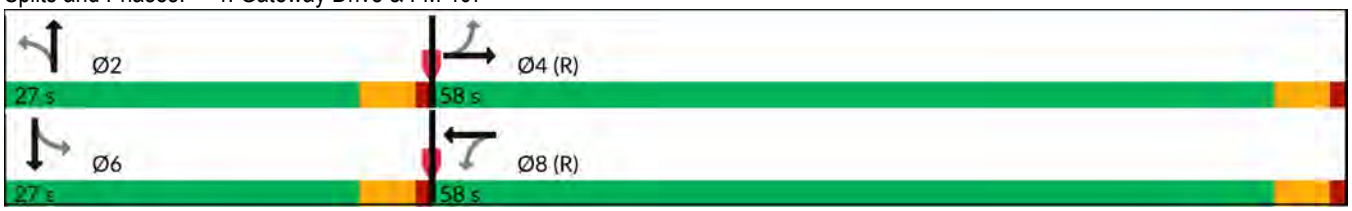


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	201	855	33	22	653	93	61	0	42	97	0	266
Future Volume (vph)	201	855	33	22	653	93	61	0	42	97	0	266
Peak Hour Factor	0.92	0.82	0.65	0.71	0.88	0.92	0.75	0.92	0.59	0.92	0.92	0.92
Adj. Flow (vph)	218	1043	51	31	742	101	81	0	71	105	0	289
Shared Lane Traffic (%)												
Lane Group Flow (vph)	218	1094	0	31	843	0	81	71	0	105	289	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	58.0	58.0		58.0	58.0		27.0	27.0		27.0	27.0	
Total Split (%)	68.2%	68.2%		68.2%	68.2%		31.8%	31.8%		31.8%	31.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		Max	Max		Max	Max	
Act Effct Green (s)	53.5	53.5		53.5	53.5		22.5	22.5		22.5	22.5	
Actuated g/C Ratio	0.63	0.63		0.63	0.63		0.26	0.26		0.26	0.26	
v/c Ratio	0.62	0.49		0.13	0.38		0.30	0.08		0.30	0.30	
Control Delay (s/veh)	19.4	9.3		7.9	7.9		28.8	1.4		27.9	6.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	19.4	9.3		7.9	7.9		28.8	1.4		27.9	6.9	
LOS	B	A		A	A		C	A		C	A	
Approach Delay (s/veh)		11.0			7.9			16.0			12.5	
Approach LOS		B			A			B			B	
Queue Length 50th (ft)	65	148		6	100		35	0		46	11	
Queue Length 95th (ft)	155	168		14	130		61	4		91	42	
Internal Link Dist (ft)		254			354			153			178	
Turn Bay Length (ft)	150			150			150			150		
Base Capacity (vph)	350	2215		247	2200		267	885		349	968	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.62	0.49		0.13	0.38		0.30	0.08		0.30	0.30	

Intersection Summary
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 27 (32%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.62

Intersection Signal Delay (s/veh): 10.5	Intersection LOS: B
Intersection Capacity Utilization 60.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4: Gateway Drive & FM 407



Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1089	967	14	0	15
Future Vol, veh/h	0	1089	967	14	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1184	1051	15	0	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	533
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	813
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		0
Mov Cap-1 Maneuver	-	-	-	-	-	813
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	9.52
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	813
HCM Lane V/C Ratio	-	-	-	0.02
HCM Ctrl Dly (s/v)	-	-	-	9.5
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	24.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	84	910	681	42	44	87
Future Vol, veh/h	84	910	681	42	44	87
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	91	989	740	46	48	95

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	786	0	-	0	1935	763
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	1172	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	833	-	-	-	~ 24	404
Stage 1	-	-	-	-	460	-
Stage 2	-	-	-	-	217	-
Platoon blocked, %		-	-	-	0	
Mov Cap-1 Maneuver	833	-	-	-	~ 21	404
Mov Cap-2 Maneuver	-	-	-	-	~ 21	-
Stage 1	-	-	-	-	410	-
Stage 2	-	-	-	-	217	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.83	0	$ 338.98
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	833	-	-	-	21	404
HCM Lane V/C Ratio	0.11	-	-	-	2.285	0.234
HCM Ctrl Dly (s/v)	9.9	-	-	-	$ 976.4	16.6
HCM Lane LOS	A	-	-	-	F	C
HCM 95th %tile Q(veh)	0.4	-	-	-	6.2	0.9

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

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	35	598	36	0	0
Future Vol, veh/h	0	35	598	36	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	38	650	39	0	0

Major/Minor	Minor1		Major1	
Conflicting Flow All	-	345	0	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	6.94	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	3.32	-	-
Pot Cap-1 Maneuver	0	651	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	-	651	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	WB	NB
HCM Ctrl Dly, s/v	10.87	0
HCM LOS	B	

Minor Lane/Major Mvmt	NBT	NBR	WBLn1
Capacity (veh/h)	-	-	651
HCM Lane V/C Ratio	-	-	0.058
HCM Ctrl Dly (s/v)	-	-	10.9
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.2

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	58	578	112	0	0
Future Vol, veh/h	0	58	578	112	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	63	628	122	0	0

Major/Minor	Minor1		Major1	
Conflicting Flow All	-	375	0	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	6.94	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	3.32	-	-
Pot Cap-1 Maneuver	0	623	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	-	623	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1
Capacity (veh/h)	-	-	623
HCM Lane V/C Ratio	-	-	0.101
HCM Ctrl Dly (s/v)	-	-	11.4
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.3