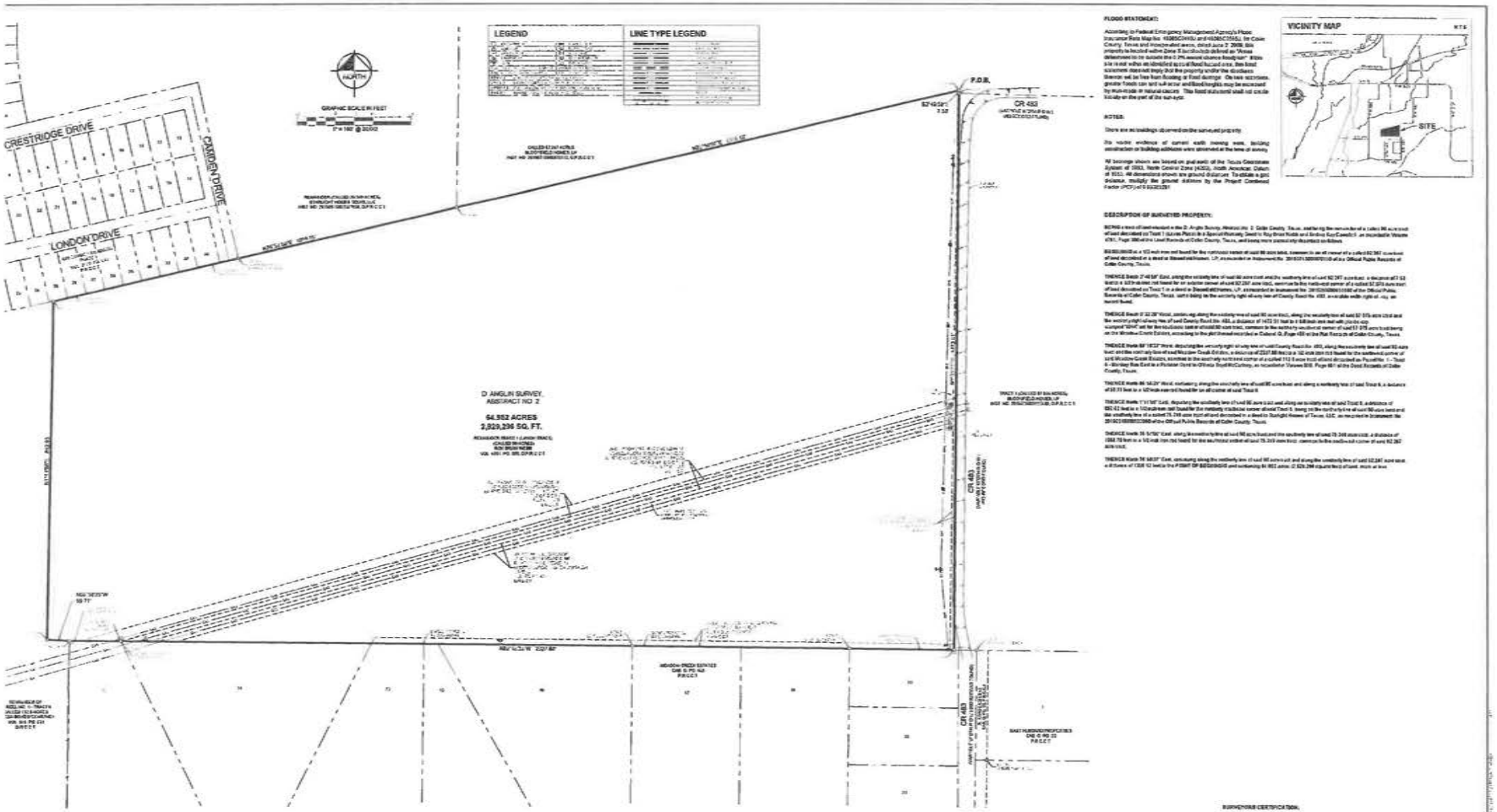


FLOOD STATEMENT:

According to Federal Emergency Management Agency's Flood Insurance Rate Map No. 48085C0445G and 48085C0565G, for Collin County, Texas and Incorporated Areas, dated June 2, 2009, this property is located within Zone X (unshaded) defined as "Areas determined to be outside the 0.2% annual chance floodplain". Within this is a real estate risk identified as a 0.2% annual chance flood zone. This flood statement does not imply that the property and/or the structures thereon will be free from flooding or flood damage. On rare occasions, greater floods can and will occur and flood heights may be increased by man-made or natural causes. This flood statement shall not create liability on the part of the surveyor.

NOTES:

There are no buildings observed on the surveyed property.

No visible evidence of current earth moving work, building construction or building additions were observed at the time of survey.

All bearings shown are based on grid north of the Texas Coordinate System of 1983, North Central Zone (4202), North American Datum of 1983. All dimensions shown are ground distances. To obtain a grid distance, multiply the ground distance by the Project Combined Factor (PCF) of 0.99993281.

VICINITY MAP

DESCRIPTION OF SURVEYED PROPERTY:

BEING a tract of land situated in the D. Anglin Survey, Abstract No. 2, Collin County, Texas, and being the remainder of a called 86 acre tract of land described as Tract 1 (Seven Pieces) in a Special Warranty Deed to Ray Brian Webb and Lindsay Kay Campbell, an undivided 1/2 interest, recorded in Volume 4781, Page 2960 of the Land Records of Collin County, Texas, and being more particularly described as follows:

BEGINNING at a 1/2 inch iron rod found for the northeast corner of said 86 acre tract, common to an ell corner of a called 62.367 acre tract of land described as a deed to Stewart and Howard, LP, as recorded in Instrument No. 20151013000401100 of the Official Public Records of Collin County, Texas;

THENCE South 2°45'58" East, along the westerly line of said 62 acre tract and the westerly line of said 62.367 acre tract, a distance of 7.32 feet to a 5/8"-inch iron rod found for an exterior corner of said 62.367 acre tract, common to the northerly southeast corner of a called 62.975 acre tract of land described as Tract 1 in a deed to Stewart and Howard, LP, as recorded in Instrument No. 20151029000431080 of the Official Public Records of Collin County, Texas, said point being on the westerly right-of-way line of County Road No. 482, a variable width right-of-way, as found there;

THENCE South 0°32'26" West, continuing along the westerly line of said 62 acre tract, along the westerly line of said 62.975 acre tract and the westerly right-of-way line of said County Road No. 482, a distance of 1472.31 feet to a 5/8-inch iron rod with yellow cap stamped "5907" set for the southeast corner of said 86 acre tract, common to the northerly southeast corner of said 62.975 acre tract being on the Winslow Creek Estates, according to the plat thereof recorded in Cabinet Q, Page 452 of the Plat Records of Collin County, Texas;

THENCE North 89°16'22" West, departing the west right-of-way line of said County Road No. 482, along the southerly line of said 86 acre tract and the common northerly line of said Winslow Creek Estates, a distance of 2327.89 feet to a 1/2 inch iron rod found for the southwest corner of said 86 acre tract and the northwest corner of said Winslow Creek Estates, also being in the east line of a called 110.0 acre tract of land described as Parcel No. 1 - Tract 4 - Monkey Run East in a Partition Deed to Offield Ruhle Brooks Co./Trey, as recorded in Volume 906, Page 661 of the Deed Records of Collin County, Texas;

THENCE North 89°16'29" West, departing the southerly line of said 86 acre tract and along a northerly line of said Tract 4, a distance of 59.77 feet to a 1/2"-inch iron rod found for an ell corner of said Tract 4;

THENCE North 1°11'56" East, departing the southerly line of said 86 acre tract and along an easterly line of said Tract 4, a distance of 662.42 feet to a 1/2-inch iron rod found for the northerly southeast corner of said Tract 4, being in the north boundary line of said 86 acre tract and the southerly line of a called 75.248 acre tract of land described in a deed to Starlight Homes of Texas, LLC, as recorded in Instrument No. 20190318000323960 of the Official Public Records of Collin County, Texas;

THENCE North 78°57'56" East, along the northerly boundary line of said 86 acre tract and the southerly line of said 75.248 acre tract, a distance of 1582.78 feet to a 1/2-inch iron rod found for the southeast corner of said 75.248 acre tract, common to the southwest corner of said 62.367 acre tract;

THENCE North 78°48'37" East, continuing along the northerly line of said 86 acre tract, and along the southerly line of said 62.367 acre tract, a distance of 1308.12 feet to the POINT OF BEGINNING and containing 64.952 acres, (2,829,236 square feet) of land, more or less.

SURVEYOR'S CERTIFICATION:

To: Paula Jane Strickland, Ray Brian Webb and Andrea Kay Campbell, Meritage Homes of Texas, LLC, an Arizona limited liability company (Exempt Title Guaranty Company), Alliance Title Company

This is to certify that I/we map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1,2,3,4,8,9,10 and 16 of Table A thereof. The field work was completed on 03/10/2021.

PRELIMINARY
THIS DOCUMENT SHALL NOT BE RECORDED FOR ANY PURPOSE AND SHALL NOT BE USED OR VIEWED OR RELIED UPON AS A FINAL SURVEY DOCUMENT

Sylvia Gonzalez
Registered Professional Land Surveyor No. 5487
Kimley-Horn and Associates, Inc.
6160 Warren Pkwy., Suite 210
Frisco, Texas 75034
Ph: 972-335-3580
sylvia.gonzalez@kimley-horn.com

SCHEDULE B EXCEPTIONS:

...to the Commitment for Title Insurance issued by Stewart Title Guaranty Company GF No. 197-4470 effective date October 18, 2021, issued November 5, 2020:

...Affects right-of-way easement in favor of Equilease Pipeline Company as set forth in instrument ...recorded in Volume 1772, Page 444 of the Real Property Records of Collin County, Texas ...property, as shown on survey.

...pipeline right-of-way easement in favor of Envision Corporation as set forth in instrument ...recorded in Volume 1258, Page 603 of the Real Property Records of Collin County, Texas ...property, as shown on survey.

...easement granted to the Cedar County by instrument not to and recorded Volume 4110, Page 2438 of ...Property Records of Collin County, Texas. Affects property, as shown on survey.

...the right-of-way easement in favor of Enlarge Corporation as set forth in instrument recorded ...Volume 3812, Page 2437 of the Real Property Records of Collin County, Texas. Affects ...rty, as shown on survey.

...ght of Way Easement granted to Lone Water Supply Corporation by instrument recorded ...Clerk's File No. 93-0051552 of the Real Property Records of Collin County, Texas. Affects ...rty. Wanted in nature, unable to plot.

...ght of Way Easement granted to Lone Water Supply Corporation by instrument recorded ...Clerk's File No. 94-0073357 of the Real Property Records of Collin County, Texas. Affects ...rty. Wanted in nature, unable to plot.

...blanket right-of-way easement to Lone Water Supply Corporation by instrument recorded ...Clerk's File No. 20160223000452230 of the Real Property Records of Collin County, Texas ...property, as shown on survey.

ALTA/NSPS LAND TITLE SURVEY
64.952 ACRES

D. ANGLIN SURVEY, ABSTRACT NO. 2
COLLIN COUNTY, TEXAS

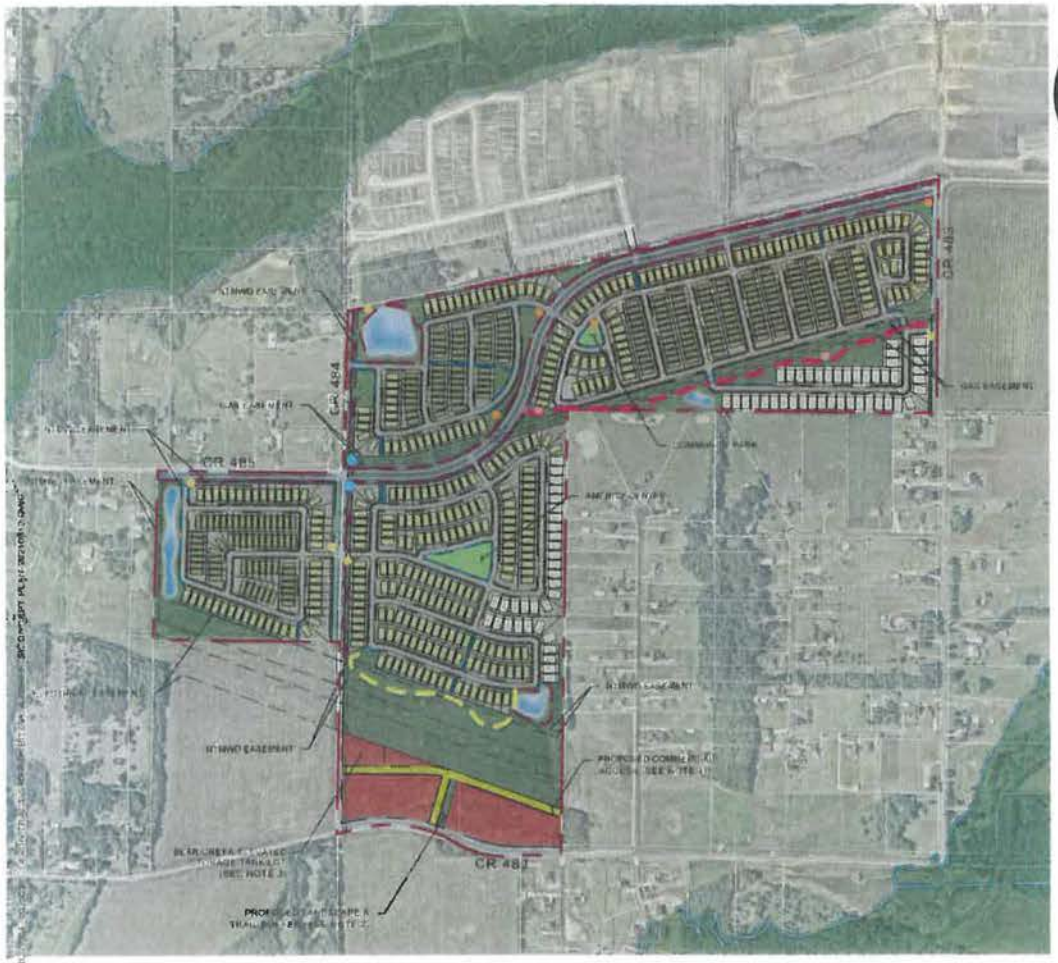
Kimley»Horn
6160 Warren Parkway, Suite 210, Frisco, Texas 75034 — Tel. No. (972) 335-3580, Fax No. (972) 335-3779
FIRM # 10193233

No.	DATE	REVISION DESCRIPTION
1		

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
1" = 100'	XXX	XXX	**/**/2019	000000XX	1 OF 1

Exhibit B
Concept Plan

(see next page)



GRAPHIC SCALE IN FEET

0 500 1000 2000

1"=1000'@ 8.5x11

Land Use Acreage Summary

Perimeter Thoroughfares Rights of Way	17.0
Commercial	10.1
Amenity Center/ Community Park	1.7
Open Space & Buffers	46.3
Residential Lots / Residential Rights of Way	127.5
Total	**205.5**

Open Space Acreage Summary

Open Space, Buffers & Amenity Center	48.0
Area (Net of Perimeter ROW)	188.5
Total Percent Open Space	**25.5%**

Lot Type Summary

40' x 110'	227
50' x 110'	350
60' x 120'	74
Total	651

Density Summary (Units per Acre)

Gross	3.2
Net of Perimeter ROW	3.4

LEGEND

- 5' CONCRETE SIDEWALK
- MEANDERING 8' CONCRETE TRAIL
- MEANDERING 10' CONCRETE TRAIL
- PROPOSED 10' CONCRETE TRAIL SUBJECT TO APPROVAL BY UTILITY EASEMENT OWNER
- MAIN ENTRY MONUMENT
- SECONDARY ENTRY MONUMENT
- TRAIL HEAD
- ENHANCED PEDESTRIAN NODE TO INCLUDE (2) BENCHES
- ART FEATURE
- ENHANCED CROSSWALK

NOTE:

1. ACCESS VIA PUBLIC R.O.W. OR FIRE LANE SHALL BE PROVIDED THROUGH COMMERCIAL TRACT AS GENERALLY SHOWN. EXACT LOCATIONS AND ALIGNMENTS TO BE DETERMINED AT TIME OF SITE PLANNING OF THE COMMERCIAL TRACT.

2. A LANDSCAPE AND TRAIL BUFFER SHALL BE PROVIDED CONNECTING CR 483 TO OPEN SPACE NORTH OF COMMERCIAL TRACT AS GENERALLY SHOWN. EXACT LOCATION AND DIMENSIONS SHALL BE DETERMINED AT TIME OF SITE PLANNING FOR THE COMMERCIAL TRACT.

3. DEDICATION OF THE BEAR CREEK ELEVATED STORAGE TANK LOT SHALL BE SUBJECT TO CITY REVIEW AND APPROVAL OF AN ASSOCIATED PLAT AND DETAILED SITE PLAN, INCLUDING SCREENING AND LANDSCAPING.

4. THE TRAILS AND SIDEWALKS DEPICTED HEREON, ARE THOSE THAT SHALL BE CONSTRUCTED BY THE DEVELOPER. THE HOME BUILDER SHALL BE RESPONSIBLE FOR CONSTRUCTION OF A 5' SIDEWALK ALONG THE STREET FRONTAGE OF ALL RESIDENTIAL LOTS AT THE TIME OF HOME CONSTRUCTION.

CERQUEIRA, JOSEPH
K:\DAL_CIVIL\NO_PR...
8/27/2021 8:16 AM

PLOTTED BY
DWG NAME
LAST SAVED

CONCEPT PLAN
Lavon Tract

Lavon, Texas
August 2021

Kimley»Horn
13455 Noel Road, Two Galleria Office [illegible]
suite 700
Dallas, Texas 75240
972-335-3580
State of Texas Registration No. F-928

Exhibit C
Development Standards

The Development shall meet the standards in the Subdivision Regulations and the Zoning Ordinance, as may be amended, except as follows:

1. Concept Plan:
   The property shall generally be developed in accordance with the Concept Plan, Exhibit B, the Conceptual Landscape Plan, Exhibit H, and the Amenities Exhibit, Exhibit F.

   Approval of the Concept Plan shall constitute approval of the lot and street configurations with regards to lot mix and maximum street and/or block lengths.

2. Commercial District:
   The commercial district shall conform to the provisions set forth in the Zoning Ordinance, as may be amended, with a base Zoning District of Retail (R).

   An approximately one-acre lot within the commercial district may be dedicated to Bear Creek Special Utility District for use for an elevated storage tank in conjunction with an associated plat for the area and a detailed site plan, including screening and landscaping subject to review and approval by the City Engineer.

3. Residential District:
   The residential district shall conform to the provisions set forth in the Zoning Ordinance, as may be amended, with a base Zoning District of Single Family – 4 (SF-4), except as follows:

   - Lot Mix

Lot Size	Minimum Number of Lots	Maximum Number of Lots
40' Lots	N/A	227
50' Lots	N/A	350
60' Lots	74	N/A

[This Space Intentionally Left Blank]

- Lot Regulations

	60' Lots	50' Lots	40' Lots
Minimum Lot Area	7,200 square feet	5,500 square feet	4,400 square feet
Minimum Lot Width [1]	60 feet	50 feet	40 feet
Minimum Lot Depth	120 feet	110 feet	110 feet
Minimum Front Yard/Garage Setback	20 feet	20 feet	20 feet
Minimum Rear Yard	20 feet	10 feet	10 feet
Minimum Side Yard on Interior Lots[2]	5 feet	5 feet	5 feet
Minimum Side Yard on Street Side of Corner Lots[3, 4]	15 feet	15 feet	15 feet
Maximum Lot Coverage[5]	65%	65%	65%
Maximum Building Height	35 feet	35 feet	35 feet
Minimum Dwelling Area	1,800 square feet	1,500 square feet	1,200 square feet

[1] Lot widths shall be measured at the front building line. Along arcs, the lot width shall be measured as the length of the tangent at front building line.

[2] Air conditioning units may be installed within side yard setback.

[3] Except for key lots, which shall match the front yard of the adjacent lot. A key lot shall mean any corner lot in which the street side of said lot is adjacent to front yard of the lot it rears to.

[4] Side entry garages shall adhere to a 20' setback.

[5] Exclusive of sidewalks and driveways

4. Drainage & Detention Standards:

Drainage & detention shall be provided in accordance with the Subdivision Regulations and the Zoning Ordinance, as may be amended, except as follows:

- Lots shall drain surface runoff from an individual lot to public Right-of-Way or to a drainage system contained in an associated drainage easement.
- The Property shall provide on-site detention facilities sized to prevent an increase in offsite downstream storm water flows above existing conditions in the 100-year storm event. Detention shall be designed and evaluated for only the 100-year storm event. Detention ponds shall be designed as an amenity to the community and will be wet ponds with a fountain.

5. Amenities, Landscape, & Open Space Requirements:
   Amenities and landscaping shall conform to the Conceptual Landscape Plan, Exhibit H, and the Amenities Exhibit F.

   - Open Space
     - The Property shall provide open space at a minimum of 20% of the development acreage net of perimeter and arterial right-of-way dedications including all required landscape buffers, block end caps, amenity centers, community parks, easement corridors, and detention/retention areas as generally reflected on the Concept Plan and Conceptual Landscape Plan. The provided open space shall satisfy all required landscape area requirements and parkland dedication requirements of the development. The open space percentage shall be measured as a cumulative of the entire development and not on a phase by phase basis.
     - An amenity center shall be constructed prior to issuance of the 250th home building permit at the location generally reflected on the Concept Plan and Conceptual Landscape Plan. The amenity center shall include, at a minimum, the following elements:
       - Swimming Pool
       - Children's Pool Area
       - Restroom Building
       - Playground
       - Shade Structure
     - A community park shall be constructed prior to the issuance of the 500th home building permit at the location generally reflected on the Concept Plan and Conceptual Landscape Plan. The park shall include, at a minimum, the following elements:
       - Playground
       - Shaded Picnic Structure
       - Event Lawn
       - Site Furniture

- Two pocket parks shall be constructed at the time of development of the associated phase that they are within at the locations generally reflected on the Concept Plan and Conceptual Landscape Plan. One pocket park shall be an active park with landscape berms and slides within a manicured lawn area. The second pocket park shall be an open play area with a cedar shaded picnic structure and site furniture.

- Perimeter Arterial Open Space
  - A minimum 15-foot landscape buffer shall be provided along CR 484, CR 485, and CR 483 between the right-of-way and the property line of any adjacent residential lots. The 15' landscape buffer may include areas encumbered by existing easements on the property. The 15' landscape buffer shall include one (1) large canopy tree (min 3" caliper at planting as defined below) generally placed every 40 feet except where an existing easement may not allow for it.
  - A 6' brick screening wall with masonry columns shall be required where residential lots are adjacent to CR 484, CR 485, and CR 483. Masonry columns shall be placed at all ends and changes in direction with a maximum 100' spacing on centers along tangents and curves.
- Residential Lot Landscaping
  - At least one (1) large canopy tree (min 3" caliper at planting as defined below) shall be provided in the front yard of every lot. Corner Lots shall have one (1) additional large canopy tree (min 3" caliper at planting) in the side yard outside of the sight visibility triangle.
  - Fencing shall be of consistent design patterns and high-quality materials throughout the development. Each lot shall have either: 1) a 6-foot board-by-board wooden fence and consistent stain or 2) wrought-iron or tubular steel fencing. A/C equipment shall be behind the front fence line and screened from the street with shrubs if wrought iron fences are utilized.

6. Lake Connector Corridor:
   The median of County Road 485 through the Project shall be designed to be a green infrastructure-type design that provides the following elements:
   - At median ends, focal points shall be created that include varied plant forms, textures, and foliage in addition to flowers in a Green Infrastructure design. Plants shall be coordinated with repeating groupings to form an overall pattern. Related elements, such as mulches, boulders, river rock, and/or unique lake oriented design elements shall be included if possible. Enhanced pedestrian crosswalks at intersections around the Amenity Center and Community Park. An enhanced pedestrian crosswalk may

include one of the following: striping, stamped/stained concrete, or pavers.

- For the medians that are not designated as focal points, shade trees shall be planted in a uniform line and repeated in species type for uniform texture and pattern. The same tree species shall not span more than ten trees in a row.
- Enhanced planting design shall be placed at all logo columns, sign monuments, and art features along the frontage of County Road 485.

7. Community Enhancement:
   Community enhancement features shall be installed throughout the Property at the general locations shown on the Conceptual Landscape Plans. The features shall include, but are not limited to, the following:
   - Four art features that shall be custom designed and be made of metal and/or stone including a general theme and logo to designate the Lake Connector Corridor.
   - Enhanced pedestrian crosswalks at intersections around the Amenity Center and Community Park. An enhanced pedestrian crosswalk may include one of the following: striping, stamped/stained concrete, or pavers.
   - Two pedestrian nodes along the trail system.
   - One trail head that shall include a water fountain, small cedar shade structure, bench and pet waste station.

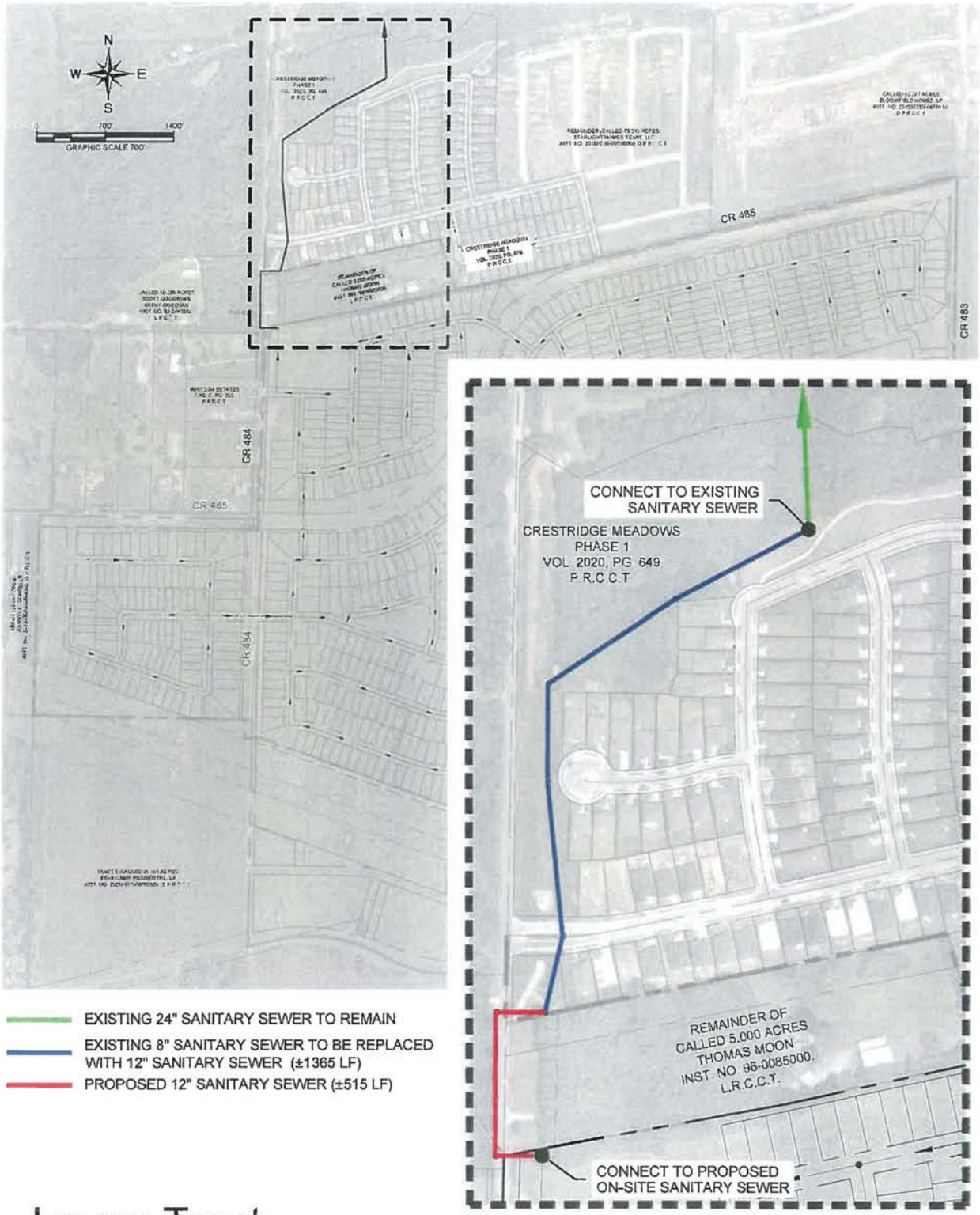
8. Tree Preservation & Mitigation:
   - The property has limited existing tree coverage and the required/proposed tree plantings are anticipated to exceed the caliper inches of removed trees. As such, all requirements for tree preservation and mitigation shall be considered satisfied.
   - Existing trees three-inch caliper and above shall be preserved to the extent possible in open spaces adjacent to ponds. Trees will be allowed to be removed to accommodate required detention pond volumes and detention pond outfalls. Tree preservation fencing located at the drip line shall be required throughout construction.
   - A large canopy tree includes: Live Oak, Red Oak, Bur Oak, Chinquapin Oak, Bald Cypress, Cedar Elm, Southern Magnolia, Chinese Pistache, Pecan Texas Ash, Eastern Red Cedar, or otherwise as approved by the City Manager or designee.

9. Cluster Mailboxes:
   Mailboxes for residents shall be clustered throughout the community according to United States Postal Service guidelines. The mailboxes shall be a black Classic Cluster Box with Crown Cap and Pillar Pedestal mounted on a concrete pad. The mailboxes shall be located in the side yards of corner lots or in open spaces between back of curb and sidewalk.

10. Non-Repetition of Building Form:
    The same house elevation may not be duplicated within three (3) lots on the same side of street and within three (3) lots on the opposite side of street.

11. Building Standards:
    The minimum masonry requirement for the exterior façades of all buildings is permitted up to 90% of the total façade. For the purposes of this, the masonry requirement shall be limited to full width brick, natural stone, cast stone, and cementaceous fiberboard horizontal lap-siding (e.g. HardiBoard or Hardy Plank) or decorative pattern stucco.

Exhibit D
Offsite Wastewater Improvements



Lavon Tract

OFF-SITE SEWER EXHIBIT
Lavon ETJ, Collin County, Texas
August 2021

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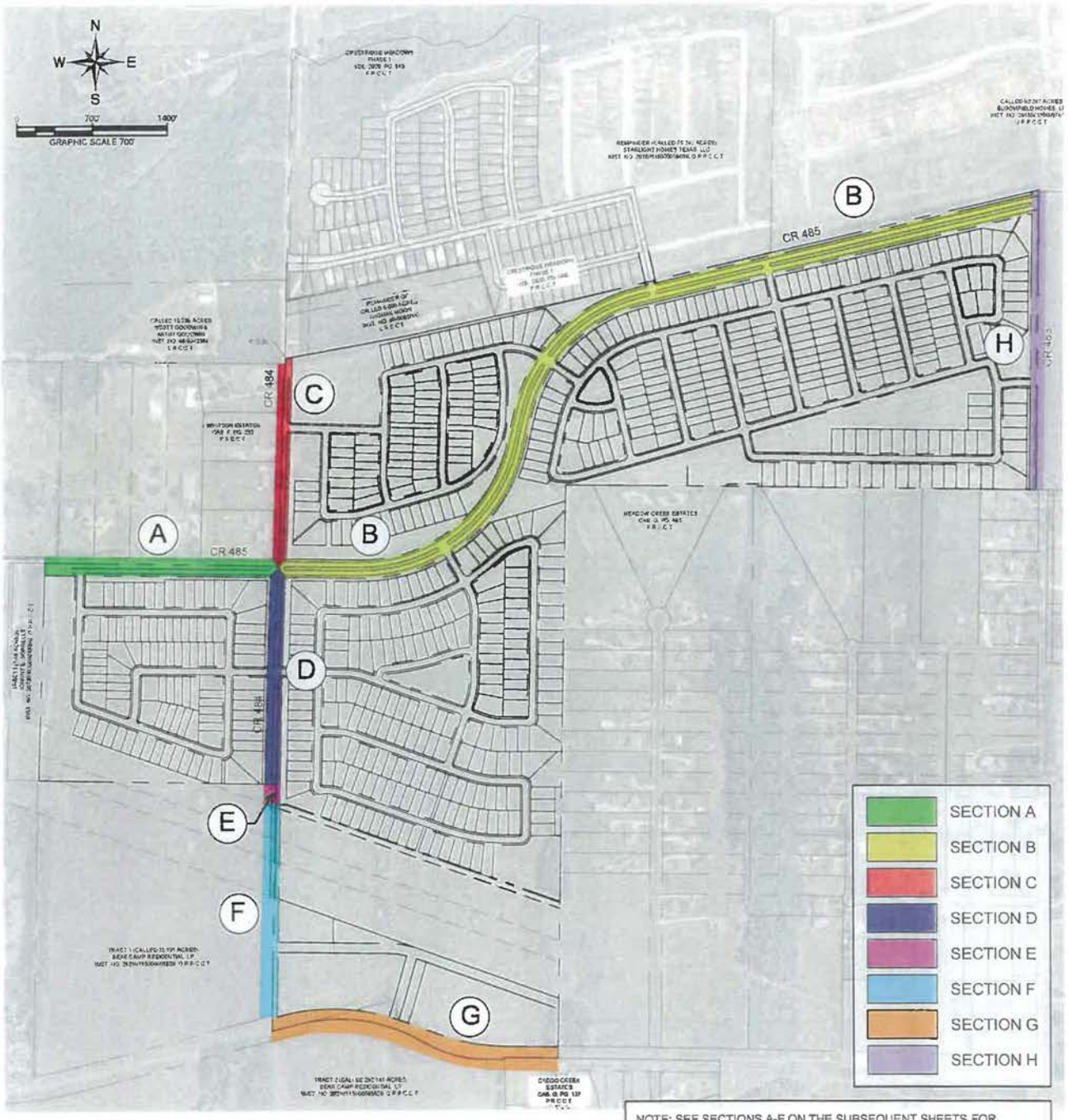
Kimley»Horn
13455 Noel Road
Suite 700
Dallas, Texas 75034
469-914-8611
State of Texas Registration No. F-928

Exhibit E
Roadway Improvements



NOTE: SEE SECTIONS A-F ON THE SUBSEQUENT SHEETS FOR RIGHT-OF-WAY DEDICATION AND PAVEMENT WIDTH DETAILS.

SECTION G WILL BE A VARIABLE WIDTH RIGHT-OF-WAY DEDICATION OUT OF THE ULTIMATE 120-FOOT RIGHT-OF-WAY SECTION.

SECTION H WILL BE A 35-FOOT RIGHT-OF-WAY DEDICATION OUT OF THE ULTIMATE 70-FOOT RIGHT-OF-WAY SECTION.

Lavon Tract

ROADWAY IMPROVEMENT EXHIBIT - MASTER

Lavon ETJ, Collin County, Texas

June 2021

Kimley»Horn
13455 Noel Road
Suite 700
Dallas, Texas 75034
469-914-8811
State of Texas Registration No. F-928

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DWG NAME
LAST SAVED

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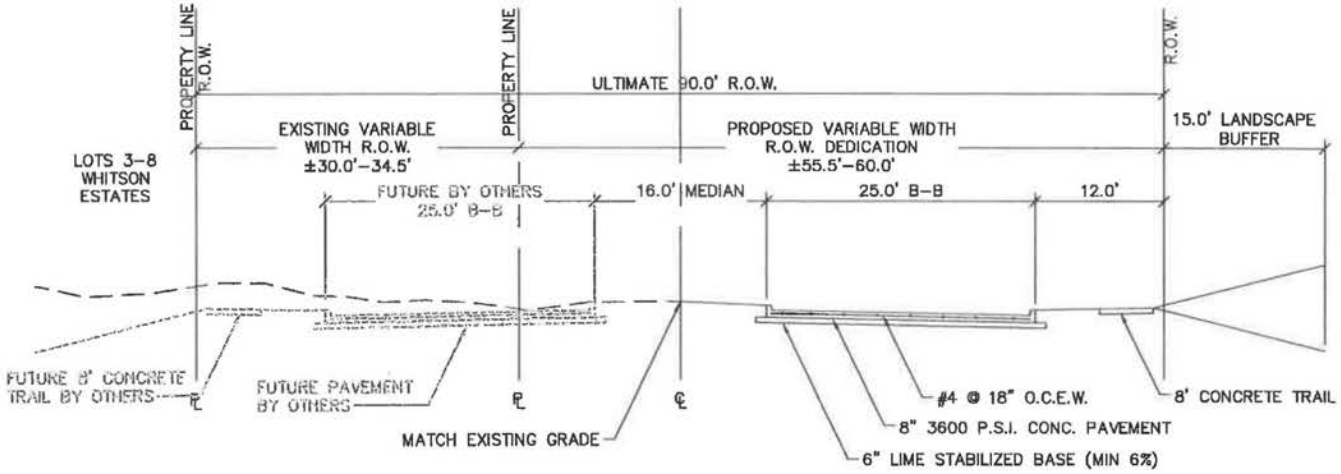

SECTION A – CR 485 (WEST OF CR 484)

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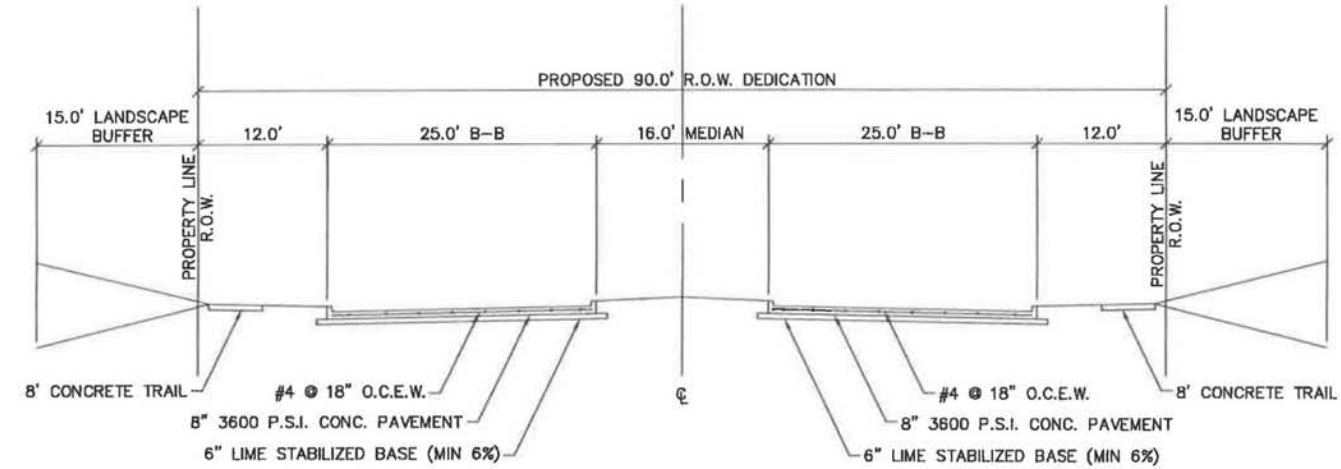

SECTION B – CR 485 (EAST OF CR 484)

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PLOTTED BY
DWG NAME
LAST SAVED

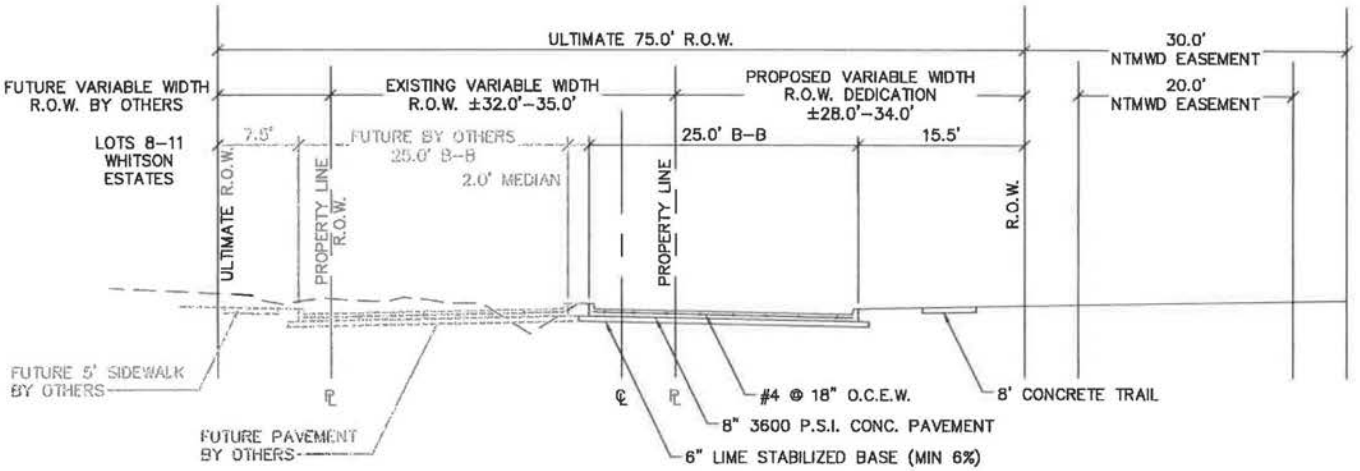
Lavon Tract

ROADWAY IMPROVEMENT EXHIBIT

Lavon ETJ, Collin County, Texas

August 2021

Kimley»Horn
13455 Noel Road
Suite 700
Dallas, Texas 75034
469-914-8611
State of Texas Registration No. F-928



SECTION C – CR 484 (NORTH OF CR 485)

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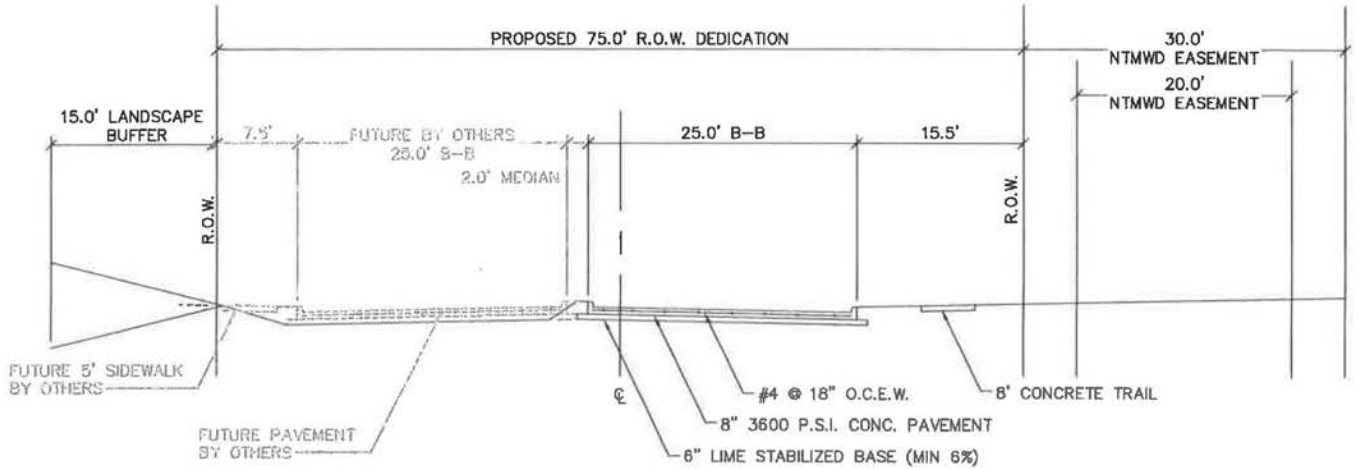

SECTION D – CR 484 (SOUTH OF CR 485 TO SOUTH END OF RESIDENTIAL)

NTS

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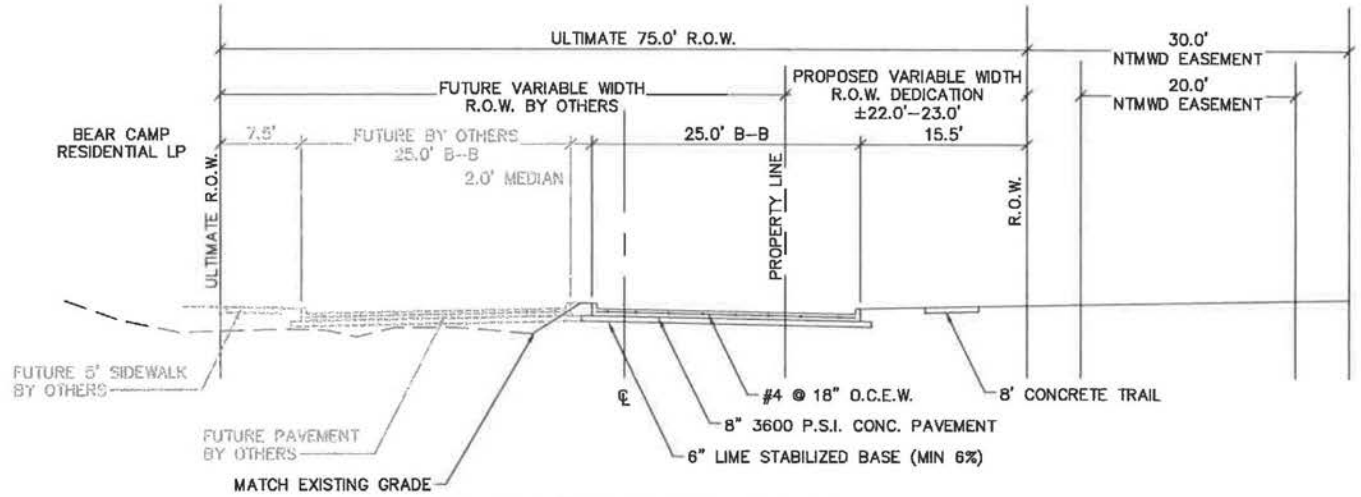
Lavon Tract

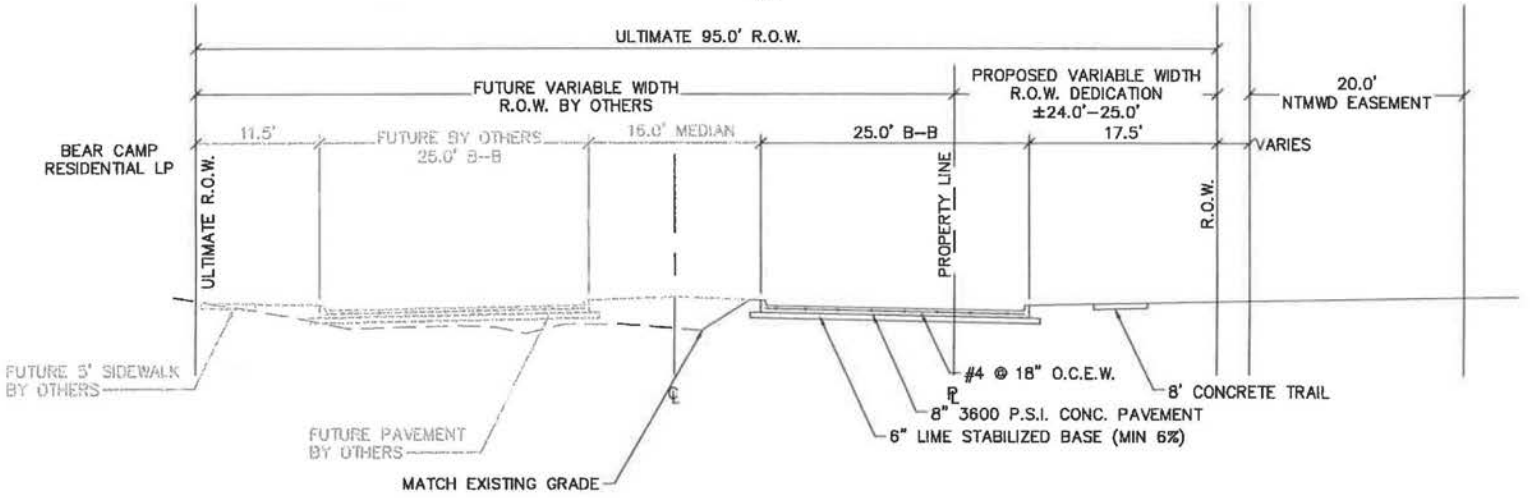
ROADWAY IMPROVEMENT EXHIBIT
Lavon ETJ, Collin County, Texas
August 2021

Kimley»Horn
13455 Noel Road
Suite 700
Dallas, Texas 75034
469-914-8611
State of Texas Registration No. F-926



SECTION E – CR 484 (SOUTH END OF RESIDENTIAL TO NORTH END OF ELECTRIC EASEMENT)

NTS



SECTION F – CR 484 (ELECTRIC EASEMENT SOUTH)

NOTE: THE R.O.W. DEDICATION AND CONSTRUCTION OF THE PORTION OF CR 484 ADJACENT TO THE COMMERCIAL TRACT SHALL BE COMPLETED BY THE COMMERCIAL DEVELOPER AT THE TIME OF DEVELOPMENT OF THE ADJACENT LAND

NTS

MOODY, BRYAN 8/27/2021 2:03 PM
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DWG NAME
LAST SAVED

Lavon Tract

ROADWAY IMPROVEMENT EXHIBIT
Lavon ETJ, Collin County, Texas
August 2021

Kimley»Horn
13455 Noel Road
Suite 700
Dallas, Texas 75034
469-914-8611
State of Texas Registration No. F-928

Exhibit F
Amenities

An amenity center shall be provided at the location generally reflected on the Concept Plan. The amenity center shall be platted with Phase 1 of the development and completed prior to the issuance of PID Bonds for the second improvement area within the PID. The amenity center shall include, at a minimum, the following elements:

- Swimming Pool
- Children's Pool Area
- Restroom Building
- Playground
- Shade Structure

A community park shall be provided at the location generally reflected on the Concept Plan. The park shall be platted with Phase 3 of the development. The park shall include, at a minimum, the following elements:

- Playground
- Shade Structure
- Event Lawn
- Site Furniture

Exhibit G
Traffic Impact Analysis

Traffic Impact Analysis

Lavon Tract Development
Lavon, Texas

DRAFT

July 1, 2021

Kimley-Horn and Associates, Inc.
Dallas, Texas

Registered Firm F-928

Kimley»Horn

Traffic Impact Analysis

Lavon Tract Development
Lavon, Texas

Prepared by:

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EXECUTIVE SUMMARY

The proposed Lavon Tract development is located in Lavon, Texas, east of State Highway 205 along CR 485. The site is proposed to be built with 653 single family residential homes. This study is intended to identify traffic generation characteristics and to identify potential traffic related impacts on the local street system.

The following existing intersections were selected to be part of this study:

- State Highway 78 at State Highway 205
- State Highway 205 at CR 485
- State Highway 205 at CR 483
- CR 485 at CR 484
- Main Street at Presidents Boulevard

The analysis also included the eight proposed driveways having access in and out of the site.

Traffic operations were analyzed at the study intersections for existing volumes, 2026 and 2031 background traffic volumes, and 2026 and 2031 background plus site-generated traffic volumes. The future years correspond to the expected buildout year of the site and a key future study year. Conditions were analyzed for the weekday AM and PM peak hours.

The background traffic conditions included existing traffic with compound growth rates, plus explicit modeling of the following development in the vicinity:

- Crestridge Meadows site, a development that will be located just north of the Lavon Tract development. Although construction has started for the development, the site is currently generating very little traffic and its expected trip generation from the remaining 582 single-family residential homes was considered in the study years.

The Lavon Tract development is expected to generate approximately 468 new weekday AM peak hour one-way vehicle trips and 615 new weekday PM peak hour one-way vehicle trips at buildout. The distribution of the site-generated traffic volumes onto the street system was based on the surrounding roadway network, existing traffic patterns, and the project's proposed access locations.

Analysis of the existing conditions showed the need for regional roadway network improvements. The planned widening of State Highway 205 will significantly improve traffic operations at State Highway 78 at State Highway 205 which is currently operating with heavy delay, specifically for the northbound approach. The delay is only expected to increase due to general traffic growth in the area and additional surrounding developments. Therefore, the additional capacity on State Highway 205 is necessary at this intersection to accommodate the heavy volumes. Building out State Highway 205 to its thoroughfare potential of a six-lane roadway could even further increase capacity. Signal timing adjustments, such as an increased cycle length and adjustments to the signal control type, could allow for a more optimal phasing

that is favorable for the northbound approach. As stated in the report, running the intersection as actuated-coordinated and updating the phase sequence, can give more time for the heavy northbound approach. Other signal timing adjustments such as modifications to the existing splits, can also potentially improve traffic. However, since the majority of the traffic at this intersection is existing, the need for these intersection improvements is not due to the Lavon Tract development.

The existing study stop-controlled approaches along State Highway 205 are also currently experiencing heavy delay due to the heavy northbound and southbound volumes on State Highway 205. It is expected that by 2026, without the Lavon Tract development, the westbound approaches of CR 485 and CR 483 will be operating at LOS F. State Highway 205 at CR 485 is expected to be a major intersection for not only the Lavon Tract development, but also the Crestridge Meadows development that is currently under construction. However, with the widening of State Highway 205, geometric improvements may be implemented at its intersection at CR 485. However, if no improvements are made, the City of Lavon should review the intersection for further improvements through Texas Department of Transportation (TxDOT) to help mitigate the expected delay. Similarly, Main Street at Presidents Boulevard is currently experiencing heavy delay for the stop-controlled northbound approach, specifically in the AM peak hour. However, in the PM peak hour, the northbound approach operates with minimal delay which indicates that for the majority of the day, the intersection is expected to operate well.

The proposed site driveways provide the appropriate level of access for the development. All eight of the site driveways are expected to operate at LOS C or better after the full build-out of the site.

Based on the analysis presented in this report, the proposed Lavon Tract development, located in Lavon, Texas, can be successfully incorporated into the surrounding roadway network provided the site-specific recommendations made in this report are considered.

The following site-specific modification to the roadway network is recommended as part of the Lavon Tract development:

- Installation of an All-Way Stop Control (AWSC) at CR 485 and CR 484

The following modifications to the external roadway network should be considered at a regional level to help improve traffic operations in the vicinity of the development:

- Signal timing adjustments at State Highway 78 and State Highway 205
- Addition of an exclusive through lane at State Highway 78 and State Highway 205 to support signal timing improvements
- Intersection improvements at State Highway 205 and CR 485

I. INTRODUCTION

A. Purpose

Kimley-Horn was retained to conduct a Traffic Impact Analysis (TIA) of future traffic conditions associated with the development of the Lavon Tract site. A site vicinity map is provided as **Exhibit 1**. **Exhibit 2** shows the proposed conceptual site plan. This study is intended to identify traffic generation characteristics and to identify potential traffic related impacts on the local street system.

B. Methodology

Traffic operations were analyzed at the study intersections for AM and PM peak hours for the following scenarios:

- 2021 existing traffic
- 2026 background traffic
- 2026 background plus site traffic
- 2031 background traffic
- 2031 background plus site traffic

The capacity analyses were conducted using the *Synchro*™ software package and its associated *Intersection* reports for signalized intersections and *Highway Capacity Manual* reports for unsignalized intersections.

EXHIBIT 1
Vicinity Map

LEGEND:
= Study Intersection

North
Not To Scale

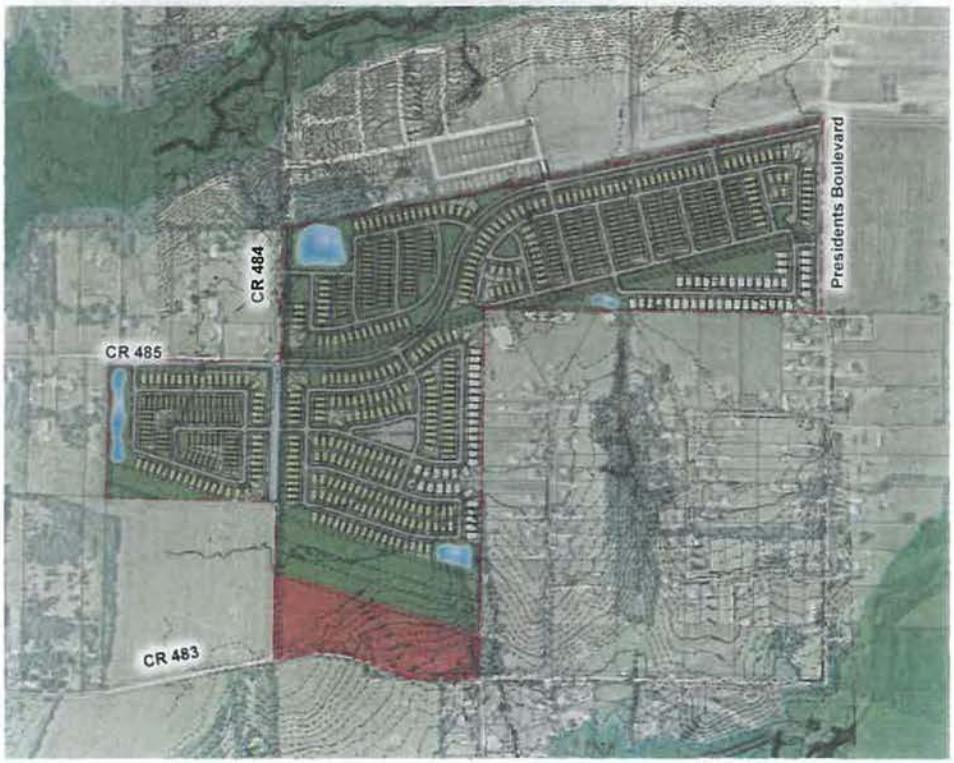

EXHIBIT 2
Conceptual Site Plan

North
Not To Scale

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II. EXISTING AND FUTURE AREA CONDITIONS

A. Roadway Characteristics

The following signalized intersections were evaluated as part of this study:

- State Highway 78 at State Highway 205

The following unsignalized intersections were evaluated as part of this study:

- State Highway 78 at Main Street
- Main Street at Presidents Boulevard
- State Highway 205 at Country Road (CR) 485
- CR 485 at CR 484
- State Highway 205 at CR 483

The major study area roadways are described below.

State Highway 78 – is a six-lane divided roadway that runs east-west from Dallas to Farmersville. State Highway 78 serves as a major thoroughfare for the region, connecting Lavon to the northeastern Dallas suburbs and to US 380. Per the City of Lavon Thoroughfare Plan, State Highway 78 is classified as a principal arterial. The posted speed limit on State Highway 78 near the study area is 50 MPH.

State Highway 205 – is currently a two-lane undivided roadway that runs from State Highway 78 to Terrell, connection the cities of Lavon and Rockwall. It is expected that within the next four years, State Highway 205 will be expanded into a four-lane roadway. Per the City of Lavon Thoroughfare Plan, State Highway 205 is classified principal arterial with a thoroughfare potential of becoming a six-lane divided facility. The posted speed limit on State Highway 205 near the study area is 45 MPH.

CR 484 – is a two-lane undivided roadway that runs north-south from Main Street to CR 483. Per the City of Lavon Thoroughfare Plan, CR 484 is classified as a four-lane divided Minor Arterial. The posted speed limit on CR 484 is 40 MPH.

CR 485 – is a two-lane undivided roadway that runs east-west from State Highway 205 to CR 484. Per the City of Lavon Thoroughfare Plan, CR 485 is classified as a four-lane divided Lake Connector. As part of the development, CR 485 will be expanded into a four-lane divided facility by 2026. The posted speed limit on CR 485 is 45 MPH.

Exhibit 3 illustrates the intersection geometry used for the traffic analysis.

B. Existing Study Area

The property is currently not developed. The existing land use of property around Lavon Tract is primarily single-family residential homes with some additional industrial

warehouses located along State Highway 205. An adjacent development, the Crestridge Meadows development, is currently under construction and will include approximately 582 single-family residential homes.

C. Proposed Site Improvements

Lavon Tract as proposed includes 653 single-family residential homes and is expected to be completed by 2026. As part of the Lavon Tract development, existing CR 485 will be extended further east until it intersects Presidents Boulevard. This extension will serve as the primary roadway for the Lavon Tract development driveways. The proposed cross-section will be a four-lane divided facility.

As shown in **Exhibit 3**, the site has eight proposed driveways. The driveways to be modeled in this analysis are as follows:

Drive 1 – will be the primary driveway for the residential homes located in the southwest corner of CR 485 and CR 484. Drive 1 was modeled with one inbound and one outbound lane.

Drive 2 – will serve both the residentials homes in the southwest corner of CR 485 and CR 484 as well as the residentials homes in the southeast corner. Drive 2 was modeled with one inbound and one outbound lane.

Drive 3 – will be located north of the intersection of CR 485 and CR 484. Drive 3 was modeled with one inbound and one outbound lane.

Drive 4, Drive 5, Drive 6, Drive 7 – will all be located along the proposed extension of CR 485. All of the driveways were modeled with one inbound and one outbound lane. Drive 6 is expected to be extended and serve both the residential homes in Lavon Tract and Crestridge Meadows.

Drive 8 – will be located along Presidents Boulevard, east of CR 485. Drive 8 was modeled with one inbound and one outbound lane.

Intersection sight distance at the proposed driveways is acceptable, with each on relatively straight segments of their respective roadway.

D. Existing Traffic Volumes

Exhibit 4 shows the existing weekday AM and PM peak hour traffic volumes. 24-hour machine counts were collected near the site on CR 483, State Highway 78 and State Highway 205. The raw count sheets, as well as a comparison between the 24-hour volumes collected and previous 24-hour counts, are provided in the Appendix.

The 24-hour count showed the daily volume on the roadway link as follows:

- CR 483: 232 vehicles per day (vpd)
- State Highway 78: 31,780 vpd
- State Highway 205: 19,933 vpd

Due to the potential of lowered traffic volumes due to the circumstances surrounding COVID-19, the peak hours of the traffic counts along State Highway 78 and State Highway 205 were compared to historic counts from TxDOT's Traffic Count Database System (TCDS). The collected counts were consistent with expected 2021 traffic volumes on these roadways without COVID-19 disruptions. Therefore, no adjustments were made in the analysis for COVID-19.

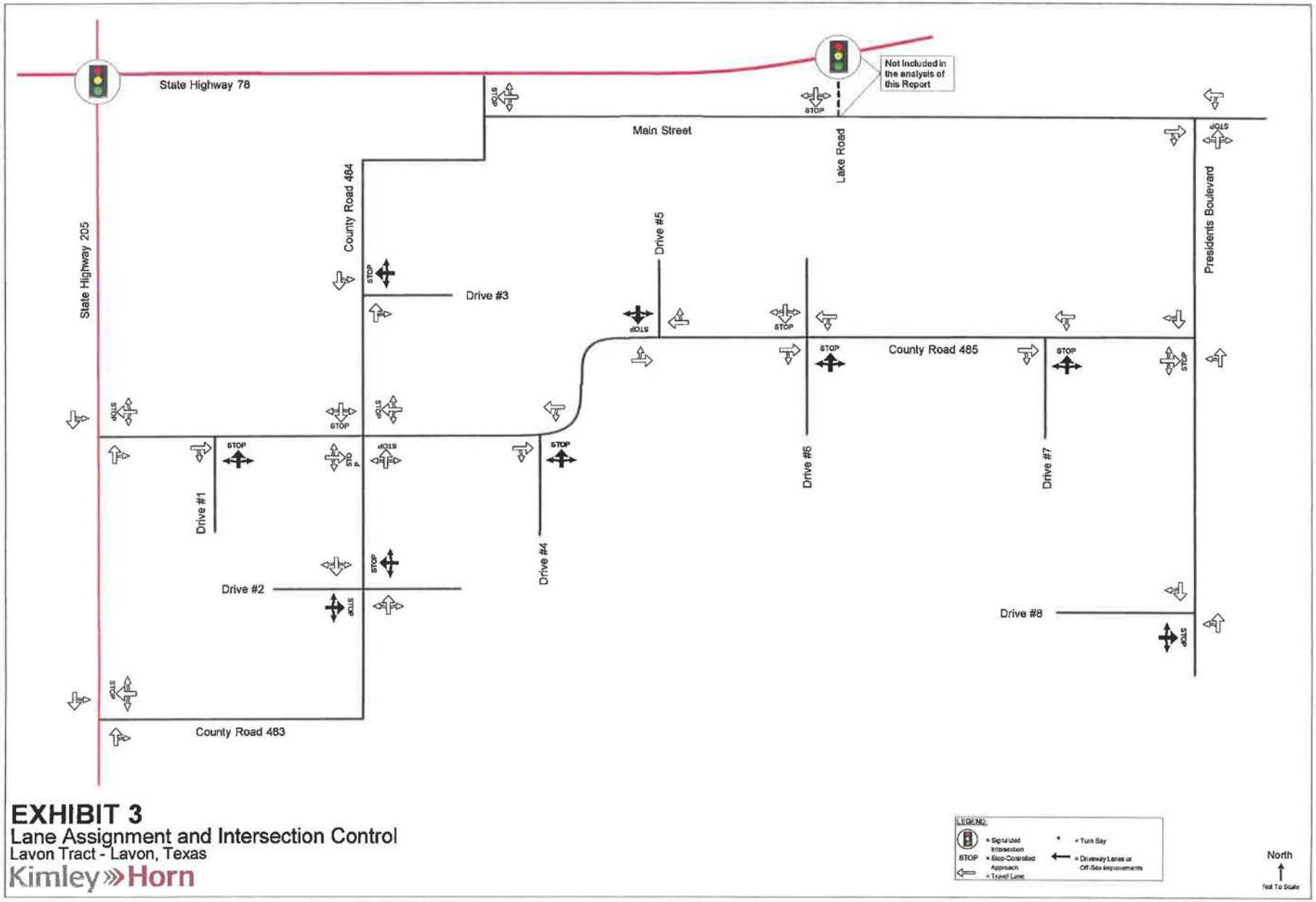

EXHIBIT 3
Lane Assignment and Intersection Control
Lavon Tract - Lavon, Texas
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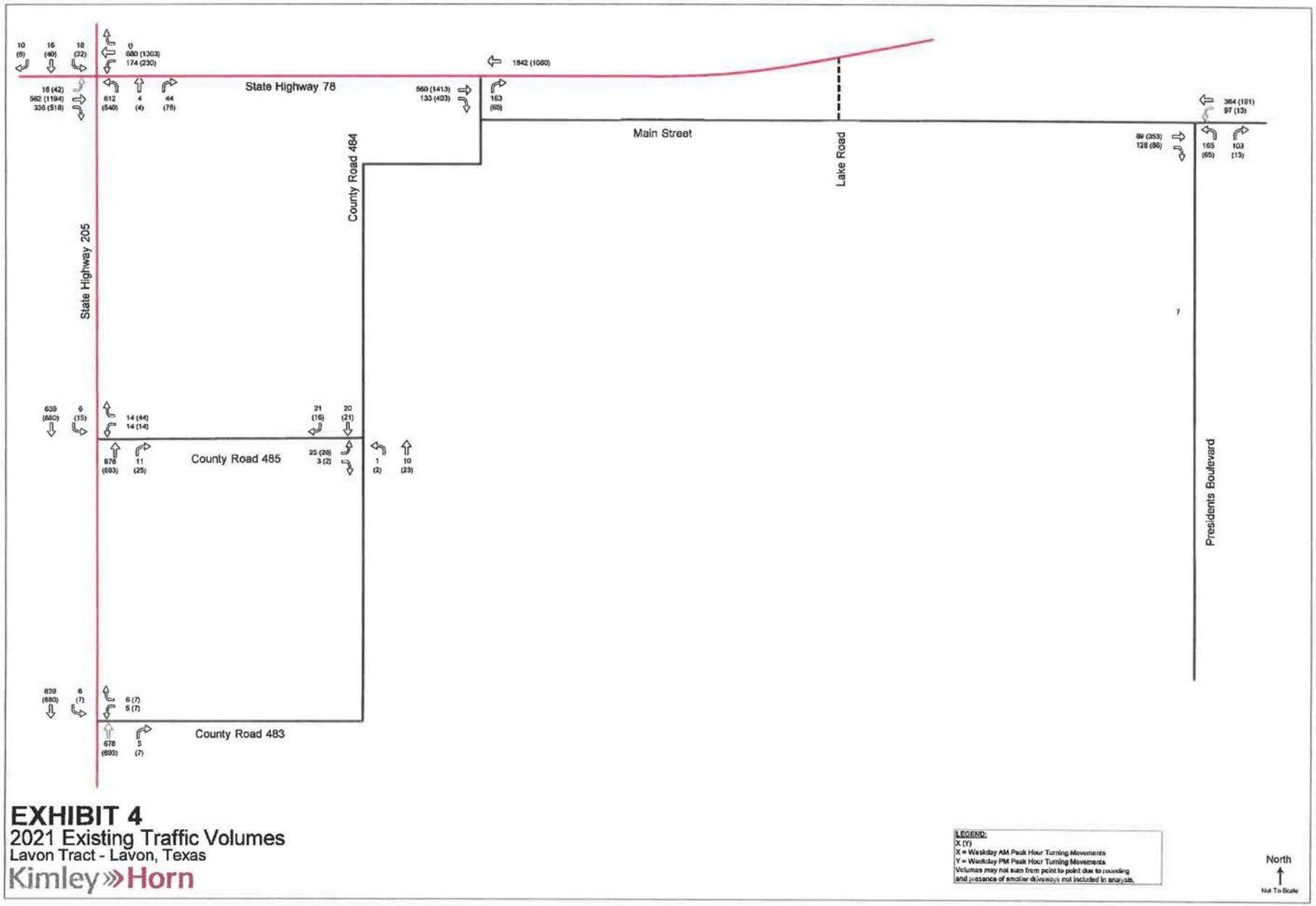

EXHIBIT 4
2021 Existing Traffic Volumes
Lavon Tract - Lavon, Texas
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III. PROJECT TRAFFIC CHARACTERISTICS

A. Site-Generated Traffic

Site-generated traffic estimates are determined through a process known as trip generation. Rates and equations are applied to the proposed land use to estimate traffic generated by the development during a specific time interval. The acknowledged source for trip generation rates is the 10th edition of *Trip Generation Manual* published by the Institute of Transportation Engineers (ITE). ITE has established trip rates in nationwide studies of similar land uses. The trips indicated are actually one-way trips or *trip ends*, where one vehicle entering and exiting the site is counted as one inbound trip and one outbound trip.

No reductions were taken for internal capture, pass-by trips, or multimodal use for the development.

Table 1 shows the resulting daily and weekday AM and PM peak hour trip generation for the proposed development.

Table 1 – Trip Generation

Land Uses	Amount	Units	ITE Code	Daily One-Way Trips	AM Peak Hour One-Way Trips			PM Peak Hour One-Way Trips		
					IN	OUT	TOTAL	IN	OUT	TOTAL
Single Family Detached Housing	653	DU	210	5,843	117	351	468	387	228	615

Trip Generation rates based on *ITE's Trip Generation Manual* , 10th Edition.

B. Trip Distribution and Assignment

The distribution of the site-generated traffic volumes in to and out of the site driveways and onto the street system was based on the area street system characteristics, existing traffic patterns, relative land use density, and the locations of the proposed driveway access to/from the site.

The corresponding inbound and outbound traffic assignment, where the directional distribution is applied using the most probable paths to and from the site, can be found in **Exhibit 5**. **Exhibit 6** shows the resulting site-generated weekday AM and weekday PM peak hour turning movements after multiplying the new external trip generation by the respective traffic assignment percentages.

C. Other Development Traffic Modeling

The Crestridge Meadows is currently under construction and the development generates very little traffic. The remaining expected traffic generation at full build-out from Crestridge Meadows can be seen in **Table 2**.

Table 2 – Crestridge Meadows Trip Generation

Land Uses	Amount	Units	ITE Code	Daily One-Way Trips	AM Peak Hour One-Way Trips			PM Peak Hour One-Way Trips		
					IN	OUT	TOTAL	IN	OUT	TOTAL
Single Family Detached Housing	582	DU	210	5,256	105	313	418	347	204	551

Trip Generation rates based on *ITE's Trip Generation Manual* , 10th Edition.

Using the same procedure as was used to develop the Lavon Tract site-generated traffic and distribute that traffic on the roadway network, traffic was developed and distributed for the Crestridge Meadows development. The distribution and volumes for the development can be seen in **Exhibit A1** and **Exhibit A2**, respectively.

D. Development of 2026 Background Traffic

In order to obtain 2026 background traffic, the existing traffic counts and historic counts near the site were compared to find expected growth trends within the study area. Historical count data showed an approximately annual growth rate of 5%. However, since traffic generated from the Crestridge Meadows development was taken into consideration, a 3% annual growth rate was applied to the existing counts through 2026. The resulting 2026 background weekday AM and PM peak hour traffic volumes are shown in **Exhibit 7**.

E. Development of 2026 Total Traffic

Site traffic volumes were added to the background volumes to represent the estimated total (background plus site-generated) traffic conditions for the 2026 study year after completion of the proposed development. **Exhibit 8** shows the resulting 2026 weekday AM and PM peak hour total traffic volumes.

F. Development of 2031 Background and Total Traffic

The background and total traffic volumes in the 2031 study year were calculated in a similar manner to the 2026 traffic volumes by adding five years of 5% growth over the 2026 background volume, the growth factor shown by the historical count data. The development traffic was then added into the traffic volumes. **Exhibit 9** shows the resulting 2031 weekday AM and PM peak hour background traffic volumes, and **Exhibit 10** shows the resulting 2031 weekday AM and PM peak hour total traffic volumes after the addition of the site-generated traffic.

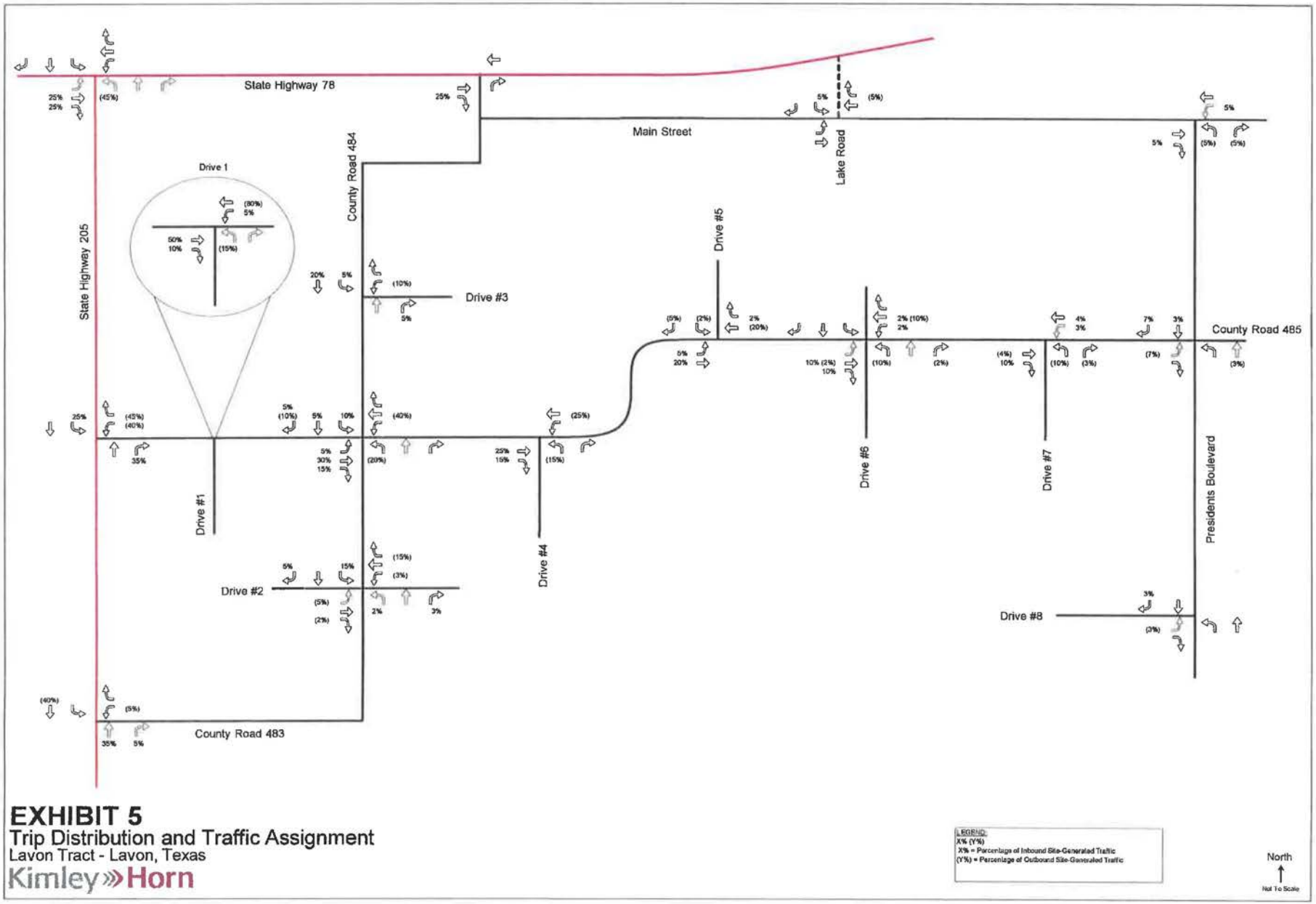

EXHIBIT 5
Trip Distribution and Traffic Assignment
Lavon Tract - Lavon, Texas
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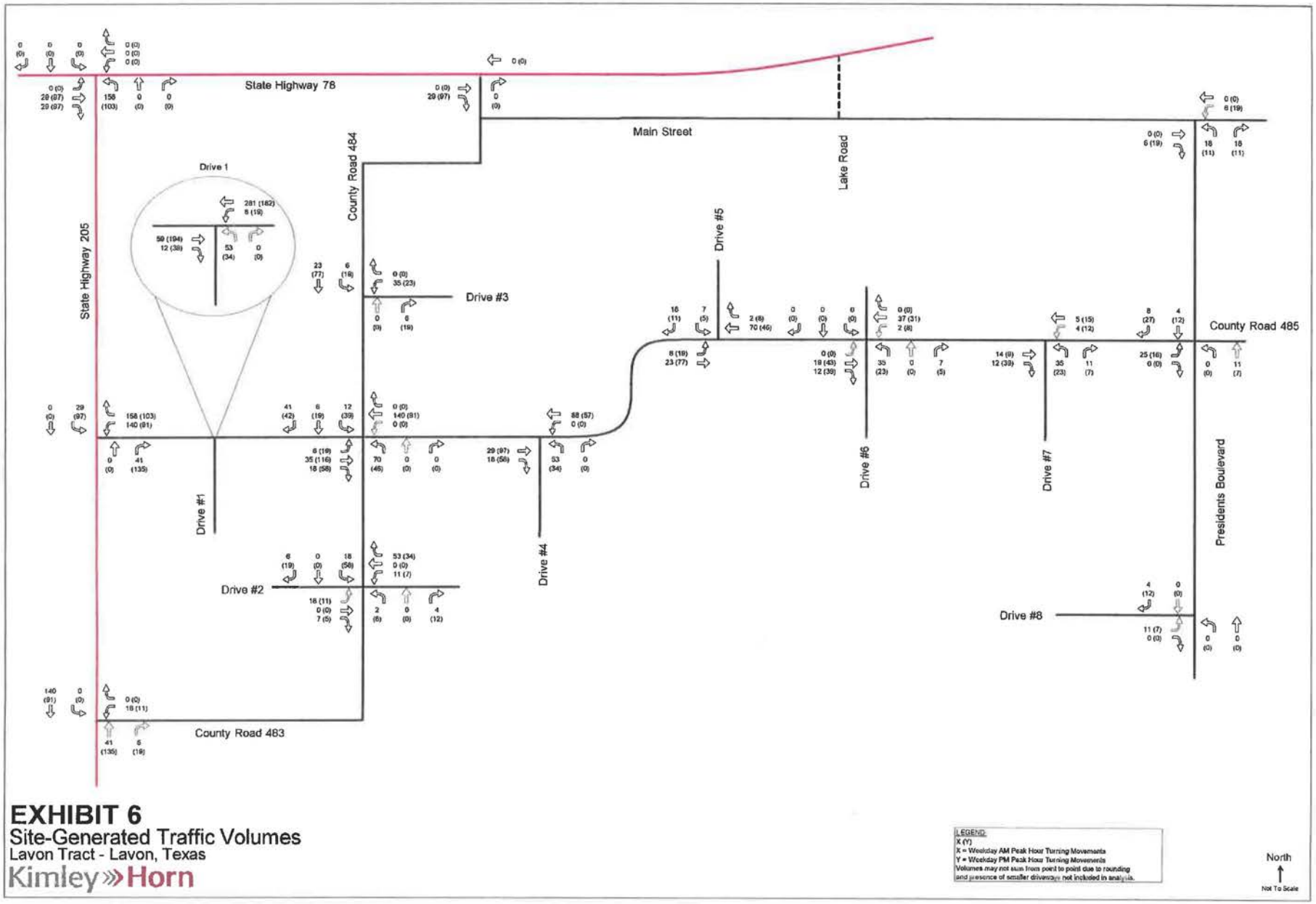

EXHIBIT 6
Site-Generated Traffic Volumes
Lavon Tract - Lavon, Texas
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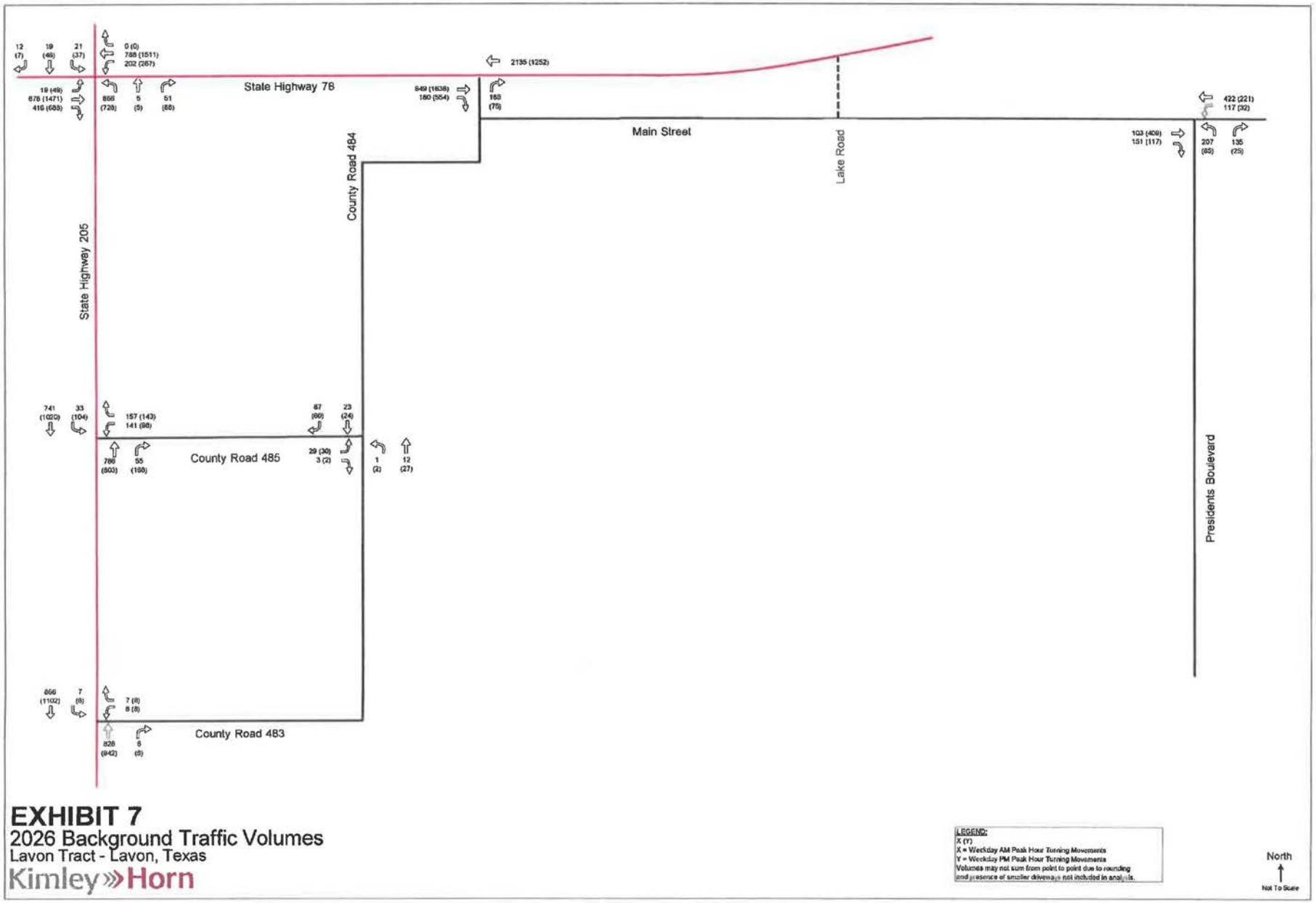

EXHIBIT 7
2026 Background Traffic Volumes
Lavon Tract - Lavon, Texas
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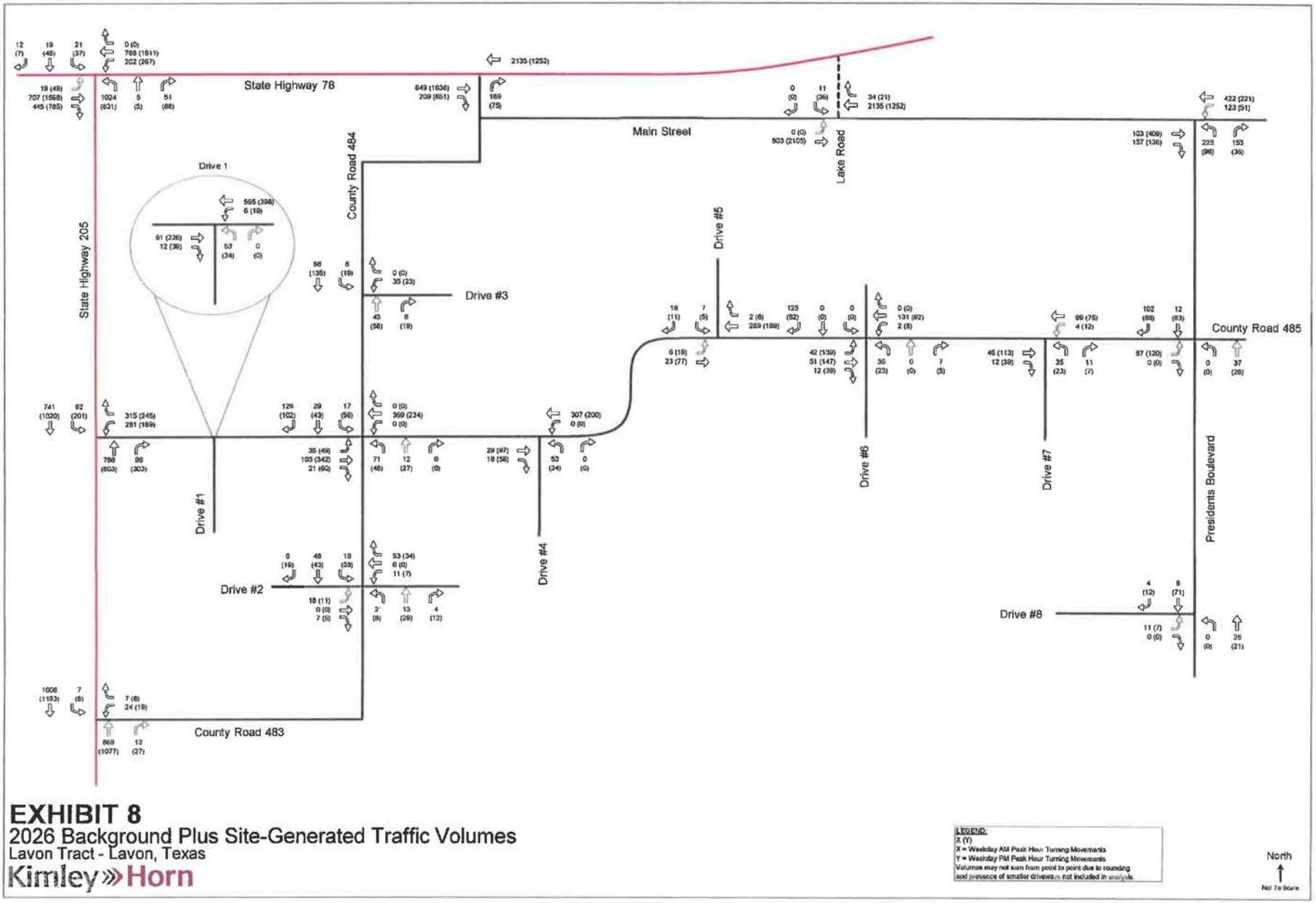

EXHIBIT 8
2026 Background Plus Site-Generated Traffic Volumes
Lavon Tract - Lavon, Texas
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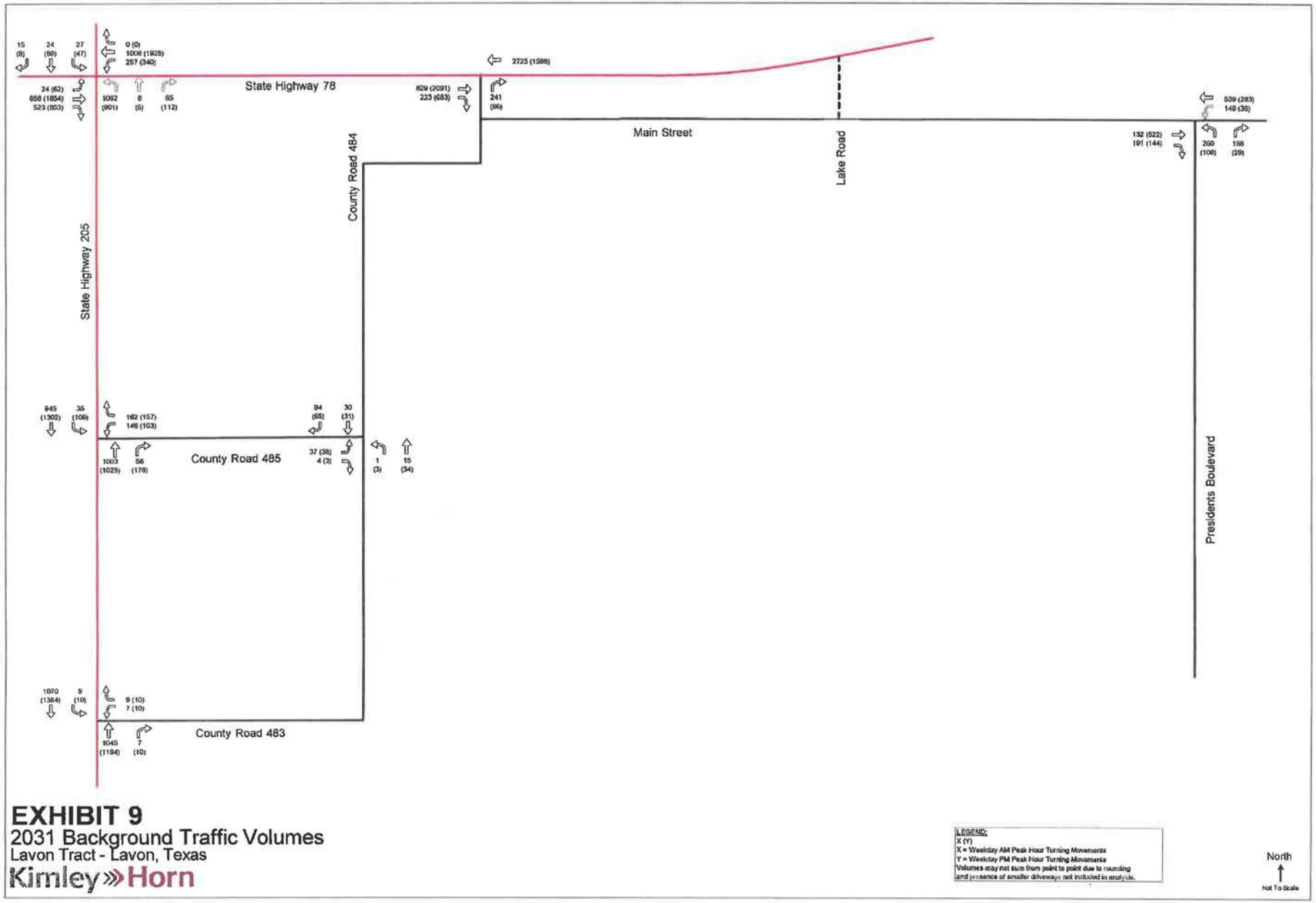
State Highway 78
Main Street
Lake Road
County Road 484
State Highway 205
County Road 485
County Road 483
Presidents Boulevard
2725 (1586)
241 (96)
829 (2091) 223 (683)
1052 (901) 6 (5) 85 (112)
24 (62) 658 (1654) 523 (853)
15 (9) 24 (59) 27 (47)
0 (0) 1008 (1928) 257 (340)
539 (283) 149 (35)
132 (522) 191 (144)
260 (108) 188 (29)
945 (1302) 35 (109)
162 (157) 146 (103)
94 (65) 30 (31)
1003 (1025) 58 (178)
37 (38) 4 (3)
1 (3) 15 (34)
1070 (1384) 9 (10)
9 (10) 7 (10)
1045 (1164) 7 (10)
EXHIBIT 9
2031 Background Traffic Volumes
Lavon Tract - Lavon, Texas
Kimley»Horn
LEGEND:
X (Y)
X = Weekday AM Peak Hour Turning Movements
Y = Weekday PM Peak Hour Turning Movements
Volumes may not sum from point to point due to rounding and presence of smaller driveways not included in analysis.
North
Not To Scale

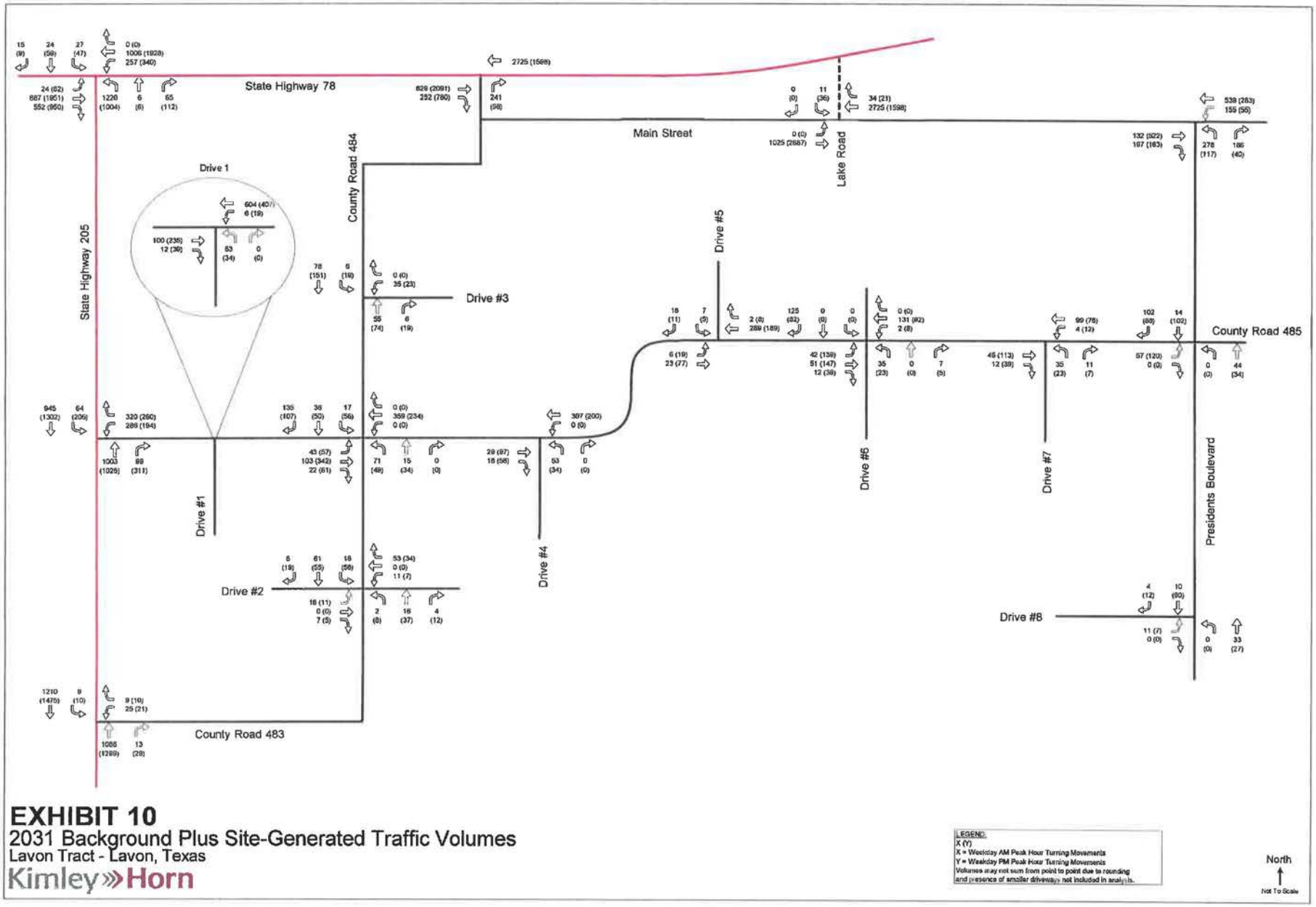

EXHIBIT 10
2031 Background Plus Site-Generated Traffic Volumes
Lavon Tract - Lavon, Texas
Kimley»Horn

IV. ALL-WAY STOP-CONTROL ANALYSIS

All-way STOP-control warrant (AWSC) analyses were conducted for the intersections of CR 485 at CR 484 and Presidents Boulevard at CR 485. The Texas Manual on Uniform Traffic Control Devices (TMUTCD) identifies three AWSC warrants as areas of analysis when investigating if All-Way STOP-Control would be justified at a location, which are as follows:

- Where traffic control signals are justified, AWSC may be used as an interim measure;
- 5 or more reported crashes in a 12-month period that are susceptible to correction by AWSC; or
- Minimum volumes:
    - The vehicular volume entering the intersection from the total of the major street approaches averages 300 or more vehicles per hour for any eight hours of the day; and
    - The total minor street volume averages at least 200 vehicles/pedestrians per hour for the same eight hours with an average delay of 30 seconds per vehicle during the highest hour.

The satisfaction of a warrant is not a requirement that an intersection should be converted to AWSC, but rather is a qualifier or an indication that the conversion may be a net benefit to the community. Peak hour hourly variation from ITE *Trip General Manual* for single-family residential homes (ITE Land Use 220) was applied to the 2026 AM and PM background traffic to obtain the expected background daily volumes along CR 485 and Presidents Boulevard. Site-generated trips from the Lavon Tract development then added to each approach.

Per the ASWC analysis, average 2026 traffic volumes for the top eight hours at CR 484 and CR 485 meet the warrant. For the highest eight hours of the expected CR 485 traffic, CR 485 averages 675 vehicles per hour. For the same eight hours, CR 484 averages 384 vehicles per hour. For the 2026 scenario, CR 484, which is currently not stop-controlled, was considered the minor roadway due to the proposed CR 485 extension. If the intersection were to remain as a two-way stop control, the delay for the minor approach is expected to be approximately 33 seconds, with both the minor road approaches operating at either LOS D or C. By the TMUTCD criteria, the intersection meets traffic volume portion of the AWSC warrant and installation of an AWSC is recommended.

The average expected 2027 traffic volumes for the top eight hours of Presidents Boulevard at CR 485 does not met the warrant volume criteria. For the highest eight hours of the expected Presidents Boulevard traffic, Presidents Boulevard averages 101 vehicles per hour at this intersection. For the same eight hours, CR 485 averages 82 vehicles per hour. An AWSC is not recommended for the intersection of Presidents Boulevard at CR 485.

V. TRAFFIC OPERATIONS ANALYSIS

Kimley-Horn conducted a traffic operations analysis to determine potential capacity deficiencies in the 2021, 2026, and 2031 study years at the study intersections. The acknowledged source for determining overall capacity is the current edition of the *Highway Capacity Manual*.

A. Analysis Methodology

Capacity analysis results are listed in terms of Level of Service (LOS). Level of service and the corresponding analysis methodology are explained in the **Appendix**.

Signal timings for the signalized intersections were obtained from site visits. Timing adjustments were made in the future scenarios to accommodate changes in traffic volumes due to background growth and site traffic, replicating how City and TxDOT staff will periodically review signal operations in the future.

The analyses assumed the lane geometry and intersection control shown in **Exhibit 3**.

B. Analysis Results

Table 3 and **Table 4** show the intersection operational results for the weekday AM and PM peak hours, respectively.

Table 3 – Traffic Operational Results – Weekday AM Peak Hour

INTERSECTION	APPROACH	2021 Existing Traffic AM Peak Hour		2026 Background Traffic AM Peak Hour		2026 Background plus Site Traffic AM Peak Hour		2031 Background Traffic AM Peak Hour		2031 Background plus Site Traffic AM Peak Hour	
		DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS
State Highway 78 @ State Highway 205	EB	12.8	B	22.5	C	25.8	C	29.7	C	30.3	C
	WB	12.8	B	25.8	C	30.1	C	34.9	C	35.4	D
	NB	+	F	68.4	E	101.9	F	88.0	F	142.0	F
	SB	79.4	E	28.5	C	28.0	C	25.8	C	25.8	C
	Overall	**105.4**	**F**	**37.4**	**D**	**52.1**	**D**	**48.4**	**D**	**67.2**	**E**
Main Street @ Presidents Boulevard	WBL	8.1	A	8.3	A	8.3	A	8.7	A	8.8	A
	NB*	58.3	F	113.3	F	148.9	F	+	F	+	F
CR 485 @ CR 484 (Existing Two-Way Stop Controlled)	NBL	7.3	A	7.5	A	-	-	7.6	A	-	-
	EB*	8.9	A	9.2	A	-	-	9.4	A	-	-
CR 485 @ CR 484 (All-Way Stop-Controlled)	NB*	-	-	-	-	10.7	B	-	-	10.9	B
	SB*	-	-	-	-	11.2	B	-	-	11.8	B
	EB*	-	-	-	-	10.3	B	-	-	10.6	B
	WB*	-	-	-	-	10.4	B	-	-	10.6	B
	Overall	-	-	-	-	**10.6**	**B**	-	-	**10.9**	**B**
CR 485 @ State Highway 205	WB*	23.8	C	+	F	+	F	+	F	+	F
	SBL	9.2	A	10.0	A	10.5	B	11.2	B	11.9	B
CR 483 @ State Highway 205	WB	21.7	C	22.4	C	40.0	E	34.3	D	87.2	F
CR 485 @ Drive 1	NB*	-	-	-	-	12.5	B	-	-	12.7	B
	WBL	-	-	-	-	7.5	A	-	-	7.5	A
CR 485 @ Drive 2	NBL	-	-	-	-	7.3	A	-	-	7.4	A
	SBL	-	-	-	-	7.3	A	-	-	7.3	A
	EB*	-	-	-	-	9.5	A	-	-	9.6	A
	WB*	-	-	-	-	8.8	A	-	-	8.8	A
CR 484 @ Drive 3	WB*	-	-	-	-	9.4	A	-	-	9.6	A
CR 485 @ Drive 4	NB*	-	-	-	-	10.1	B	-	-	10.1	B
CR 485 @ Drive 5	SB*	-	-	-	-	9.8	A	-	-	9.8	A
CR 485 @ Drive 6	NB*	-	-	-	-	11.1	B	-	-	11.1	B
CR 485 @ Drive 7	NB*	-	-	-	-	9.3	A	-	-	9.3	A
CR 485 @ Drive 8	EB*	-	-	-	-	8.7	A	-	-	8.8	A

Signalized | Unsignalized

* Stop-Controlled Approach
- No movements in Time Period
+ Movement Delay Exceeds 200 seconds

Table 4 – Traffic Operational Results – Weekday PM Peak Hour

INTERSECTION	APPROACH	2021 Existing Traffic PM Peak Hour		2026 Background Traffic PM Peak Hour		2026 Background plus Site Traffic PM Peak Hour		2031 Background Traffic PM Peak Hour		2031 Background plus Site Traffic PM Peak Hour	
		DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS
State Highway 78 @ Main Street	EB	21.7	C	42.4	D	56.7	E	84.3	F	108.7	F
	WB	26.5	C	40.0	D	48.0	D	84.3	F	94.4	F
	NB	+	F	61.7	E	59.9	E	62.3	E	77.6	E
	SB	65.9	E	36.4	D	32.1	C	31.8	C	30.8	C
	Overall	**70.7**	**E**	**44.7**	**D**	**53.8**	**D**	**79.7**	**E**	**96.9**	**F**
Main Street @ Presidents Boulevard	WBL	8.4	A	8.8	A	9.0	A	9.4	A	9.6	A
	NB*	15.7	C	19.2	C	21.8	C	32.1	D	41.3	E
CR 485 @ CR 484 (Existing Two-Way Stop Controlled)	NBL	7.3	A	7.4	A	-	-	7.4	A	-	-
	EB*	9.0	A	9.2	A	-	-	9.4	A	-	-
CR 485 @ CR 484 (All-Way Stop-Controlled)	NB*	7.3	A	-	-	10.8	B	-	-	11.1	B
	SB*	-	-	-	-	12.5	B	-	-	13.1	B
	EB*	9.0	A	-	-	13.3	B	-	-	13.8	B
	WB*	-	-	-	-	9.8	A	-	-	10.0	A
	Overall	-	-	-	-	**12.1**	**B**	-	-	**12.5**	**B**
CR 485 @ State Highway 205	WB*	23.9	C	+	F	+	F	+	F	+	F
	SBL	9.2	A	11.1	B	13.6	B	12.8	B	17.0	C
CR 483 @ State Highway 205	WB	30.0	D	32.7	D	66.1	F	68.1	F	+	F
CR 485 @ Drive 1	NB*	-	-	-	-	13.3	B	-	-	13.4	B
	WBL	-	-	-	-	7.9	A	-	-	7.9	A
CR 485 @ Drive 2	NBL	-	-	-	-	7.4	A	-	-	7.4	A
	SBL	-	-	-	-	7.4	A	-	-	7.4	A
	EB*	-	-	-	-	10.1	B	-	-	10.2	B
	WB*	-	-	-	-	9.0	A	-	-	9.0	A
CR 484 @ Drive 3	WB*	-	-	-	-	10.2	B	-	-	10.5	B
CR 485 @ Drive 4	NB*	-	-	-	-	10.3	B	-	-	10.3	B
CR 485 @ Drive 5	SB*	-	-	-	-	9.5	A	-	-	9.5	A
CR 485 @ Drive 6	NB*	-	-	-	-	15.0	B	-	-	15.0	B
CR 485 @ Drive 7	NB*	-	-	-	-	9.8	A	-	-	9.8	A
CR 485 @ Drive 8	EB*	-	-	-	-	9.1	A	-	-	9.2	A
							Signalized		Unsignalized		

* Stop-Controlled Approach
\- No movements in Time Period
\+ Movement Delay Exceeds 200 seconds

C. 2021 Existing Traffic Operations

The analysis of the 2021 existing traffic operations showed that the intersection of State Highway 78 at State Highway 205 is currently operating with high delay. The intersection LOS in the AM and PM peak hour are LOS F and LOS E, respectively. This signalized intersection is a major intersection that is heavily utilized by commuters from both Lavon and Rockwall that are traveling west towards the Dallas Metroplex. The existing northbound volumes and associated delay indicate the need for additional roadway capacity.

Of the unsignalized study intersections, all approaches at the intersections operate at LOS D or better in both the AM and PM peak hour except for the northbound approach at Main Street at Presidents Boulevard. The northbound approach is currently experiencing approximately 58 seconds of delay the AM peak hour. This amount of delay is typical for a minor stop-controlled approach onto a major road, but the intersection is near the limits of two-way stop-control (TWSC) operation. As shown in the 2026 background analysis, increases in background traffic causes larger increases in delay.

D. 2026 Background Traffic Operations

In the 2026 background scenario, the widening of State Highway 205 to a four-lane facility was modeled. The northbound approach at State Highway 78 and State Highway 205 was modeled with two northbound left-turn lanes, a through lane and a channelized right-turn lane. In addition, signal timing adjustments, including an increased cycle length and adjustments to the movement timings, including un-splitting the northbound and southbound movements, were made in the 2026 build-out scenario to accommodate the traffic growth. To further improve signal operations at State Highway 78 at State Highway 205, the intersection was modeled with an actuated-coordinated control type so that the phase sequence could be adjusted. This would allow any unused time from the southbound approach to be utilized by the northbound approach, which is the heavier moment and would benefit from the additional time. The increased capacity and timing adjustments helped improve the LOS significantly so that the signal is expected to operate with only approximately 37 seconds of delay in the AM peak hour and 45 seconds of delay in the PM peak hour.

The stop-controlled approaches at the unsignalized intersections experience an increase in delay from existing conditions. Main Street at Presidents Boulevard continues to operate at LOS F in the northbound direction in the AM peak hour. In the PM peak hour, the delay is lower when compared to the AM peak, which is representative of commuter traffic that is traveling northbound towards the major roadways in the AM.

The westbound approach at both State Highway 205 at CR 485 and State Highway 205 at CR 483 are expected to operate with over 200 seconds of delay in the AM peak hour. This is due to the high northbound and southbound volumes on State Highway 205. Any increase in the through volume on State Highway 205 correlates to a relatively large

increased delay at the stop-controlled approaches on CR 485 and CR 483. In addition, it is expected that the majority of the background site traffic, 90%, from the Crestridge Meadows development will utilize CR 485 to access State Highway 205. However, if users determine that the delay at the intersection of State Highway 205 with CR 485 or CR 483 is too great, they may elect to divert their trip to an alternative route which may include taking advantage of the signalized intersection at State Highway 78 and Lake Road.

E. 2026 Background Plus Site-Generated Traffic Operations

In the 2026 background, the same network adjustments, widening of State Highway 205 and signal timing adjustments, were made at State Highway 78 at State Highway 205.

The addition of the site-generated traffic to the 2026 background traffic results in additional delay at the existing signalized intersection and caused no change in LOS in the AM or PM peak hour. The northbound leg continues to operate with the highest amount of delay with approximately 102 seconds in the AM peak hour and 60 seconds in the PM peak hour. Since only one of the peak hours, the AM peak hour, operates with high delay, it is expected that the intersection will operate with acceptable delay the majority of the time.

Additional network improvements, such as the widening of CR 485 to a four-lane divided facility with an additional northbound through lane, was also modeled in the 2026 build-out scenario. As with the 2026 background traffic operations, the stop-controlled westbound approaches along State Highway 205 at CR 485 and CR 483 continue to operate at LOS F. Similar to the Crestridge Meadows development, the majority of the Lavon Tract development traffic is expected to heavily utilize CR 485 to access State Highway 205. Only 5% of the Lavon Tract development is expected to utilize CR 483.

The northbound approach at Main Street at Presidents Boulevard, similar to existing conditions, is expected to continue operating at LOS F due to the high existing and background northbound volumes. In the 2026 build-out scenario, CR 485 at CR 484 is modeled as an AWSC intersection. The intersection is expected to operate with minimal delay, with each approach operating at LOS B or better in both peak hours.

All eight of the Lavon Tract site driveways are expected to operate with minimal delay with their approaches operating at LOS B or better in both peak hours.

F. 2031 Background Traffic Operations

The analysis of the 2031 background traffic operations, at both the signalized intersection and unsignalized intersections, was similar to the 2026 background traffic and all the intersections continue to experience an increase in delay with the addition of five more years of background traffic growth.

G. 2031 Background Plus Site-Generated Traffic Operations

The addition of the site-generated traffic to the 2031 background traffic results in more additional delay at the signalized and unsignalized intersections. State Highway 78 at State Highway 205 was modeled with the same traffic signal timing and roadway network improvements discussed in the 2026 background plus site scenario. In the 2031 build-out scenario, the eastbound and westbound approach are expected to operate at LOS F. However, in the AM peak hour, the eastbound and westbound approach are expected to operate at LOS C and LOS D, respectively. This indicates that the majority of the day, the intersection is operating with an acceptable delay.

As with the 2026 build-out scenario, CR 485 was modeled as a four-lane divided facility. The AWSC at CR 485 and CR 484 is expected to operate at LOS B after the full build-out of the site. In addition, of the site driveways are expected to operate with minimal delay with all the stop-controlled approaches and there are no changes in LOS. Since most of the site driveways will be located along a new extension of CR 485, the majority of the traffic on that roadway is expected to continue to only be the users of the development. The site driveways operate at LOS C or better after the Lavon Tract development projections are fully added to the street network.

H. Site Proportionality

The volumes at the intersection of State Highway 205 and CR 485 were analyzed to determine the proportion of traffic from the Lavon Tract development. **Table 5** and **Table 6** show a rough proportion of the traffic generated from the Lavon Tract development for both the 2026 and 2031 study years, respectively.

Table 5 – SH 205 and CR 485 Build Out Year (2026) Site Proportionality

	Lavon Tract Site Traffic		Total Background Traffic	
Peak Hour	AM	PM	AM	PM
Volume (vph)	368	426	1913	2336
Percentage of Total Volume	16.1%	15.4%	83.9%	84.6%
Average Percent (Weighted)	15.8%		84.2%	

Table 6 – SH 205 and CR 485 Horizon Year (2031) Site Proportionality

	Lavon Tract Site Traffic		Total Background Traffic	
Peak Hour	AM	PM	AM	PM
Volume (vph)	368	426	2349	2872
Percentage of Total Volume	13.5%	12.9%	86.5%	87.1%
Average Percent (Weighted)	13.2%		86.8%	

The largest percentage of traffic generated by the Lavon Tract development is expected to occur in the AM peak hour in 2026, with 16.1% of the traffic generated by the proposed site. The lowest percentage of contribution occurs in the PM peak hour in 2031 with the site only contribute 12.9% of the total traffic. Analysis of the weighted average of the two peak hours at the intersection traffic shows that the Lavon Tract development is expected to contribute only 15.8% of the intersection traffic and 13.2% of the intersection traffic in 2026 and 2031, respectively. In both study scenarios, the proposed development contributes less than a fifth of the total traffic at State Highway 205 and CR 485.

I. Link Volume Analysis

The volume to capacity ratio (V/C) of the different roadway links that would be impacted by the proposed development's traffic was calculated for the 2021 existing traffic, 2026 background and background plus site traffic, and 2031 background and background plus site traffic scenarios. The daily link capacity for each roadway is taken from the North Central Texas Council of Governments (NCTCOG) model capacity volumes assuming the suburban residential area type. CR 484, as a minor arterial, has a capacity of 825 vehicles per hour per lane (vphpl). Existing CR 483, which will connect to Presidents Boulevard, as a major collector, has a capacity of 525 vphpl.

The link analyses, displayed below in **Table 7**, shows that both CR 484 and Presidents Boulevard currently operates with ample capacity at LOS A/B with current traffic volumes. After the traffic from the background growth, background site, and the project site are added to the network, the roadway continues to operate at LOS A/B through the 2031 background plus site scenario. After the full buildout of the site, the both roadways are left with over three-quarters of its capacity.

The site does not have a significant negative impact on the link capacities of the study roadways.

Table 7 – Link Operational Results

Roadway Link		2021 Existing			2026 Background					2026 Site-Generated		2026 Background+Site		
From	To	Volume	V/C Ratio	LOS	Volume	Daily Volume	Volume	V/C Ratio	LOS	Assignment	Daily Volume	Volume	V/C Ratio	LOS
CR 484														
Main Street	CR 483	557	0.03	A/B	Crestridge Meadows 12.5%	657	1,303	0.08	A/B	12.5%	730	2,033	0.12	A/B
Presidents Boulevard					Crestridge Meadows									
Crestride Meadows Drive 2	Drive 8	79	0.005	A/B	20%	1,051	1,143	0.07	A/B	10.0%	584	1,727	0.10	A/B
Volume Limit 2 Lanes 16,500							3% growth for 5 years							
Roadway Link					**2031 Background**					**2031 Site-Generated**		**2031 Background+Site**		
From	To				Volume	Daily Volume	Volume	V/C Ratio	LOS	Assignment	Daily Volume	Volume	V/C Ratio	LOS
CR 484														
Main Street	CR 483				Crestridge Meadows 12.5%	657	1,457	0.09	A/B	12.5%	730	2,187	0.13	A/B
Presidents Boulevard					Crestridge Meadows	1,051	1,164	0.07	A/B	10.0%	584	1,748	0.11	A/B
Crestride Meadows Drive 2	Drive 8				20.0%									
Volume Limit 2 Lanes 16,500							5% growth for 5 additional years							

Volume Limit Based on NCTCOG DFWRTM Hourly Capacity Per Lane

J. Right-Turn Lane Analysis

Where justified, the addition of right-turn deceleration lanes can help inbound turning vehicles separate from the through traffic, avoiding conflicts and smoothing traffic flow. Right-turn lane analysis followed the National Cooperative Highway Research Program (NCHRP) guidance for right-turn lane installation. In this methodology, the roadway geometry, roadway speed, roadway volume and right-turn volume are taken into consideration. Based on the NCHRP methodology, none of the site driveways warrant the installation of a right-turn lane. The NCHRP analysis worksheets have been attached in the **Appendix**.

K. Left-Turn Lane Analysis

All intersections that have access to the proposed development were analyzed to determine the need for left-turn deceleration lanes. The criteria for left-turn deceleration lanes under the guidelines of the American Association of State Highway Officials (AASHTO) is based on the advancing and opposing volume, as well as the left turn percentage. Based on the total volumes projected at completion of the Lavon Tract development (**Exhibit 8**), none of the study intersections along CR 485 meet the threshold to warrant a left-turn deceleration lane, as seen below in **Table 8**. Auxiliary lane analysis sheets can be found in the **Appendix**. Note that Drive 4 and Drive 8 were not analyzed due to extremely low expected left-turn volumes at those drives.

Table 8 – Driveway Left-Turn Lane Analysis

Left-turn Lane Location	Direction	Projected Maximum Peak Hour Volume				Left-Turn Lane Required?
		Left-Turn	Advancing	% LT of Adv.	Opposing	
Drive 1 from CR 485	WBL	19 vph	417 vph	4.6%	265 vph	No
SW* Drive 2 from CR 484	NBL	8 vph	37 vph	21.6%	62 vph	No
SE* Drive 2 from CR 484	SBL	58 vph	120 vph	48.3%	49 vph	No
Drive 3 from CR 484	SBL	19 vph	154 vph	12.3%	77 vph	No
Drive 4 from CR 485	WBL	-	-	-	-	No
Drive 5 from CR 485	EBL	19 vph	96 vph	19.8%	198 vph	No
Drive 6 from CR 485	WBL	8 vph	100 vph	20.5%	325 vph	No
Drive 7 from CR 485	WBL	12 vph	88 vph	44.4%	152 vph	No
Drive 8 from Presidents Blvd	NBL	-	-	-	-	No

*SW = Southwest Tract, SE = Southeast Tract

VI. CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis presented in this report, the proposed Lavon Tract development, located in Lavon, Texas, can be successfully incorporated into the surrounding roadway network provided the recommendations made in this report are considered. Traffic operations were analyzed at the study intersections for existing volumes, 2026 and 2031 background traffic volumes, and 2026 and 2031 background plus site-generated traffic volumes. Year 2026 represents the expected buildout year of the site and 2031 represents a future horizon year. Conditions were analyzed for the weekday AM and PM peak hours.

Analysis of the existing conditions showed the need for regional roadway network improvements. The planned widening of State Highway 205 will significantly improve traffic operations at State Highway 78 at State Highway 205 which is currently operating with heavy delay, specifically for the northbound approach. The delay is only expected to increase due to general traffic growth in the area and additional surrounding developments. Therefore, the additional capacity on State Highway 205 is necessary at this intersection to accommodate the heavy volumes. Building out State Highway 205 to its thoroughfare potential of a six-lane roadway could even further increase capacity. Signal timing adjustments, such as an increased cycle length and adjustments to the signal control type, could allow for a more optimal phasing that is favorable for the northbound approach. As stated in the report, running the intersection as actuated-coordinated and updating the phase sequence, can give more time for the heavy northbound approach. Other signal timing adjustments such as modifications to the existing splits, can also potentially improve traffic. However, since the majority of the traffic at this intersection is existing, the need for these intersection improvements is not due to the Lavon Tract development.

The existing study stop-controlled approaches along State Highway 205 are also currently experiencing heavy delay due to the heavy northbound and southbound volumes on State Highway 205. It is expected by 2026, without the Lavon Tract development, the CR 485 and CR 483 westbound approaches will be operating at LOS F. State Highway 205 at CR 485 is expected to be a major intersection for not only the Lavon Tract development, but also the Crestridge Meadows development that is currently under construction. Although the planned widening of State Highway 205 could potentially include intersection upgrades at CR 485, if no upgrades are provided, the intersection is expected to continue to operate poorly. Therefore, it is recommended that the City of Lavon review State Highway 205 at CR 485 for further improvements through TxDOT to help mitigate the delay. Providing separate left-turn and right-turn lanes at the intersection can potentially help decrease delay. Similarly, Main Street at Presidents Boulevard is currently experiencing heavy delay for the stop-controlled northbound approach, specifically in the AM peak hour. However, in the PM peak hour, the northbound approach operates with minimal delay which indicates that for the majority of the day, the intersection is expected to operate well.

The proposed site driveways provide the appropriate level of access for the development. All of the site driveways are expected to operate sufficiently with one inbound and one outbound lane

after the full build out of the development. All eight of the site driveways at expected to operate at LOS C or better for the stop-controlled approach by the full build-out of the site.

The following modification to the roadway network is recommended as part of the Lavon Tract development:

- Installation of an AWSC at CR 485 and CR 484

The following modifications to the external roadway network should be strongly considered at a regional level to help improve traffic operations in the vicinity of the development:

- Signal timing adjustments at State Highway 78 and State Highway 205
- Addition of an exclusive through lane at State Highway 78 and State Highway 205 to support signal timing improvements
- Intersection improvements at State Highway 205 and CR 485

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APPENDIX A

A. Analysis Methodology

Capacity analysis results are listed in terms of Level of Service (LOS). LOS is a qualitative term describing operating conditions a driver will experience while traveling on a particular street or highway during a specific time interval. It ranges from A (very little delay) to F (long delays and congestion). **Table 9** shows the definition of level of service for signalized and unsignalized intersections.

Table 9 – Level of Service Definitions

Level of Service	Signalized Intersection Average Total Delay (sec/veh)	Unsignalized Intersection Average Total Delay (sec/veh)
A	≤10	≤10
B	>10 and ≤20	>10 and ≤15
C	>20 and ≤35	>15 and ≤25
D	>35 and ≤55	>25 and ≤35
E	>55 and ≤80	>35 and ≤50
F	>80	>50

Definitions provided from the Highway Capacity Manual, Special Report 209, Transportation Research Board, 2010.

Study area intersections were analyzed based on average total delay analysis for signalized and unsignalized intersections. For the unsignalized analysis, the level of service (LOS) for a two-way stop-controlled intersection is defined for each movement. Unlike signalized intersections which define LOS for each approach and for the intersection as a whole, LOS for two-way stop-controlled intersections is not defined as a whole.

Signal timings for the signalized intersections were based on field visits. Timing adjustments were made in the future scenarios to accommodate changes in traffic volumes due to background growth and site traffic, replicating how City staff will periodically review signal operations in the future.

The analyses assumed the lane geometry and intersection control shown in **Exhibit 3**.

The peak hour factors (PHF) for the existing traffic is known from the counts collected at the site. PHF for the future traffic and the site-generated traffic is unknown, so where this occurred the PHF was assumed to be 0.92. The traffic does not grow the most in the peak 15-minute period but rather spreads out to fill the entire peak hour, so as traffic increases, the PHF approaches 1.

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B. Traffic Counts and Historical Data

Lavon Tract - Lavon, Texas
Historical Link Volumes and Growth Rates

State Highway 78 west of Main Street						
Record	**Year**	**Link Start**	**Link End**	**Source**	**24-Hour Volume**	**Annual Growth Rate**
1	2011	Rettop Road	Main Street	TxDOT	18,310	-
2	2013	Rettop Road	Main Street	TxDOT	19,549	3.3%
3	2014	Rettop Road	Main Street	TxDOT	19,689	0.7%
4	2015	Rettop Road	Main Street	TxDOT	22,377	13.7%
5	2016	Rettop Road	Main Street	TxDOT	23,272	4.0%
6	2017	Rettop Road	Main Street	TxDOT	20,306	-12.7%
7	2018	Rettop Road	Main Street	TxDOT	24,687	21.6%
8	2021	Rettop Road	Main Street	KHA	31,780	11.8%
				Average Growth 2011 - 2021:		**5.3%**

State Highway 205						
Record	**Year**	**Link Start**	**Link End**	**Source**	**24-Hour Volume**	**Annual Growth Rate**
1	2011	State Highway 78	County Road 483	TxDOT	12,561	-
2	2013	State Highway 78	County Road 483	TxDOT	12,399	-0.6%
3	2014	State Highway 78	County Road 483	TxDOT	11,527	-7.0%
4	2015	State Highway 78	County Road 483	TxDOT	13,579	17.8%
5	2016	State Highway 78	County Road 483	TxDOT	15,197	11.9%
6	2017	State Highway 78	County Road 483	TxDOT	13,131	-13.6%
7	2018	State Highway 78	County Road 483	TxDOT	17,231	31.2%
8	2021	State Highway 78	County Road 483	KHA	19,933	5.0%
				Average Growth 2011 - 2021:		**5.3%**

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Count Name: CR 485 @ CR 484
Site Code:
Start Date: 04/13/2021
Page No: 1

Turning Movement Data

Start Time	CR 484 Southbound					Westbound St. Westbound					CR 484 Northbound					CCR 485 Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
6:30 AM	0	3	4	0	7	0	0	0	0	0	1	2	0	0	3	2	0	0	0	2	12
6:45 AM	0	2	8	0	10	0	0	0	0	0	0	4	0	0	4	5	0	0	0	5	19
Hourly Total	0	5	12	0	17	0	0	0	0	0	1	6	0	0	7	7	0	0	0	7	31
7:00 AM	0	3	7	0	10	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	14
7:15 AM	0	4	4	0	8	0	0	0	0	0	3	1	0	0	4	4	0	0	0	4	16
7:30 AM	0	8	6	0	14	0	0	0	0	0	0	1	0	0	1	3	0	0	0	3	18
7:45 AM	0	2	6	0	8	0	0	0	0	0	1	4	0	0	5	4	0	0	0	4	17
Hourly Total	0	17	23	0	40	0	0	0	0	0	4	6	0	0	10	15	0	0	0	15	65
8:00 AM	0	2	6	0	8	0	0	0	0	0	0	3	0	0	3	6	0	1	0	7	18
8:15 AM	0	8	3	0	11	0	0	0	0	0	0	2	0	0	2	12	0	2	0	14	27
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	10	9	0	19	0	0	0	0	0	0	5	0	0	5	18	0	3	0	21	45
4:30 PM	0	3	4	0	7	0	0	0	0	0	1	5	0	0	6	3	0	0	0	3	16
4:45 PM	0	3	1	0	4	0	0	0	0	0	0	5	0	0	5	2	0	2	0	4	13
Hourly Total	0	6	5	0	11	0	0	0	0	0	1	10	0	0	11	5	0	2	0	7	29
5:00 PM	0	2	4	0	6	0	0	0	0	0	0	3	0	0	3	2	0	0	0	2	11
5:15 PM	0	6	4	0	10	0	0	0	0	0	0	1	0	0	1	9	0	1	0	10	21
5:30 PM	0	9	7	0	16	0	0	0	0	0	1	3	0	0	4	4	0	0	0	4	24
5:45 PM	0	6	0	0	6	0	0	0	0	0	1	10	0	0	11	10	0	0	0	10	27
Hourly Total	0	23	15	0	38	0	0	0	0	0	2	17	0	0	19	25	0	1	0	26	83
6:00 PM	0	0	5	0	5	0	0	0	0	0	0	9	0	0	9	3	0	1	0	4	18
6:15 PM	0	3	2	0	5	0	0	0	0	0	0	2	0	0	2	6	0	0	0	6	13
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	64	71	0	135	0	0	0	0	0	8	55	0	0	63	79	0	7	0	86	284
Approach %	0.0	47.4	52.6	0.0	-	0.0	0.0	0.0	0.0	-	12.7	87.3	0.0	0.0	-	91.9	0.0	8.1	0.0	-	-
Total %	0.0	22.5	25.0	0.0	47.5	0.0	0.0	0.0	0.0	0.0	2.8	19.4	0.0	0.0	22.2	27.8	0.0	2.5	0.0	30.3	-
Lights	0	60	60	0	120	0	0	0	0	0	5	53	0	0	58	69	0	7	0	76	254
% Lights	-	93.8	84.5	-	88.9	-	-	-	-	-	62.5	96.4	-	-	92.1	87.3	-	100.0	-	88.4	89.4
Mediums	0	3	11	0	14	0	0	0	0	0	2	1	0	0	3	9	0	0	0	9	26
% Mediums	-	4.7	15.5	-	10.4	-	-	-	-	-	25.0	1.8	-	-	4.8	11.4	-	0.0	-	10.5	9.2
rticulated Trucks	0	1	0	0	1	0	0	0	0	0	1	1	0	0	2	1	0	0	0	1	4
Articulated Trucks	-	1.6	0.0	-	0.7	-	-	-	-	-	12.5	1.8	-	-	3.2	1.3	-	0.0	-	1.2	1.4

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Count Name: CR 485 @ SH 205
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Turning Movement Data

Start Time	SH 205 Southbound					CR 485 Westbound					SH 205 Northbound					RESIDENTIAL DWY Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
6:30 AM	0	124	0	0	124	5	0	2	0	7	0	209	1	0	210	0	0	0	0	0	341
6:45 AM	1	122	0	0	123	6	0	3	0	9	0	173	4	0	177	0	0	0	0	0	309
Hourly Total	1	246	0	0	247	11	0	5	0	16	0	382	5	0	387	0	0	0	0	0	650
7:00 AM	1	140	0	0	141	5	0	2	0	7	0	168	4	0	172	0	0	0	0	0	320
7:15 AM	3	166	0	0	169	1	0	5	0	6	0	168	1	0	169	0	0	0	0	0	344
7:30 AM	1	169	0	0	170	5	0	2	0	7	0	182	4	0	186	0	0	0	0	0	363
7:45 AM	1	164	0	0	165	3	0	5	0	8	0	160	2	0	162	0	0	0	0	0	335
Hourly Total	6	639	0	0	645	14	0	14	0	28	0	678	11	0	689	0	0	0	0	0	1362
8:00 AM	3	122	1	0	126	2	0	4	0	6	0	169	5	0	174	0	0	0	0	0	306
8:15 AM	4	162	0	0	166	1	0	2	0	3	0	129	12	0	141	0	0	1	0	1	311
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	7	284	1	0	292	3	0	6	0	9	0	298	17	0	315	0	0	1	0	1	617
4:30 PM	0	189	0	0	189	2	0	1	0	3	1	165	3	0	169	0	0	0	0	0	361
4:45 PM	2	169	0	0	171	1	0	0	0	1	0	189	4	0	193	0	1	0	0	1	366
Hourly Total	2	358	0	0	360	3	0	1	0	4	1	354	7	0	362	0	1	0	0	1	727
5:00 PM	2	216	0	0	218	4	0	2	0	6	0	182	2	0	184	0	0	0	0	0	408
5:15 PM	3	220	0	0	223	2	0	4	0	6	0	171	9	0	180	0	0	0	0	0	409
5:30 PM	5	213	0	0	218	7	0	3	0	10	0	182	3	0	185	0	0	0	0	0	413
5:45 PM	5	231	0	0	236	1	0	2	0	3	0	158	11	0	169	0	0	0	0	0	408
Hourly Total	15	880	0	0	895	14	0	11	0	25	0	693	25	0	718	0	0	0	0	0	1638
6:00 PM	2	230	0	0	232	3	0	1	0	4	0	149	3	0	152	0	0	0	0	0	388
6:15 PM	3	219	0	0	222	2	0	2	0	4	0	131	6	0	137	0	0	0	0	0	363
6:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	36	2857	1	0	2894	50	0	40	0	90	1	2685	74	0	2760	0	1	1	0	2	5746
Approach %	1.2	98.7	0.0	0.0	-	55.6	0.0	44.4	0.0	-	0.0	97.3	2.7	0.0	-	0.0	50.0	50.0	0.0	-	-
Total %	0.6	49.7	0.0	0.0	50.4	0.9	0.0	0.7	0.0	1.6	0.0	46.7	1.3	0.0	48.0	0.0	0.0	0.0	0.0	0.0	-
Lights	27	2691	1	0	2719	50	0	22	0	72	0	2535	70	0	2605	0	0	1	0	1	5397
% Lights	75.0	94.2	100.0	-	94.0	100.0	-	55.0	-	80.0	0.0	94.4	94.6	-	94.4	-	0.0	100.0	-	50.0	93.9
Mediums	8	81	0	0	89	0	0	16	0	16	1	69	4	0	74	0	1	0	0	1	180
% Mediums	22.2	2.8	0.0	-	3.1	0.0	-	40.0	-	17.8	100.0	2.6	5.4	-	2.7	-	100.0	0.0	-	50.0	3.1
rticulated Trucks	1	85	0	0	86	0	0	2	0	2	0	81	0	0	81	0	0	0	0	0	169
Articulated Trucks	2.8	3.0	0.0	-	3.0	0.0	-	5.0	-	2.2	0.0	3.0	0.0	-	2.9	-	0.0	0.0	-	0.0	2.9

GRAM Traffic NTX Inc.
1120 W. Lovers Lane

Arlington, Texas, United States 76013
817.265.8968

Count Name: MAIN ST @ PRESIDENTS BLVD
Site Code:
Start Date: 04/13/2021
Page No: 1

Turning Movement Data

Start Time	RESIDENTIAL DWY Southbound					MAIN ST Westbound					PRESIDENTS BLVD Northbound					MAIN ST Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
6:30 AM	0	0	0	0	0	13	79	0	0	92	20	0	3	0	23	0	16	6	0	22	137
6:45 AM	0	0	0	0	0	21	88	0	0	109	19	0	4	0	23	0	19	31	0	50	182
Hourly Total	0	0	0	0	0	34	167	0	0	201	39	0	7	0	46	0	35	37	0	72	319
7:00 AM	0	0	0	0	0	42	96	0	0	138	50	0	36	0	86	0	26	39	0	65	289
7:15 AM	1	0	0	0	1	32	95	0	0	127	56	0	42	0	98	0	23	46	0	69	295
7:30 AM	0	0	0	0	0	2	85	0	0	87	40	0	21	0	61	0	21	10	0	31	179
7:45 AM	0	0	0	0	0	9	91	0	0	100	17	0	15	0	32	0	22	2	0	24	156
Hourly Total	1	0	0	0	1	85	367	0	0	452	163	0	114	0	277	0	92	97	0	189	919
8:00 AM	0	0	0	0	0	1	64	0	0	65	14	0	3	0	17	0	30	15	0	45	127
8:15 AM	0	0	0	0	0	0	52	0	0	52	22	0	1	0	23	0	22	8	0	30	105
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	1	116	0	0	117	36	0	4	0	40	0	52	23	0	75	232
4:30 PM	0	0	0	0	0	10	37	0	0	47	15	0	9	0	24	0	60	23	0	83	154
4:45 PM	0	0	0	0	0	2	42	0	0	44	15	0	10	0	25	0	71	21	0	92	161
Hourly Total	0	0	0	0	0	12	79	0	0	91	30	0	19	0	49	0	131	44	0	175	315
5:00 PM	0	0	0	0	0	2	39	0	1	42	13	0	3	0	16	1	83	26	0	110	168
5:15 PM	0	0	2	0	2	2	61	0	0	63	22	0	5	0	27	1	96	19	0	116	208
5:30 PM	0	0	0	0	0	2	43	0	0	45	16	0	2	0	18	2	88	20	0	110	173
5:45 PM	1	0	0	0	1	2	46	1	0	49	17	0	4	0	21	1	78	20	0	99	170
Hourly Total	1	0	2	0	3	8	189	1	1	199	68	0	14	0	82	5	345	85	0	435	719
6:00 PM	0	0	0	0	0	7	41	0	0	48	10	0	2	0	12	0	91	27	0	118	178
6:15 PM	1	0	0	0	1	4	44	0	0	48	8	0	4	0	12	0	79	20	0	99	160
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	3	0	2	0	5	151	1003	1	1	1156	354	0	164	0	518	5	825	333	0	1163	2842
Approach %	60.0	0.0	40.0	0.0	-	13.1	86.8	0.1	0.1	-	68.3	0.0	31.7	0.0	-	0.4	70.9	28.6	0.0	-	-
Total %	0.1	0.0	0.1	0.0	0.2	5.3	35.3	0.0	0.0	40.7	12.5	0.0	5.8	0.0	18.2	0.2	29.0	11.7	0.0	40.9	-
Lights	3	0	2	0	5	140	982	1	1	1124	352	0	155	0	507	5	811	329	0	1145	2781
% Lights	100.0	-	100.0	-	100.0	92.7	97.9	100.0	100.0	97.2	99.4	-	94.5	-	97.9	100.0	98.3	98.8	-	98.5	97.9
Mediums	0	0	0	0	0	11	17	0	0	28	2	0	9	0	11	0	11	3	0	14	53
% Mediums	0.0	-	0.0	-	0.0	7.3	1.7	0.0	0.0	2.4	0.6	-	5.5	-	2.1	0.0	1.3	0.9	-	1.2	1.9
ticulated Trucks	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	3	1	0	4	8
rticulated Trucks	0.0	-	0.0	-	0.0	0.0	0.4	0.0	0.0	0.3	0.0	-	0.0	-	0.0	0.0	0.4	0.3	-	0.3	0.3

GRAM Traffic NTX Inc.
1120 W. Lovers Lane

Arlington, Texas, United States 76013
817.265.8968

Count Name: SH 78 @ MAIN ST
Site Code:
Start Date: 04/13/2021
Page No: 1

Turning Movement Data

Start Time	Southbound St. Southbound					SH 78 Westbound					MAIN ST Northbound					SH 78 Eastbound					
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
6:30 AM	0	0	0	0	0	0	365	0	0	365	0	0	31	0	31	0	121	14	0	135	531
6:45 AM	0	0	0	0	0	0	446	0	0	446	0	0	30	0	30	0	128	31	0	159	635
Hourly Total	0	0	0	0	0	0	811	0	0	811	0	0	61	0	61	0	249	45	0	294	1166
7:00 AM	0	0	0	0	0	0	432	0	0	432	0	0	35	0	35	0	110	39	0	149	616
7:15 AM	0	0	0	0	0	0	481	0	0	481	0	0	55	0	55	0	150	49	0	199	735
7:30 AM	0	0	0	0	0	0	448	0	0	448	0	0	37	0	37	0	164	20	0	184	669
7:45 AM	0	0	0	0	0	0	481	0	0	481	0	0	36	0	36	0	136	25	0	161	678
Hourly Total	0	0	0	0	0	0	1842	0	0	1842	0	0	163	0	163	0	560	133	0	693	2698
8:00 AM	0	0	0	0	0	0	339	0	0	339	0	0	19	0	19	0	135	31	0	166	524
8:15 AM	0	0	0	0	0	0	319	0	0	319	0	0	26	0	26	0	117	24	0	141	486
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	658	0	0	658	0	0	45	0	45	0	252	55	0	307	1010
4:30 PM	0	0	0	0	0	0	222	0	0	222	0	0	14	0	14	0	289	75	0	364	600
4:45 PM	0	0	0	0	0	0	253	0	0	253	0	0	8	0	8	0	312	75	0	387	648
Hourly Total	0	0	0	0	0	0	475	0	0	475	0	0	22	0	22	0	601	150	0	751	1248
5:00 PM	0	0	0	0	0	0	269	0	0	269	0	0	13	0	13	0	376	116	0	492	774
5:15 PM	0	0	0	0	0	0	268	0	0	268	0	0	22	0	22	0	353	90	0	443	733
5:30 PM	0	0	0	0	0	0	288	0	0	288	0	0	13	0	13	0	376	110	0	486	787
5:45 PM	0	0	0	0	0	0	255	0	0	255	0	0	17	0	17	0	308	87	0	395	667
Hourly Total	0	0	0	0	0	0	1080	0	0	1080	0	0	65	0	65	0	1413	403	0	1816	2961
6:00 PM	0	0	0	0	0	0	208	0	0	208	0	0	19	0	19	0	332	100	0	432	659
6:15 PM	0	0	0	0	0	0	204	0	0	204	0	0	14	0	14	0	323	80	0	403	621
Grand Total	0	0	0	0	0	0	5278	0	0	5278	0	0	369	0	369	0	3730	966	0	4696	10363
Approach %	0.0	0.0	0.0	0.0	-	0.0	100.0	0.0	0.0	-	0.0	0.0	100.0	0.0	-	0.0	79.4	20.6	0.0	-	-
Total %	0.0	0.0	0.0	0.0	0.0	0.0	50.9	0.0	0.0	50.9	0.0	0.0	3.8	0.0	3.8	0.0	36.0	9.3	0.0	45.3	-
Lights	0	0	0	0	0	0	5092	0	0	5092	0	0	362	0	362	0	3578	932	0	4510	9964
% Lights	-	-	-	-	-	-	96.5	-	-	96.5	-	-	98.2	-	98.2	-	95.9	96.5	-	96.0	96.3
Mediums	0	0	0	0	0	0	82	0	0	82	0	0	6	0	6	0	57	32	0	89	177
% Mediums	-	-	-	-	-	-	1.6	-	-	1.6	-	-	1.5	-	1.5	-	1.5	3.3	-	1.9	1.7
rticulated Trucks	0	0	0	0	0	0	104	0	0	104	0	0	1	0	1	0	95	2	0	97	202
Articulated Trucks	-	-	-	-	-	-	2.0	-	-	2.0	-	-	0.3	-	0.3	-	2.5	0.2	-	2.1	1.9

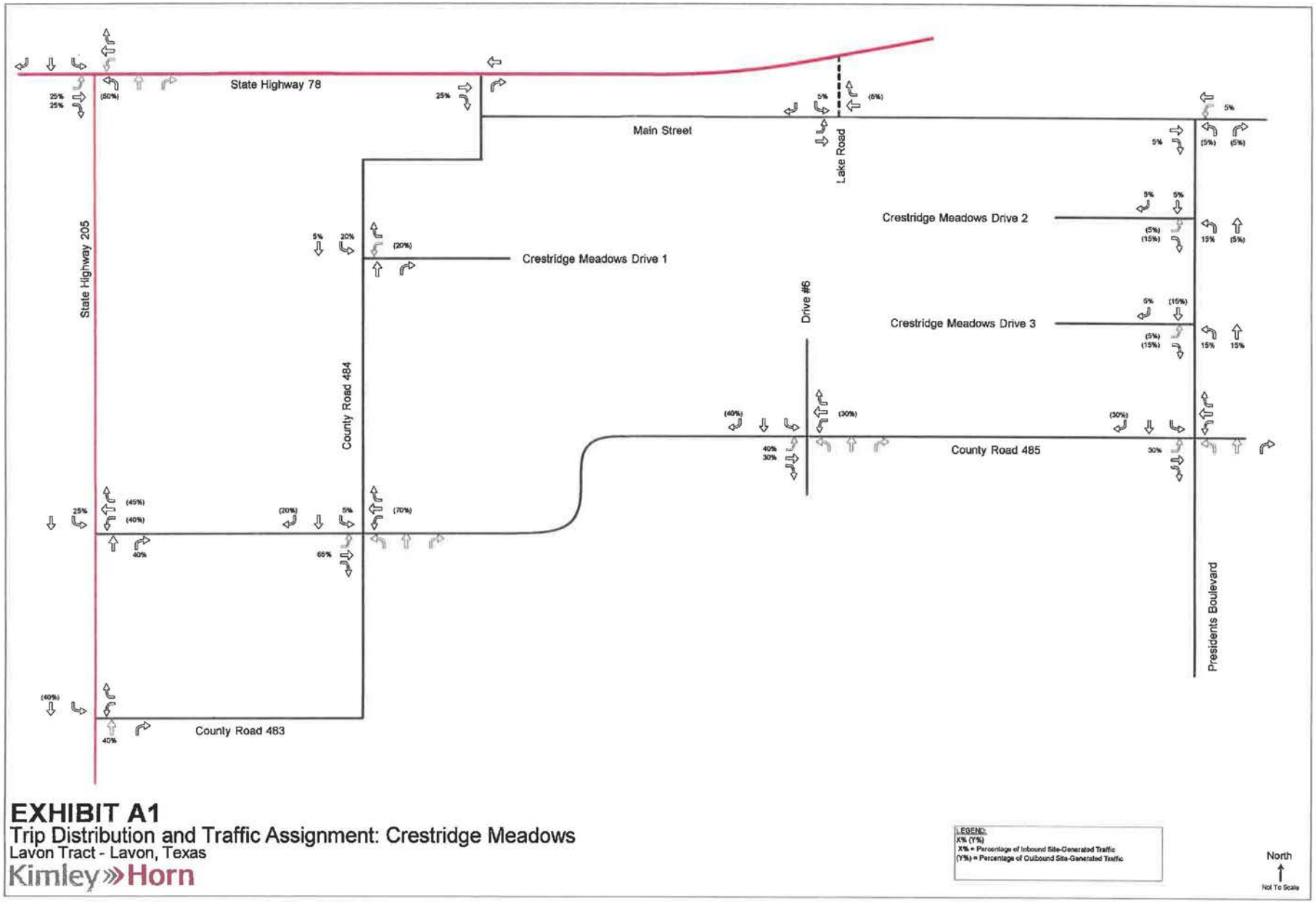


EXHIBIT A1
Trip Distribution and Traffic Assignment: Crestridge Meadows
Lavon Tract - Lavon, Texas
Kimley»Horn

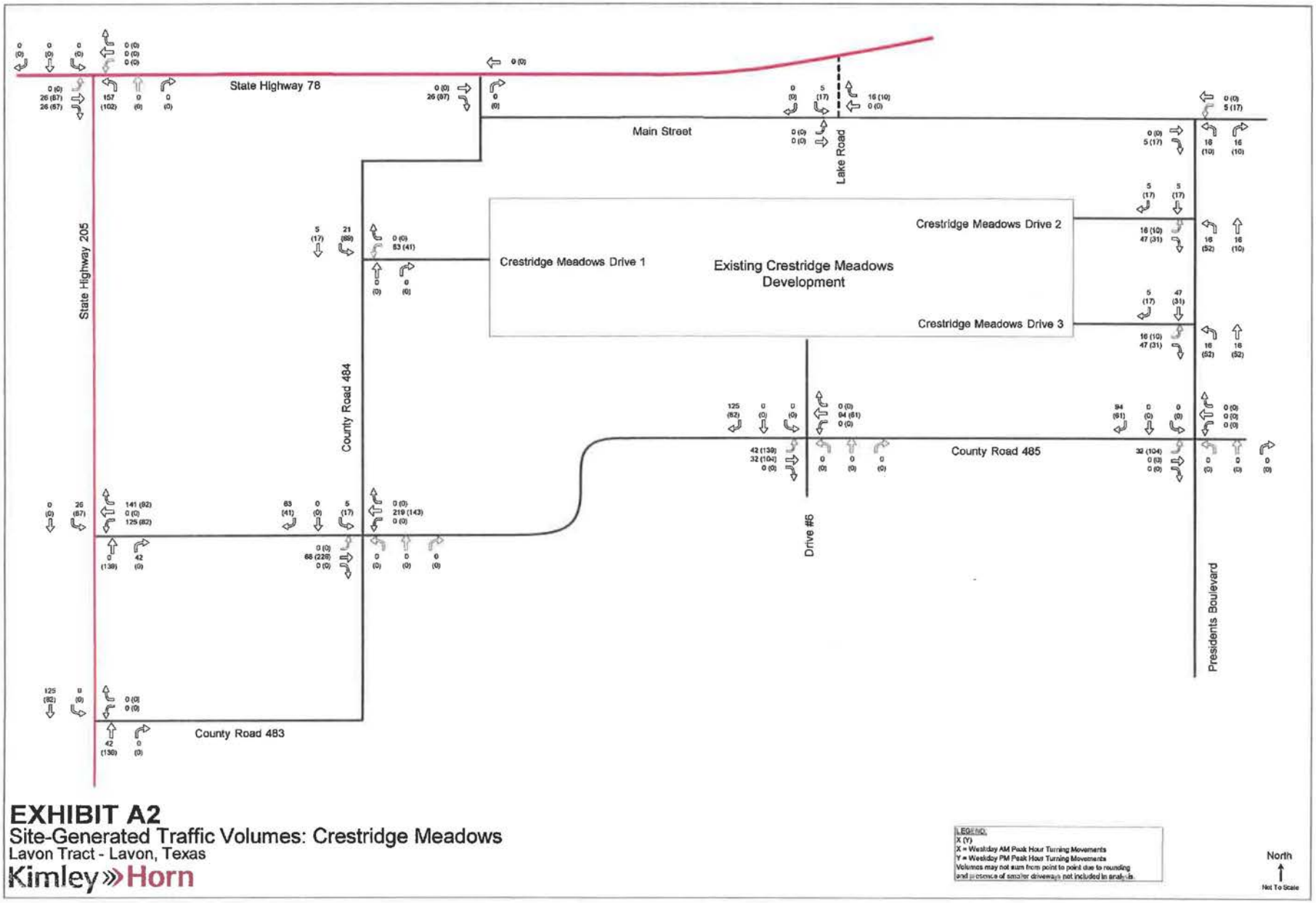


EXHIBIT A2
Site-Generated Traffic Volumes: Crestridge Meadows
Lavon Tract - Lavon, Texas
Kimley»Horn

Kimley»Horn

C. All-Way Stop Control Warrant Analysis

MULTI-WAY STOP SIGN WARRANT ANALYSIS

City/County:	Lavon	85th-percentile speed on the major street exceeds 40 mph? (Y or N)	Y
State:	Texas	Year	2026
Date:	5/6/2021		
Major Street:	CR 485	Analyzed by:	Kimley-Horn
Minor Street:	CR 484	Analyzed by:	Kimley-Horn

	24-Hour Volume Summary			Major Street Total of Both Approaches	Minor Street Total of Both Approaches	Bicycle Total of All Approaches	Pedestrian Total of All Approaches
6:00 AM	06:00 AM	TO	07:00 AM	344	193		
7:00 AM	07:00 AM	TO	08:00 AM	616	347		
8:00 AM	08:00 AM	TO	09:00 AM	567	321		
9:00 AM	09:00 AM	TO	10:00 AM	399	226		
10:00 AM	10:00 AM	TO	11:00 AM	447	254		
11:00 AM	11:00 AM	TO	12:00 PM	492	281		
12:00 PM	12:00 PM	TO	01:00 PM	518	296		
1:00 PM	01:00 PM	TO	02:00 PM	557	317		
2:00 PM	02:00 PM	TO	03:00 PM	618	352		
3:00 PM	03:00 PM	TO	04:00 PM	681	390		
4:00 PM	04:00 PM	TO	05:00 PM	846	484		
5:00 PM	05:00 PM	TO	06:00 PM	831	475		
6:00 PM	06:00 PM	TO	07:00 PM	682	389		
7:00 PM	07:00 PM	TO	08:00 PM	494	282		
8:00 PM	08:00 PM	TO	09:00 PM	444	255		
9:00 PM	09:00 PM	TO	10:00 PM	326	187		

Source: TMUTCD, 2011 Edition
Created By: Kimley-Horn and Associates, Inc.

Warrant 1		Warrant 1 Hourly Rank	
Major Street	Minor Street	Major Street	Minor Street
164%	138%	15	15
293%	248%	6	6
270%	229%	7	7
190%	162%	14	14
213%	182%	12	12
234%	201%	11	11
247%	211%	9	9
265%	227%	8	8
294%	252%	5	5
324%	279%	4	3
403%	346%	1	1
396%	339%	2	2
325%	278%	3	4
235%	202%	10	10
211%	182%	13	12
155%	133%	16	16

Threshold Values		Average of Top 8 Hours Of Minor Street	
210	140	675	384

Summary
Met? YES

COMMENTS/NOTES:

MULTI-WAY STOP SIGN WARRANT ANALYSIS

City/County:	Lavon	85th-percentile speed on the major street exceeds 40 mph? (Y or N)	Y
State:	Texas	Year	2026
Date:	5/6/2021		
Major Street:	Presidents Boulevard	Analyzed by:	Kimley-Horn
Minor Street:	CR 485	Analyzed by:	Kimley-Horn

24-Hour Volume Summary				Major Street Total of Both Approaches	Minor Street Total of Both Approaches	Bicycle Total of All Approaches	Pedestrian Total of All Approaches
6:00 AM	06:00 AM	TO	07:00 AM	29	44		
7:00 AM	07:00 AM	TO	08:00 AM	89	78		
8:00 AM	08:00 AM	TO	09:00 AM	80	70		
9:00 AM	09:00 AM	TO	10:00 AM	54	48		
10:00 AM	10:00 AM	TO	11:00 AM	68	52		
11:00 AM	11:00 AM	TO	12:00 PM	114	55		
12:00 PM	12:00 PM	TO	01:00 PM	90	58		
1:00 PM	01:00 PM	TO	02:00 PM	82	63		
2:00 PM	02:00 PM	TO	03:00 PM	98	69		
3:00 PM	03:00 PM	TO	04:00 PM	100	74		
4:00 PM	04:00 PM	TO	05:00 PM	136	92		
5:00 PM	05:00 PM	TO	06:00 PM	138	91		
6:00 PM	06:00 PM	TO	07:00 PM	104	116		
7:00 PM	07:00 PM	TO	08:00 PM	77	54		
8:00 PM	08:00 PM	TO	09:00 PM	67	46		
9:00 PM	09:00 PM	TO	10:00 PM	59	34		

Source: TMUTCD, 2011 Edition
Created By: Kimley-Horn and Associates, Inc.

Warrant 1		Warrant 1 Hourly Rank	
Major Street	Minor Street	Major Street	Minor Street
14%	31%	16	15
42%	56%	8	4
38%	50%	10	6
26%	34%	15	13
32%	37%	12	12
54%	39%	3	10
43%	42%	7	9
39%	45%	9	8
47%	50%	5	6
47%	53%	5	5
65%	66%	2	2
66%	65%	1	3
50%	83%	4	1
37%	38%	11	11
32%	33%	12	14
28%	25%	14	16
Threshold Values		Average of Top 8 Hours Of Minor Street	
210	140	101	82
Summary Met? NO			

COMMENTS/NOTES:

Kimley»Horn

D. Left-Turn Lane Warrant Analysis

Lavon Tract Development **PM Peak**

2026 Buildout **Drive 1 at FM 485**

Table 3-11: Guide for Left-Turn Lanes on Two-Lane Highways

Opposing Volume (vph)	Advancing Volume (vph)			
-	5 % Left Turns	10 % Left Turns	20 % Left Turns	30 % Left Turns
40 mph [60 km/h] Design Speed				
800	330	240	180	160
600	410	305	225	200
400	510	380	275	245
265	597.75			
200	640	470	350	305
100	720	515	390	340
50 mph [80 km/h] Design Speed				
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
55 mph [90 km/h] Design Speed (Interpolated)				
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
60 mph [100 km/h] Design Speed				
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

Enter Design Speed	40	mph
Enter Opposing Volume	265	vph
Enter Percent Left Turns	4.6%	
Left Turn Volume	19	vph
Advancing Volume	417	vph
Warrant Volume	597.8	vph
Is Left Turn Warranted?	NO	

Lavon Tract Development **PM Peak**

2026 Buildout **SW Drive 2 at FM 484**

Table 3-11: Guide for Left-Turn Lanes on Two-Lane Highways

Opposing Volume (vph)	Advancing Volume (vph)			
-	5 % Left Turns	10 % Left Turns	20 % Left Turns	30 % Left Turns
40 mph [60 km/h] Design Speed				
-	-	-	-	-
800	330	240	180	160
-	-	-	-	-
600	410	305	225	200
-	-	-	-	-
400	510	380	275	245
265	-	-	-	285.5
200	640	470	350	305
-	-	-	-	-
100	720	515	390	340
50 mph [80 km/h] Design Speed				
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
55 mph [90 km/h] Design Speed (Interpolated)				
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
60 mph [100 km/h] Design Speed				
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

Enter Design Speed	40	mph
Enter Opposing Volume	62	vph
Enter Percent Left Turns	21.6%	
Left Turn Volume	8	vph
Advancing Volume	37	vph
Warrant Volume	285.5	vph
Is Left Turn Warranted?	NO	

Lavon Tract Development **PM Peak**

2026 Buildout **SE Drive 2 at FM 484**

Table 3-11: Guide for Left-Turn Lanes on Two-Lane Highways

Opposing Volume (vph)	Advancing Volume (vph)			
-	5 % Left Turns	10 % Left Turns	20 % Left Turns	30 % Left Turns
40 mph [60 km/h] Design Speed				
-	-	-	-	-
800	330	240	180	160
-	-	-	-	-
600	410	305	225	200
-	-	-	-	-
400	510	380	275	245
265	-	-	-	285.5
200	640	470	350	305
-	-	-	-	-
100	720	515	390	340
50 mph [80 km/h] Design Speed				
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
55 mph [90 km/h] Design Speed (Interpolated)				
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
60 mph [100 km/h] Design Speed				
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

Enter Design Speed	40	mph
Enter Opposing Volume	49	vph
Enter Percent Left Turns	48.3%	
Left Turn Volume	58	vph
Advancing Volume	120	vph
Warrant Volume	285.5	vph
Is Left Turn Warranted?	NO	

Lavon Tract Development **PM Peak**

2026 Buildout **Drive 3 at FM 484**

Table 3-11: Guide for Left-Turn Lanes on Two-Lane Highways

Opposing Volume (vph)	Advancing Volume (vph)			
-	5 % Left Turns	10 % Left Turns	20 % Left Turns	30 % Left Turns
40 mph [60 km/h] Design Speed				
-	-	-	-	-
800	330	240	180	160
-	-	-	-	-
600	410	305	225	200
-	-	-	-	-
400	510	380	275	245
265	-	-	325.625	-
200	640	470	350	305
-	-	-	-	-
100	720	515	390	340
50 mph [80 km/h] Design Speed				
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
55 mph [90 km/h] Design Speed (Interpolated)				
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
60 mph [100 km/h] Design Speed				
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

Enter Design Speed	40	mph
Enter Opposing Volume	77	vph
Enter Percent Left Turns	12.3%	
Left Turn Volume	19	vph
Advancing Volume	154	vph
Warrant Volume	325.6	vph
Is Left Turn Warranted?	NO	

Lavon Tract Development **PM Peak**

2026 Buildout **Drive 5 at FM 485**

Table 3-11: Guide for Left-Turn Lanes on Two-Lane Highways

Opposing Volume (vph)	Advancing Volume (vph)			
-	5 % Left Turns	10 % Left Turns	20 % Left Turns	30 % Left Turns
40 mph [60 km/h] Design Speed				
-	-	-	-	-
800	330	240	180	160
-	-	-	-	-
600	410	305	225	200
-	-	-	-	-
400	510	380	275	245
265	-	-	325.625	-
200	640	470	350	305
-	-	-	-	-
100	720	515	390	340
50 mph [80 km/h] Design Speed				
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
55 mph [90 km/h] Design Speed (Interpolated)				
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
60 mph [100 km/h] Design Speed				
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

Enter Design Speed	40	mph
Enter Opposing Volume	198	vph
Enter Percent Left Turns	19.8%	
Left Turn Volume	19	vph
Advancing Volume	96	vph
Warrant Volume	325.6	vph
Is Left Turn Warranted?	NO	

Lavon Tract Development **PM Peak**

2026 Buildout **Drive 6 at FM 485**

Table 3-11: Guide for Left-Turn Lanes on Two-Lane Highways

Opposing Volume (vph)	Advancing Volume (vph)			
-	5 % Left Turns	10 % Left Turns	20 % Left Turns	30 % Left Turns
40 mph [60 km/h] Design Speed				
-	-	-	-	-
800	330	240	180	160
-	-	-	-	-
600	410	305	225	200
-	-	-	-	-
400	510	380	275	245
265	-	440.75	-	-
200	640	470	350	305
-	-	-	-	-
100	720	515	390	340
50 mph [80 km/h] Design Speed				
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
55 mph [90 km/h] Design Speed (Interpolated)				
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
60 mph [100 km/h] Design Speed				
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

Enter Design Speed	40	mph
Enter Opposing Volume	325	vph
Enter Percent Left Turns	8.0%	
Left Turn Volume	8	vph
Advancing Volume	100	vph
Warrant Volume	440.8	vph
Is Left Turn Warranted?	**NO**	

Lavon Tract Development **PM Peak**

2026 Buildout **Drive 7 at FM 485**

Table 3-11: Guide for Left-Turn Lanes on Two-Lane Highways

Opposing Volume (vph)	Advancing Volume (vph)			
-	5 % Left Turns	10 % Left Turns	20 % Left Turns	30 % Left Turns
40 mph [60 km/h] Design Speed				
800	330	240	180	160
600	410	305	225	200
400	510	380	275	245
265			325.625	
200	640	470	350	305
100	720	515	390	340
50 mph [80 km/h] Design Speed				
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
55 mph [90 km/h] Design Speed (Interpolated)				
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
60 mph [100 km/h] Design Speed				
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

Enter Design Speed	40	mph
Enter Opposing Volume	152	vph
Enter Percent Left Turns	13.6%	
Left Turn Volume	12	vph
Advancing Volume	88	vph
Warrant Volume	325.6	vph
Is Left Turn Warranted?	**NO**	

Kimley»Horn

E. Right-Turn Lane Warrant Analysis

Drive 1

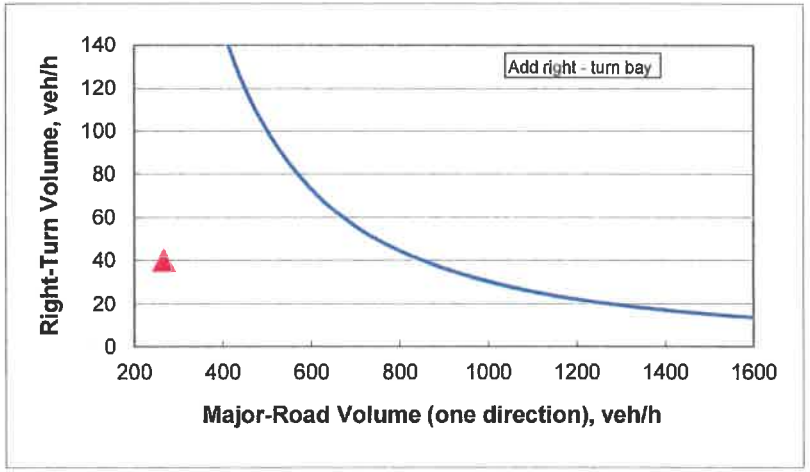
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	4-lane roadway
Variable	Value
Major-road speed, mph:	45
Major-road volume (one direction), veh/h:	265
Right-turn volume, veh/h:	39

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	301
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Do NOT add right-turn bay.	



Drive 2 SW

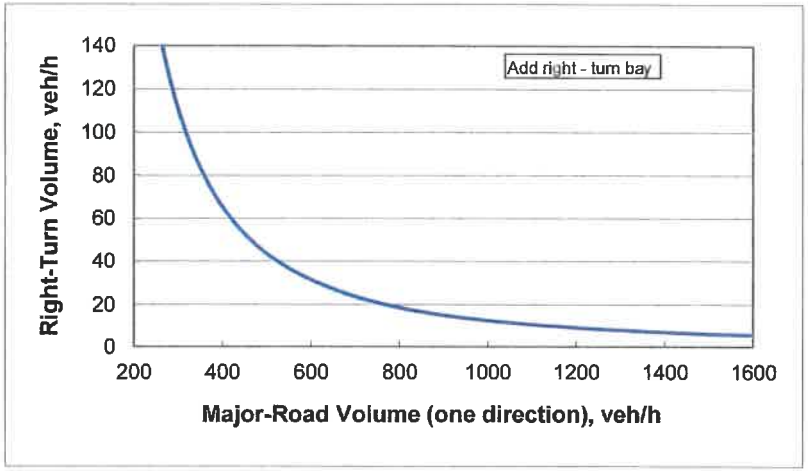
igure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	45
Major-road volume (one direction), veh/h:	120
Right-turn volume, veh/h:	19

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	590
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	



Drive 2 SE

Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

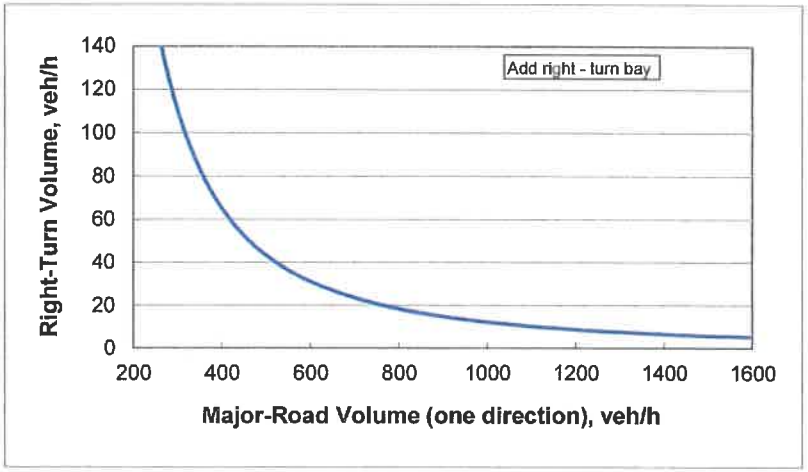
INPUT

Roadway geometry:	2-lane roadway

Variable	Value
Major-road speed, mph:	45
Major-road volume (one direction), veh/h:	49
Right-turn volume, veh/h:	12

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	3046
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	



Drive 3

Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

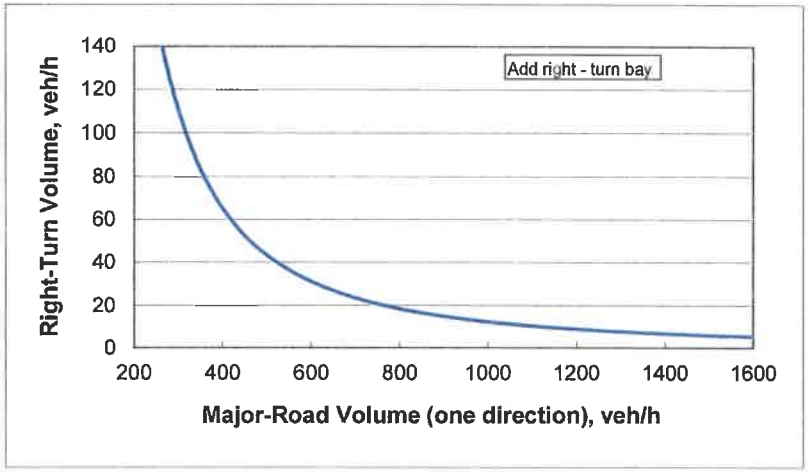
INPUT

Roadway geometry:	2-lane roadway

Variable	Value
Major-road speed, mph:	45
Major-road volume (one direction), veh/h:	77
Right-turn volume, veh/h:	19

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	1331
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	



Drive 4

Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

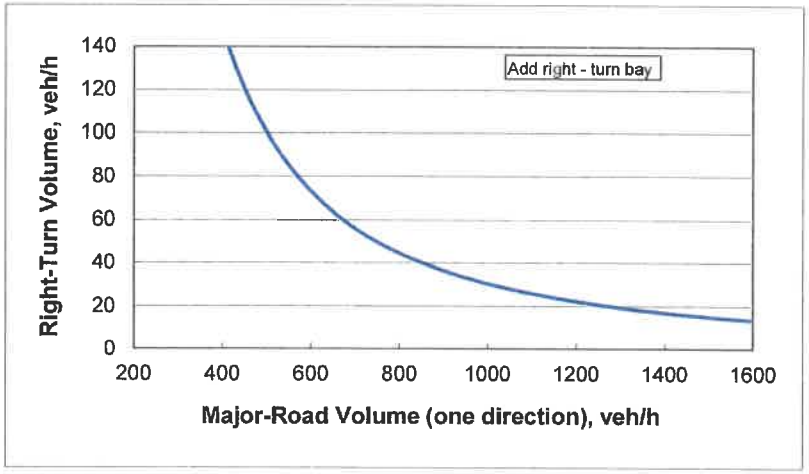
INPUT

Roadway geometry:	4-lane roadway

Variable	Value
Major-road speed, mph:	45
Major-road volume (one direction), veh/h:	155
Right-turn volume, veh/h:	58

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	766
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Do NOT add right-turn bay.	



Drive 5

Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

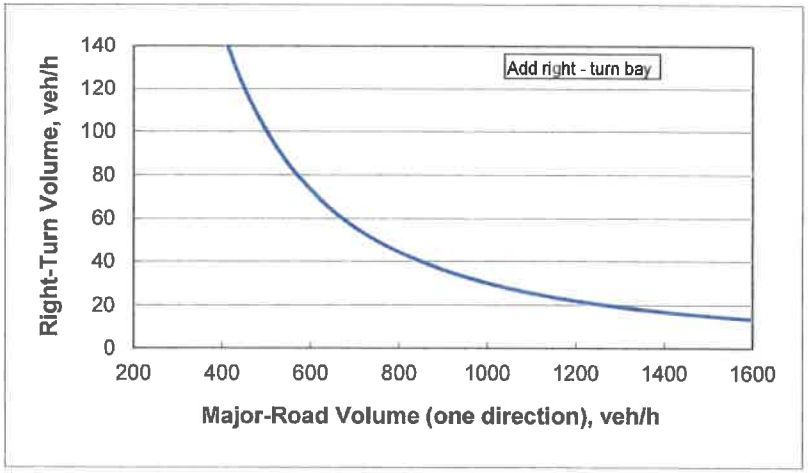
INPUT

Roadway geometry:	4-lane roadway

Variable	Value
Major-road speed, mph:	45
Major-road volume (one direction), veh/h:	151
Right-turn volume, veh/h:	8

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	801
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Do NOT add right-turn bay.	



Drive 6

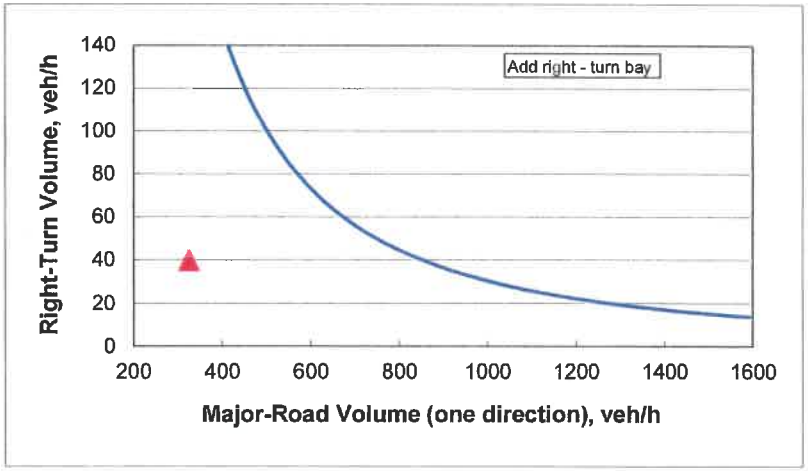
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	4-lane roadway
Variable	Value
Major-road speed, mph:	45
Major-road volume (one direction), veh/h:	325
Right-turn volume, veh/h:	39

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	211
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Do NOT add right-turn bay.	



Drive 7

Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

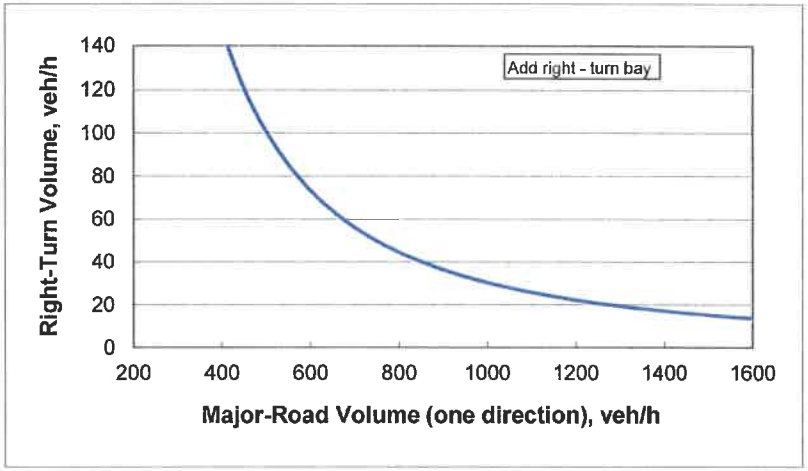
INPUT

Roadway geometry:	4-lane roadway

Variable	Value
Major-road speed, mph:	45
Major-road volume (one direction), veh/h:	152
Right-turn volume, veh/h:	39

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	792
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Do NOT add right-turn bay.	



Drive 8

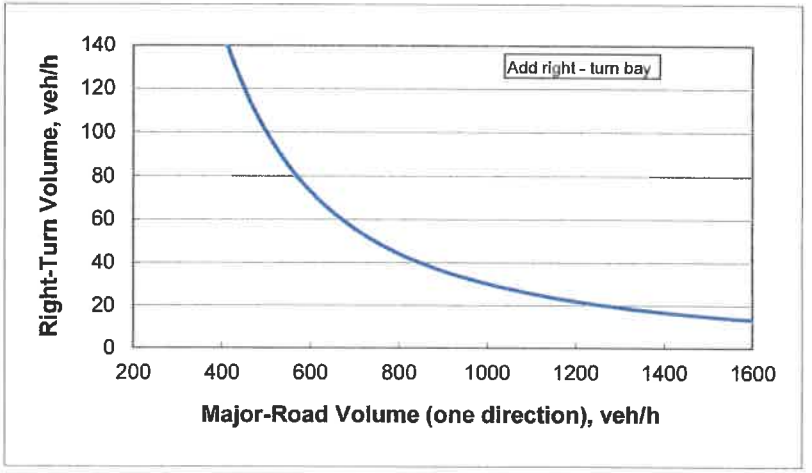
igure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	4-lane roadway
Variable	Value
Major-road speed, mph:	45
Major-road volume (one direction), veh/h:	83
Right-turn volume, veh/h:	12

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	2269
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Do NOT add right-turn bay.	



Drive 3

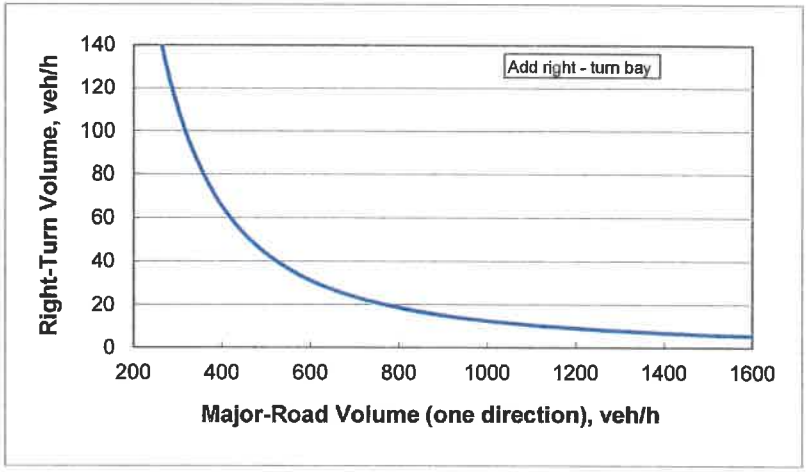
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	45
Major-road volume (one direction), veh/h:	77
Right-turn volume, veh/h:	19

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	1331
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	



Drive 4

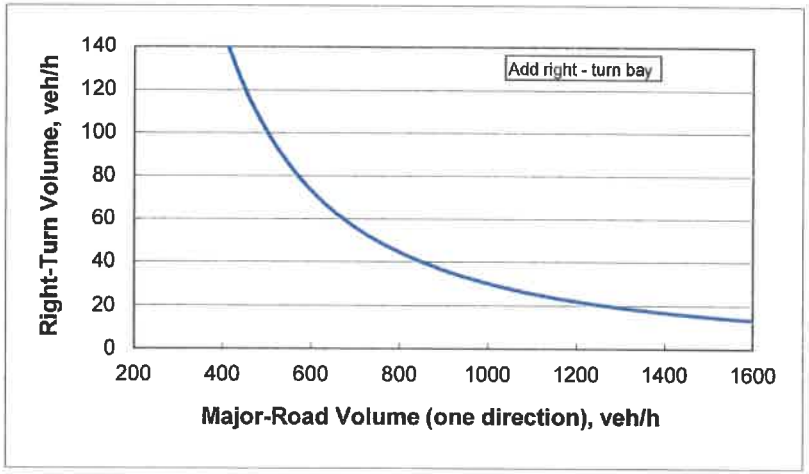
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	4-lane roadway
Variable	Value
Major-road speed, mph:	45
Major-road volume (one direction), veh/h:	155
Right-turn volume, veh/h:	58

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	766
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Do NOT add right-turn bay.	



Drive 5

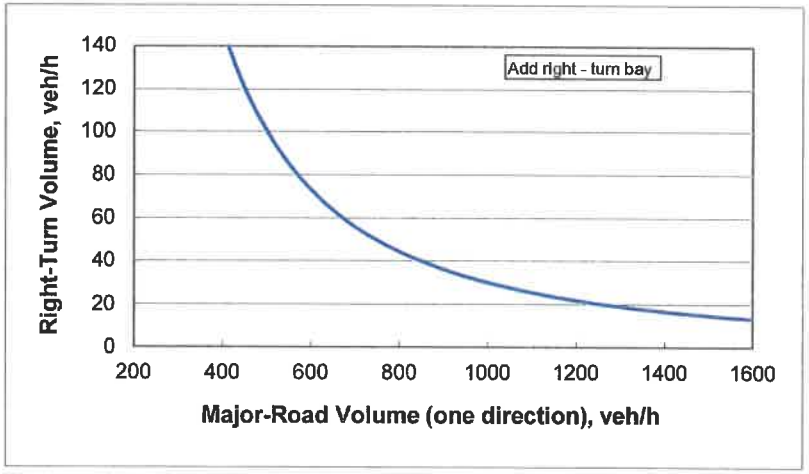
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	4-lane roadway
Variable	Value
Major-road speed, mph:	45
Major-road volume (one direction), veh/h:	151
Right-turn volume, veh/h:	8

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	801
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Do NOT add right-turn bay.	



Drive 6

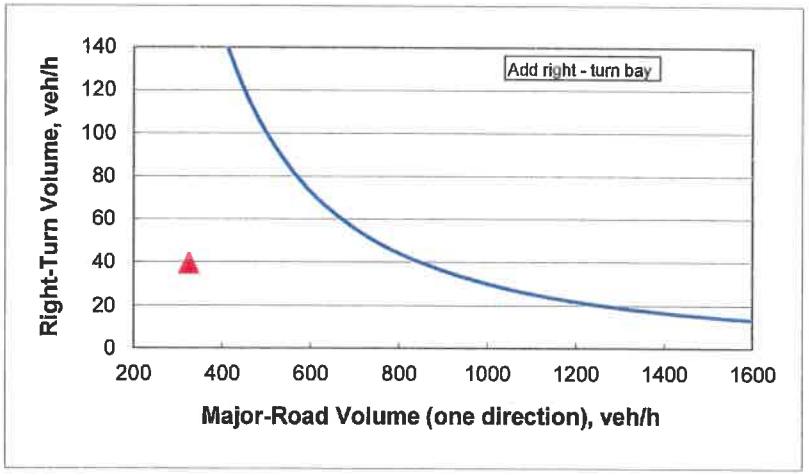
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	4-lane roadway
Variable	Value
Major-road speed, mph:	45
Major-road volume (one direction), veh/h:	325
Right-turn volume, veh/h:	39

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	211
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Do NOT add right-turn bay.	



Drive 7

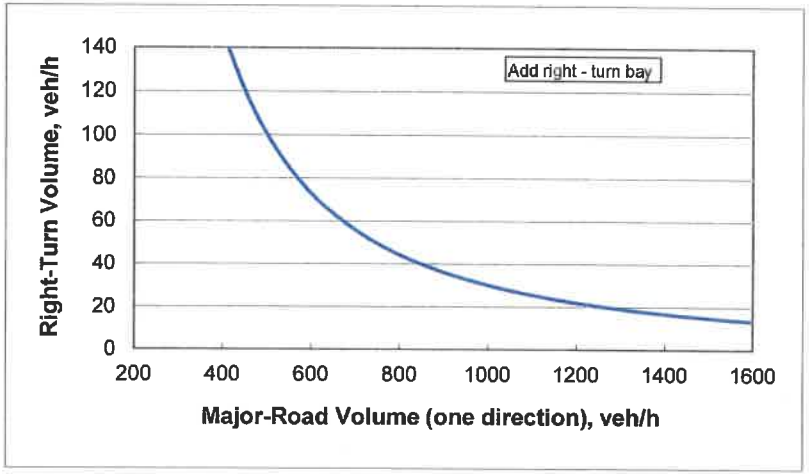
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	4-lane roadway
Variable	Value
Major-road speed, mph:	45
Major-road volume (one direction), veh/h:	152
Right-turn volume, veh/h:	39

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	792
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Do NOT add right-turn bay.	



Drive 8

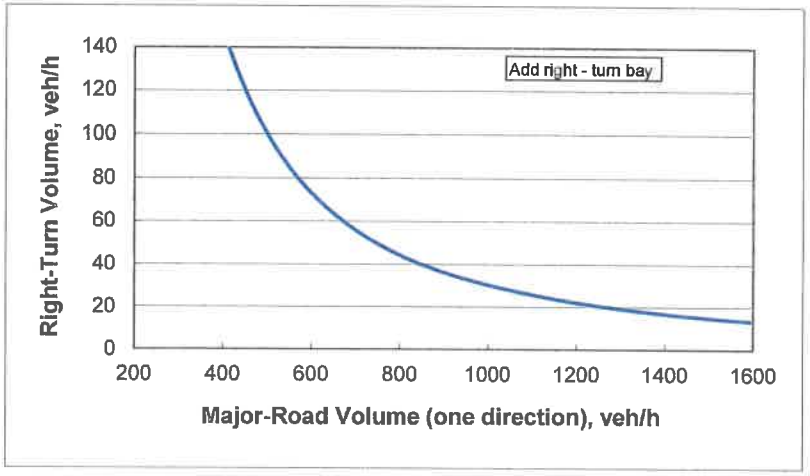
igure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	4-lane roadw ay
Variable	Value
Major-road speed, mph:	45
Major-road volume (one direction), veh/h:	83
Right-turn volume, veh/h:	12

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	2269
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Do NOT add right-turn bay.	



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F. Synchro Results

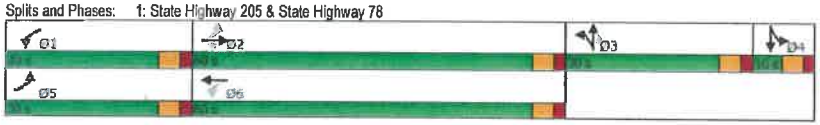
Synchro™ Output – 2021 Existing Traffic

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	562	336	174	680	0	612	4	44	18	16	10
Future Volume (vph)	16	562	336	174	680	0	612	4	44	18	16	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		200	150		0	0		150	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850		0.969	
Flt Protected	0.950			0.950				0.953			0.980	
Satd. Flow (prot)	1770	5085	1583	1770	5085	0	0	1775	1583	0	1769	0
Flt Permitted	0.359			0.354				0.953			0.980	
Satd. Flow (perm)	669	5085	1583	659	5085	0	0	1775	1583	0	1769	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			365						113		9	
Link Speed (mph)		30			50			45			30	
Link Distance (ft)		506			2334			2241			368	
Travel Time (s)		11.5			31.8			34.0			8.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	17	611	365	189	739	0	665	4	48	20	17	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	611	365	189	739	0	0	669	48	0	48	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA	Perm	Split	NA	
Protected Phases	5	2		1	6		3	3		4	4	
Permitted Phases	2		2	6					3			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		3	3	3	4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	23.5	23.5	23.5	23.5	23.5		23.5	23.5	23.5	23.5	23.5	
Total Split (s)	30.0	60.0	60.0	30.0	60.0		30.0	30.0	30.0	10.0	10.0	
Total Split (%)	23.1%	46.2%	46.2%	23.1%	46.2%		23.1%	23.1%	23.1%	7.7%	7.7%	
Maximum Green (s)	24.5	54.5	54.5	24.5	54.5		24.5	24.5	24.5	4.5	4.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5			5.5	5.5		5.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lead	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	Max	Max	None	Max		None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
Act Effct Green (s)	60.6	54.7	54.7	71.0	66.4			24.6	24.6		4.5	
Actuated g/C Ratio	0.53	0.48	0.48	0.62	0.58			0.22	0.22		0.04	
v/c Ratio	0.04	0.25	0.39	0.37	0.25			1.76	0.11		0.62	
Control Delay	9.8	18.7	3.2	11.8	13.1			380.4	0.5		79.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay	9.8	18.7	3.2	11.8	13.1			380.4	0.5		79.4	
LOS	A	B	A	B	B			F	A		E	
Approach Delay		12.8			12.8			355.0			79.4	
Approach LOS		B			B			F			E	

Intersection Summary			
Area Type	Other		
Cycle Length: 130			
Actuated Cycle Length: 114.4			
Natural Cycle: 125			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.76			
Intersection Signal Delay: 105.4		Intersection LOS: F	
Intersection Capacity Utilization 75.0%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: State Highway 205 & State Highway 78



Intersection	
Int Delay, s/veh	17.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	89	126	97	364	165	103
Future Vol, veh/h	89	126	97	364	165	103
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	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	111	158	121	455	206	129

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	269	0	887	190
Stage 1	-	-	-	-	190	-
Stage 2	-	-	-	-	697	-
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	0	-	1295	-	315	852
Stage 1	-	-	-	-	842	-
Stage 2	-	-	-	-	494	-
Platoon blocked, %	-	-			-	
Mov Cap-1 Maneuver	-	-	1295	-	276	852
Mov Cap-2 Maneuver	-	-	-	-	276	-
Stage 1	-	-	-	-	842	-
Stage 2	-	-	-	-	432	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	58.3
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	373	-	-	1295	-
HCM Lane V/C Ratio	0.898	-	-	0.094	-
HCM Control Delay (s)	58.3	-	-	8.1	0
HCM Lane LOS	F	-	-	A	A
HCM 95th %tile Q(veh)	9.1	-	-	0.3	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	14	678	11	6	639
Future Vol, veh/h	14	14	678	11	6	639
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	15	721	12	6	680

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1419	727	0	0	733	0
Stage 1	727	-	-	-	-	-
Stage 2	692	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	151	424	-	-	872	-
Stage 1	478	-	-	-	-	-
Stage 2	497	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	149	424	-	-	872	-
Mov Cap-2 Maneuver	149	-	-	-	-	-
Stage 1	478	-	-	-	-	-
Stage 2	492	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.8	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	221	872	-
HCM Lane V/C Ratio	-	-	0.135	0.007	-
HCM Control Delay (s)	-	-	23.8	9.2	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	3	1	10	20	21
Future Vol, veh/h	25	3	1	10	20	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	4	1	14	27	28

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	57	41	55	0	-	0
Stage 1	41					
Stage 2	16	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12			
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42					
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	950	1030	1550			
Stage 1	981	-	-	-	-	-
Stage 2	1007					
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	949	1030	1550			
Mov Cap-2 Maneuver	949	-	-	-	-	-
Stage 1	980					
Stage 2	1007	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	0.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1550	-	957	-	-
HCM Lane V/C Ratio	0.001	-	0.04	-	-
HCM Control Delay (s)	7.3	0	8.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	6	678	5	6	639
Future Vol, veh/h	5	6	678	5	6	639
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	7	737	5	7	695

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1449	740	0	0	742	0
Stage 1	740					
Stage 2	709	-	-	-	-	-
Critical Hdwy	6.42	6.22			4.12	
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42					
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	144	417			865	
Stage 1	472	-	-	-	-	-
Stage 2	488	-				
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	142	417			865	
Mov Cap-2 Maneuver	142	-	-	-	-	-
Stage 1	472					
Stage 2	482	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.1	0	0.1
HCM LOS	C		

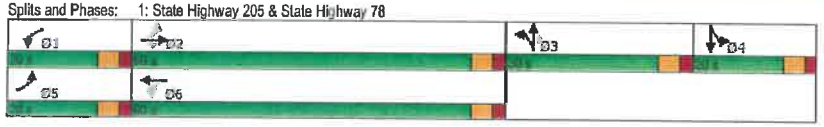
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	222	865	-
HCM Lane V/C Ratio	-	- 0.054	0.008	-
HCM Control Delay (s)	-	22.1	9.2	0
HCM Lane LOS	-	- C	A	A
HCM 95th %tile Q(veh)	-	0.2	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	1194	518	230	1303	0	540	4	76	32	40	6
Future Volume (vph)	42	1194	518	230	1303	0	540	4	76	32	40	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		200	150		0	0		150	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850		0.989	
Flt Protected	0.950			0.950				0.953			0.980	
Satd. Flow (prot)	1770	5085	1583	1770	5085	0	0	1775	1583	0	1805	0
Flt Permitted	0.139			0.117				0.953			0.980	
Satd. Flow (perm)	259	5085	1583	218	5085	0	0	1775	1583	0	1805	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			509						113		3	
Link Speed (mph)		30			50			45			30	
Link Distance (ft)		506			2334			2241			368	
Travel Time (s)		11.5			31.8			34.0			8.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	46	1298	563	250	1416	0	587	4	83	35	43	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	1298	563	250	1416	0	0	591	83	0	85	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA	Perm	Split	NA	
Protected Phases	5	2		1	6		3	3		4	4	
Permitted Phases	2		2	6					3			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		3	3	3	4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	23.5	23.5	23.5	23.5	23.5		23.5	23.5	23.5	23.5	23.5	
Total Split (s)	20.0	60.0	60.0	20.0	60.0		30.0	30.0	30.0	20.0	20.0	
Total Split (%)	15.4%	46.2%	46.2%	15.4%	46.2%		23.1%	23.1%	23.1%	15.4%	15.4%	
Maximum Green (s)	14.5	54.5	54.5	14.5	54.5		24.5	24.5	24.5	14.5	14.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5			5.5	5.5		5.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lead	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	Max	Max	None	Max		None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
Act Effct Green (s)	61.4	54.5	54.5	73.8	63.8			24.5	24.5		10.8	
Actuated g/C Ratio	0.49	0.43	0.43	0.59	0.51			0.19	0.19		0.09	
v/c Ratio	0.22	0.59	0.58	0.84	0.55			1.71	0.21		0.54	
Control Delay	15.0	28.8	6.0	45.6	23.1			363.4	4.5		65.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay	15.0	28.8	6.0	45.6	23.1			363.4	4.5		65.9	
LOS	B	C	A	D	C			F	A		E	
Approach Delay		21.7			26.5			319.2			65.9	
Approach LOS		C			C			F			E	

Intersection Summary			
Area Type	Other		
Cycle Length: 130			
Actuated Cycle Length: 125.7			
Natural Cycle: 145			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.71			
Intersection Signal Delay: 70.7		Intersection LOS: E	
Intersection Capacity Utilization 86.4%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 1: State Highway 205 & State Highway 78



Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	353	86	13	191	65	13
Future Vol, veh/h	353	86	13	191	65	13
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	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	401	98	15	217	74	15

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	499	0	697	450
Stage 1	-	-	-	-	450	-
Stage 2	-	-	-	-	247	-
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	-	-	1065	-	407	609
Stage 1	-	-	-	-	642	-
Stage 2	-	-	-	-	794	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1065	-	400	609
Mov Cap-2 Maneuver	-	-	-	-	400	-
Stage 1	-	-	-	-	642	-
Stage 2	-	-	-	-	781	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	15.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	424	-	-	1065	-
HCM Lane V/C Ratio	0.209	-	-	0.014	-
HCM Control Delay (s)	15.7	-	-	8.4	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	44	693	25	15	880
Future Vol, veh/h	14	44	693	25	15	880
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	44	700	25	15	889

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1632	713	0	0	725	0
Stage 1	713	-	-	-	-	-
Stage 2	919	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	111	432	-	-	878	-
Stage 1	486	-	-	-	-	-
Stage 2	389	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	107	432	-	-	878	
Mov Cap-2 Maneuver	107	-	-	-	-	-
Stage 1	486	-	-	-	-	-
Stage 2	376	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.9	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	249	878	-
HCM Lane V/C Ratio	-	0.235	0.017	-
HCM Control Delay (s)	-	23.9	9.2	0
HCM Lane LOS	-	C	A	A
HCM 95th %tile Q(veh)	-	0.9	0.1	-

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	26	2	2	23	21	16
Future Vol, veh/h	26	2	2	23	21	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	2	2	28	25	19

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	67	35	44	0	-	0
Stage 1	35	-	-	-	-	-
Stage 2	32	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	938	1038	1564	-	-	-
Stage 1	987	-	-	-	-	-
Stage 2	991	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	937	1038	1564	-	-	-
Mov Cap-2 Maneuver	937	-	-	-	-	-
Stage 1	986	-	-	-	-	-
Stage 2	991	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1564	-	944	-	-
HCM Lane V/C Ratio	0.002	-	0.036	-	-
HCM Control Delay (s)	7.3	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	7	693	7	7	880
Future Vol, veh/h	7	7	693	7	7	880
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	8	753	8	8	957

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1730	757	0	0	761	0
Stage 1	757	-	-	-	-	-
Stage 2	973	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	97	408	-	-	851	-
Stage 1	463	-	-	-	-	-
Stage 2	366	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	95	408	-	-	851	-
Mov Cap-2 Maneuver	95	-	-	-	-	-
Stage 1	463	-	-	-	-	-
Stage 2	359	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	30.9	0	0.1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 154	851	-
HCM Lane V/C Ratio	-	- 0.099	0.009	-
HCM Control Delay (s)	-	- 30.9	9.3	0
HCM Lane LOS	-	- D	A	A
HCM 95th %tile Q(veh)	-	- 0.3	0	-

Kimley»Horn

Synchro™ Output – 2026 Background Traffic

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	678	416	202	788	0	866	5	51	21	19	12
Future Volume (vph)	19	678	416	202	788	0	866	5	51	21	19	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		200	150		0	0		150	0		0
Storage Lanes	1		1	1		0	2		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850		0.943	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5085	1583	1770	5085	0	3433	1863	1583	1770	1757	0
Flt Permitted	0.314			0.285			0.735			0.754		
Satd. Flow (perm)	585	5085	1583	531	5085	0	2656	1863	1583	1405	1757	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			452						82		13	
Link Speed (mph)		30			50			45			30	
Link Distance (ft)		506			2334			2241			368	
Travel Time (s)		11.5			31.8			34.0			8.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	21	737	452	220	857	0	941	5	55	23	21	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	737	452	220	857	0	941	5	55	23	34	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	custom	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6			4		8	8		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		4	4	8	8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.5	23.5	23.5	23.5	23.5		23.5	23.5	23.5	23.5	23.5	
Total Split (s)	15.0	80.0	80.0	25.0	90.0		75.0	75.0	75.0	75.0	75.0	
Total Split (%)	8.3%	44.4%	44.4%	13.9%	50.0%		41.7%	41.7%	41.7%	41.7%	41.7%	
Maximum Green (s)	9.5	74.5	74.5	19.5	84.5		69.5	69.5	69.5	69.5	69.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5		5.5	5.5	5.5	5.5	5.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
Act Effct Green (s)	86.3	79.8	79.8	101.6	94.1		67.4	67.4	67.4	67.4	67.4	
Actuated g/C Ratio	0.48	0.44	0.44	0.56	0.52		0.37	0.37	0.37	0.37	0.37	
v/c Ratio	0.07	0.33	0.47	0.54	0.32		0.95	0.01	0.09	0.04	0.05	
Control Delay	19.5	33.8	4.3	25.0	26.0		72.4	34.2	2.3	35.1	24.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	19.5	33.8	4.3	25.0	26.0		72.4	34.2	2.3	35.1	24.1	
LOS	B	C	A	C	C		E	C	A	D	C	
Approach Delay		22.5			25.8			68.4			28.5	
Approach LOS		C			C			E			C	

Intersection Summary	
Area Type	Other
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 37.4	Intersection LOS: D
Intersection Capacity Utilization 69.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: State Highway 205 & State Highway 78

Intersection	
Int Delay, s/veh	35

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	103	151	117	422	207	135
Future Vol, veh/h	103	151	117	422	207	135
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	0
Veh in Median Storage, #	0	-	-	0	0	
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	129	189	146	528	259	169

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	318	0	1044	224
Stage 1					224	
Stage 2	-	-	-	-	820	-
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	-	-	1242	-	~ 254	815
Stage 1	-	-	-	-	813	-
Stage 2	-	-	-	-	433	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1242	-	~ 212	815
Mov Cap-2 Maneuver	-	-	-	-	~ 212	-
Stage 1	-	-	-	-	813	-
Stage 2	-	-	-	-	361	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.8	113.3
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	212	815	-	-	1242	-
HCM Lane V/C Ratio	1.221	0.207	-	-	0.118	-
HCM Control Delay (s)	180.2	10.6	-	-	8.3	0
HCM Lane LOS	F	B	-	-	A	A
HCM 95th %tile Q(veh)	13.2	0.8	-	-	0.4	-

Notes

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

Intersection	
Int Delay, s/veh	40

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	141	157	786	55	33	741
Future Vol, veh/h	141	157	786	55	33	741
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0		-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	150	167	836	59	35	788

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1330	448	0	0	895	0
Stage 1	866					
Stage 2	464	-	-	-	-	-
Critical Hdwy	6.84	6.94	-		4.14	
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84					
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 146	558	-		754	
Stage 1	372	-	-	-	-	-
Stage 2	599					
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 134	558	-		754	
Mov Cap-2 Maneuver	~ 134	-	-	-	-	-
Stage 1	372					
Stage 2	549	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	255	0	0.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)			223	754	-
HCM Lane V/C Ratio	-	-	1.422	0.047	-
HCM Control Delay (s)			255	10	0.4
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)			18.3	0.1	-

Notes

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

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	29	3	1	12	23	87
Future Vol, veh/h	29	3	1	12	23	87
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-		0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	4	1	16	31	118

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	108	90	149	0	-	0
Stage 1	90					
Stage 2	18	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12			
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42					
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	889	968	1432			
Stage 1	934	-	-	-	-	-
Stage 2	1005					
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	888	968	1432			
Mov Cap-2 Maneuver	888	-	-	-	-	-
Stage 1	933					
Stage 2	1005	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.2	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1432		895		
HCM Lane V/C Ratio	0.001	-	0.048	-	-
HCM Control Delay (s)	7.5	0	9.2		
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0		0.2		

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	7	828	6	7	866
Future Vol, veh/h	6	7	828	6	7	866
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0			0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	8	900	7	8	941

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1391	454	0	0	907	0
Stage 1	904					
Stage 2	487	-	-	-	-	-
Critical Hdwy	6.84	6.94			4.14	
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84					
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	133	553			746	
Stage 1	355	-	-	-	-	-
Stage 2	583					
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	130	553			746	
Mov Cap-2 Maneuver	130	-	-	-	-	-
Stage 1	355					
Stage 2	570	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.4	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)			221	746	
HCM Lane V/C Ratio		-	0.064	0.01	-
HCM Control Delay (s)			22.4	9.9	0.1
HCM Lane LOS		-	C	A	A
HCM 95th %tile Q(veh)			0.2	0	

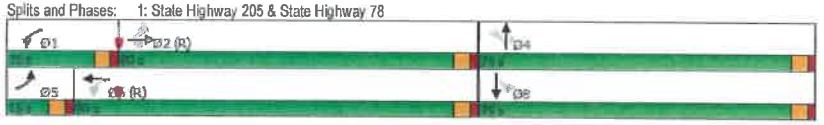
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	1471	688	267	1511	0	728	5	88	37	46	7
Future Volume (vph)	49	1471	688	267	1511	0	728	5	88	37	46	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		200	150		0	0		150	0		0
Storage Lanes	1		1	1		0	2		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850		0.979	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5085	1583	1770	5085	0	3433	1863	1583	1770	1824	0
Flt Permitted	0.109			0.053			0.719			0.754		
Satd. Flow (perm)	203	5085	1583	99	5085	0	2598	1863	1583	1405	1824	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			392						96		5	
Link Speed (mph)		30			50			45			30	
Link Distance (ft)		506			2334			2241			368	
Travel Time (s)		11.5			31.8			34.0			8.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	53	1599	748	290	1642	0	791	5	96	40	50	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	1599	748	290	1642	0	791	5	96	40	58	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6			4		4	8		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		4	4	4	8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.5	23.5	23.5	23.5	23.5		23.5	23.5	23.5	23.5	23.5	
Total Split (s)	15.0	80.0	80.0	25.0	90.0		75.0	75.0	75.0	75.0	75.0	
Total Split (%)	8.3%	44.4%	44.4%	13.9%	50.0%		41.7%	41.7%	41.7%	41.7%	41.7%	
Maximum Green (s)	9.5	74.5	74.5	19.5	84.5		69.5	69.5	69.5	69.5	69.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5		5.5	5.5	5.5	5.5	5.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
Act Effct Green (s)	82.2	74.5	74.5	107.4	95.4		61.6	61.6	61.6	61.6	61.6	
Actuated g/C Ratio	0.46	0.41	0.41	0.60	0.54		0.34	0.34	0.34	0.34	0.34	
v/c Ratio	0.33	0.76	0.85	0.93	0.60		0.89	0.01	0.16	0.08	0.09	
Control Delay	24.2	48.0	31.8	88.5	31.4		68.6	35.4	6.4	38.2	35.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	24.2	48.0	31.8	88.5	31.4		68.6	35.4	6.4	38.2	35.1	
LOS	C	D	C	F	C		E	D	A	D	D	
Approach Delay		42.4			40.0			61.7			36.4	
Approach LOS		D			D			E			D	

Intersection Summary

Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 180
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 44.7 Intersection LOS: D
Intersection Capacity Utilization: 84.4% ICU Level of Service E
Analysis Period (min): 15

Splits and Phases: 1: State Highway 205 & State Highway 78



Intersection	
Int Delay, s/veh	2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	409	117	32	221	85	25
Future Vol, veh/h	409	117	32	221	85	25
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	0
Veh in Median Storage, #	0	-	-	0	0	
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	465	133	36	251	97	28

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	598	0	855	532
Stage 1	-	-	-	-	532	-
Stage 2	-	-	-	-	323	-
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	-	-	979	-	329	547
Stage 1	-	-	-	-	589	-
Stage 2	-	-	-	-	734	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	979	-	315	547
Mov Cap-2 Maneuver	-	-	-	-	315	-
Stage 1	-	-	-	-	589	-
Stage 2	-	-	-	-	702	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.1	19.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	315	547	-	-	979	-
HCM Lane V/C Ratio	0.307	0.052	-	-	0.037	-
HCM Control Delay (s)	21.4	11.9	-	-	8.8	0
HCM Lane LOS	C	B	-	-	A	A
HCM 95th %tile Q(veh)	1.3	0.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	51.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	98	143	803	168	104	1020
Future Vol, veh/h	98	143	803	168	104	1020
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	99	144	811	170	105	1030

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1621	491	0	0	981	0
Stage 1	896	-	-			-
Stage 2	725	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-			-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 94	523	-	-	699	-
Stage 1	359	-	-	-	-	-
Stage 2	440	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 61	523	-	-	699	-
Mov Cap-2 Maneuver	~ 61	-	-	-	-	-
Stage 1	359	-	-	-	-	-
Stage 2	286	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, $	491.5	0	2.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	128	699	-
HCM Lane V/C Ratio	-	-	1.902	0.15	-
HCM Control Delay (s)	-	-	$ 491.5	11.1	1.6
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	19.2	0.5	

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

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	2	2	27	24	60
Future Vol, veh/h	30	2	2	27	24	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	2	2	33	29	72

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	102	65	101	0	-	0
Stage 1	65			-	-	-
Stage 2	37	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42			-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	896	999	1491	-	-	-
Stage 1	958	-	-	-	-	-
Stage 2	985			-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	895	999	1491	-	-	-
Mov Cap-2 Maneuver	895	-	-	-	-	-
Stage 1	957	-	-	-	-	-
Stage 2	985	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.2	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1491	-	901	-	-
HCM Lane V/C Ratio	0.002	-	0.043	-	-
HCM Control Delay (s)	7.4	0	9.2	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	8	942	8	8	1102
Future Vol, veh/h	8	8	942	8	8	1102
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	9	1024	9	9	1198

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1646	517	0	0	1033	0
Stage 1	1029			-	-	
Stage 2	617	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-				
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	90	503		-	668	-
Stage 1	306	-	-	-	-	-
Stage 2	501	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	86	503		-	668	
Mov Cap-2 Maneuver	86	-	-	-	-	-
Stage 1	305	-	-	-	-	-
Stage 2	481	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	32.7	0	0.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	147	668	-
HCM Lane V/C Ratio	-	-	0.118	0.013	-
HCM Control Delay (s)	-	-	32.7	10.5	0.2
HCM Lane LOS	-	-	D	B	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Kimley»Horn

Synchro™ Output – 2026 Background Plus Site Traffic

Intersection	
Intersection Delay, s/veh	10.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	103	21	0	359	0	71	12	0	17	29	128
Future Vol, veh/h	35	103	21	0	359	0	71	12	0	17	29	128
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	47	139	28	0	485	0	96	16	0	23	39	173
Number of Lanes	0	2	0	0	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	10.3	10.4	10.7	11.2
HCM LOS	B	B	B	B

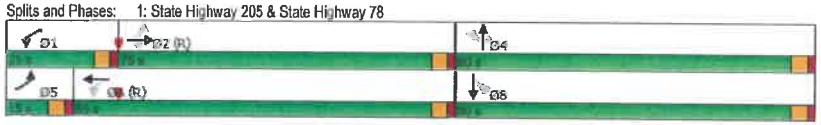
Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	86%	40%	0%	0%	0%	10%
Vol Thru, %	14%	60%	71%	100%	100%	17%
Vol Right, %	0%	0%	29%	0%	0%	74%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	83	87	73	180	180	174
LT Vol	71	35	0	0	0	17
Through Vol	12	52	52	180	180	29
RT Vol	0	0	21	0	0	128
Lane Flow Rate	112	117	98	243	243	235
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.192	0.205	0.161	0.395	0.276	0.348
Departure Headway (Hd)	6.148	6.325	5.913	5.858	4.1	5.331
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	582	567	605	614	873	672
Service Time	4.2	4.073	3.661	3.597	1.838	3.376
HCM Lane V/C Ratio	0.192	0.206	0.162	0.396	0.278	0.35
HCM Control Delay	10.7	10.7	9.8	12.4	8.4	11.2
HCM Lane LOS	B	B	A	B	A	B
HCM 95th-tile Q	0.7	0.8	0.6	1.9	1.1	1.6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	707	445	202	788	0	1024	5	51	21	19	12
Future Volume (vph)	19	707	445	202	788	0	1024	5	51	21	19	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		200	150		0	0		150	0		0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850						0.850		0.969	
Flt Protected	0.950			0.950			0.950	0.953			0.980	
Satd. Flow (prot)	1770	5085	1583	1770	5085	0	1681	1686	1583	0	1769	0
Flt Permitted	0.309			0.259			0.736	0.702			0.553	
Satd. Flow (perm)	576	5085	1583	482	5085	0	1302	1242	1583	0	998	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			484						82		10	
Link Speed (mph)		30			50			45			30	
Link Distance (ft)		506			2334			2241			368	
Travel Time (s)		11.5			31.8			34.0			8.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	21	768	484	220	857	0	1113	5	55	23	21	13
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	21	768	484	220	857	0	556	562	55	0	57	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6			4		4	8		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		4	4	4	8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.5	23.5	23.5	23.5	23.5		23.5	23.5	23.5	23.5	23.5	
Total Split (s)	15.0	75.0	75.0	25.0	85.0		80.0	80.0	80.0	80.0	80.0	
Total Split (%)	8.3%	41.7%	41.7%	13.9%	47.2%		44.4%	44.4%	44.4%	44.4%	44.4%	
Maximum Green (s)	9.5	69.5	69.5	19.5	79.5		74.5	74.5	74.5	74.5	74.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5		5.5	5.5	5.5		5.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
Act Effct Green (s)	78.6	72.1	72.1	94.5	86.9		74.5	74.5	74.5		74.5	
Actuated g/C Ratio	0.44	0.40	0.40	0.52	0.48		0.41	0.41	0.41		0.41	
v/c Ratio	0.07	0.38	0.52	0.59	0.35		1.03	1.09	0.08		0.14	
Control Delay	22.1	39.1	4.9	30.1	30.1		97.8	115.7	2.0		28.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	22.1	39.1	4.9	30.1	30.1		97.8	115.7	2.0		28.0	
LOS	C	D	A	C	C		F	F	A		C	
Approach Delay		25.8			30.1			101.9			28.0	
Approach LOS		C			C			F			C	

Intersection Summary			
Area Type	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.09			
Intersection Signal Delay: 52.1		Intersection LOS: D	
Intersection Capacity Utilization 73.8%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: State Highway 205 & State Highway 78



Intersection						
Int Delay, s/veh	48.5					
Movement	EBL	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	103	157	123	422	225	153
Future Vol, veh/h	103	157	123	422	225	153
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	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	129	196	154	528	281	191

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	325	0	1063	227
Stage 1	-	-	-	-	227	-
Stage 2	-	-	-	-	836	-
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	-	-	1235	-	~ 247	812
Stage 1	-	-	-	-	811	-
Stage 2	-	-	-	-	425	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1235	-	~ 204	812
Mov Cap-2 Maneuver	-	-	-	-	~ 204	-
Stage 1	-	-	-	-	811	-
Stage 2	-	-	-	-	350	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	148.9
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	204	812	-	-	1235	-
HCM Lane V/C Ratio	1.379	0.236	-	-	0.124	-
HCM Control Delay (s)	242.8	10.8	-	-	8.3	0
HCM Lane LOS	F	B	-	-	A	A
HCM 95th %tile Q(veh)	16.2	0.9	-	-	0.4	-

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

Intersection						
Int Delay, s/veh	112.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	281	315	786	96	62	741
Future Vol, veh/h	281	315	786	96	62	741
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None	-	None		None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	299	335	836	102	66	788

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1413	469	0	0	938	0
Stage 1	887	-	-	-	-	-
Stage 2	526	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 129	541	-	-	726	-
Stage 1	363	-	-	-	-	-
Stage 2	557	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 108	541	-	-	726	-
Mov Cap-2 Maneuver	~ 108	-	-	-	-	-
Stage 1	363	-	-	-	-	-
Stage 2	467	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, $	427.9	0	1.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	108	541	726	-
HCM Lane V/C Ratio	-	-	2.768	0.619	0.091	-
HCM Control Delay (s)	-	-	$ 883.1	21.9	10.5	0.7
HCM Lane LOS	-	-	F	C	B	A
HCM 95th %tile Q(veh)	-	-	27.9	4.2	0.3	-

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

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	24	7	869	12	7	1006
Future Vol, veh/h	24	7	869	12	7	1006
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	8	945	13	8	1093

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1515	952	0	0	958	0
Stage 1	952					
Stage 2	563					
Critical Hdwy	6.63	6.23			4.13	
Critical Hdwy Stg 1	5.43					
Critical Hdwy Stg 2	5.83					
Follow-up Hdwy	3.519	3.319			2.219	
Pot Cap-1 Maneuver	120	314			716	
Stage 1	374					
Stage 2	535					
Platoon blocked, %						
Mov Cap-1 Maneuver	117	314			716	
Mov Cap-2 Maneuver	117					
Stage 1	374					
Stage 2	520					

Approach	WB	NB	SB
HCM Control Delay, s	40	0	0.2
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)			136	716	
HCM Lane V/C Ratio			0.248	0.011	
HCM Control Delay (s)			40	10.1	0.1
HCM Lane LOS			E	B	A
HCM 95th %tile Q(veh)			0.9	0	

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	91	12	6	595	53	0
Future Vol, veh/h	91	12	6	595	53	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized		None		None		None
Storage Length	-	-	-	-	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	99	13	7	647	58	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	112	0	444	56
Stage 1					106	
Stage 2	-	-	-	-	338	-
Critical Hdwy			4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2					5.84	
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver			1475	-	542	999
Stage 1	-	-	-	-	907	-
Stage 2					694	
Platoon blocked, %	-	-				
Mov Cap-1 Maneuver			1475		538	999
Mov Cap-2 Maneuver	-	-	-	-	538	-
Stage 1					907	
Stage 2	-	-	-	-	689	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	12.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	538	-		1475	
HCM Lane V/C Ratio	0.107	-	-	0.004	
HCM Control Delay (s)	12.5	-		7.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4			0	

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑			↑			↑	
Traffic Vol, veh/h	18	0	7	11	0	53	2	13	4	18	48	6
Future Vol, veh/h	18	0	7	11	0	53	2	13	4	18	48	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-		None	-		None	-		None	-		None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	0	8	12	0	58	2	14	4	20	52	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	145	118	56	120	119	16	59	0	0	18	0	0
Stage 1	96	96	-	20	20	-	-	-	-	-	-	-
Stage 2	49	22	-	100	99	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	824	772	1011	855	771	1063	1545	-	-	1599	-	-
Stage 1	911	815	-	999	879	-	-	-	-	-	-	-
Stage 2	964	877	-	906	813	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	771	761	1011	840	760	1063	1545	-	-	1599	-	-
Mov Cap-2 Maneuver	771	761	-	840	760	-	-	-	-	-	-	-
Stage 1	910	804	-	998	878	-	-	-	-	-	-	-
Stage 2	911	876	-	887	802	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	8.8	0.8	1.8
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1545	-	-	826	1017	1599	-	-
HCM Lane V/C Ratio	0.001	-	-	0.033	0.068	0.012	-	-
HCM Control Delay (s)	7.3	0	-	9.5	8.8	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0	-	-

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑			↑
Traffic Vol, veh/h	35	0	43	6	6	66
Future Vol, veh/h	35	0	43	6	6	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	0	47	7	7	72

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	137	51	0	0	54	0
Stage 1	51	-	-	-	-	-
Stage 2	86	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	856	1017	-	-	1551	-
Stage 1	971	-	-	-	-	-
Stage 2	937	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	852	1017	-	-	1551	-
Mov Cap-2 Maneuver	852	-	-	-	-	-
Stage 1	971	-	-	-	-	-
Stage 2	932	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.4	0	0.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	852	1551	-
HCM Lane V/C Ratio	-	-	0.045	0.004	-
HCM Control Delay (s)	-	-	9.4	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	29	18	0	307	53	0
Future Vol, veh/h	29	18	0	307	53	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None		None	-	None
Storage Length	-	-	-	-	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	20	0	334	58	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	52	0	209	26
Stage 1					42	
Stage 2	-	-	-	-	167	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1552	-	760	1044
Stage 1	-	-	-	-	975	-
Stage 2	-	-	-	-	845	-
Platoon blocked, %	-	-			-	
Mov Cap-1 Maneuver	-	-	1552	-	760	1044
Mov Cap-2 Maneuver	-	-	-	-	760	-
Stage 1	-	-	-	-	975	-
Stage 2	-	-	-	-	845	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	760	-	-	1552	
HCM Lane V/C Ratio	0.076	-	-	-	-
HCM Control Delay (s)	10.1	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	23	289	2	7	18
Future Vol, veh/h	6	23	289	2	7	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None		None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0		0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	25	314	2	8	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	316	0	-	0	342	158
Stage 1	-	-	-	-	315	-
Stage 2	-	-	-	-	27	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1241	-	-	-	628	859
Stage 1	-	-	-	-	713	-
Stage 2	-	-	-	-	992	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1241	-	-	-	624	859
Mov Cap-2 Maneuver	-	-	-	-	624	-
Stage 1	-	-	-	-	709	-
Stage 2	-	-	-	-	992	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	9.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1241	-	-	-	777
HCM Lane V/C Ratio	0.005	-	-	-	0.035
HCM Control Delay (s)	7.9	0	-	-	9.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	51	12	2	131	0	35	0	7	0	0	125
Future Vol, veh/h	42	51	12	2	131	0	35	0	7	0	0	125
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized			None			None			None			None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0			0		-	0		-	0	
Grade, %	-	0			0		-	0		-	0	
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	46	55	13	2	142	0	38	0	8	0	0	136

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	142	0	0	68	0	0	229	300	34	266	306	71
Stage 1							154	154		146	146	
Stage 2	-	-	-	-	-	-	75	146	-	120	160	-
Critical Hdwy	4.14			4.14			7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2							6.54	5.54		6.54	5.54	
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1438			1531			707	611	1032	665	606	977
Stage 1	-	-	-	-	-	-	833	769	-	842	775	-
Stage 2							926	775	-	872	764	
Platoon blocked, %			-			-						
Mov Cap-1 Maneuver	1438			1531			593	590	1032	643	585	977
Mov Cap-2 Maneuver	-	-	-	-	-	-	593	590	-	643	585	-
Stage 1							806	744	-	814	774	
Stage 2	-	-	-	-	-	-	796	774	-	837	739	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3	0.1	11.1	9.3
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	638	1438	-	-	1531	-	-	977
HCM Lane V/C Ratio	0.072	0.032	-	-	0.001	-	-	0.139
HCM Control Delay (s)	11.1	7.6	0	-	7.4	0	-	9.3
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.5

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	46	12	4	99	35	11
Future Vol, veh/h	46	12	4	99	35	11
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	50	13	4	108	38	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	63	0	119	32
Stage 1					57	
Stage 2	-	-	-	-	62	-
Critical Hdwy			4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2					5.84	
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver			1538	-	864	1035
Stage 1	-	-	-	-	959	-
Stage 2					953	
Platoon blocked, %	-	-				
Mov Cap-1 Maneuver			1538		861	1035
Mov Cap-2 Maneuver	-	-	-	-	861	-
Stage 1					959	
Stage 2	-	-	-	-	950	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	897			1538	
HCM Lane V/C Ratio	0.056	-	-	0.003	-
HCM Control Delay (s)	9.3	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection						
Int Delay, s/veh	2					

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	0	0	26	8	4
Future Vol, veh/h	11	0	0	26	8	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	0	0	28	9	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	39	11	13	0	-	0
Stage 1	11	-	-	-	-	-
Stage 2	28	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	973	1070	1606	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	995	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	973	1070	1606	-	-	-
Mov Cap-2 Maneuver	973	-	-	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	995	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1606	-	973	-	-
HCM Lane V/C Ratio	-	-	0.012	-	-
HCM Control Delay (s)	0	-	8.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Intersection Delay, s/veh	12.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	342	60	0	234	0	48	27	0	56	43	102
Future Vol, veh/h	49	342	60	0	234	0	48	27	0	56	43	102
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	59	412	72	0	282	0	58	33	0	67	52	123
Number of Lanes	0	2	0	0	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	13.3	9.8	10.8	12.5
HCM LOS	B	A	B	B

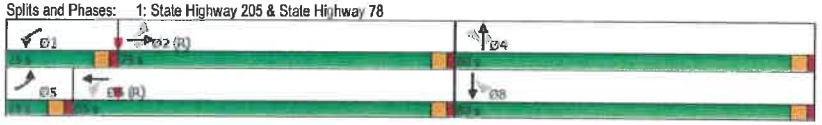
Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	64%	22%	0%	0%	0%	28%
Vol Thru, %	36%	78%	74%	100%	100%	21%
Vol Right, %	0%	0%	26%	0%	0%	51%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	75	220	231	117	117	201
LT Vol	48	49	0	0	0	56
Through Vol	27	171	171	117	117	43
RT Vol	0	0	60	0	0	102
Lane Flow Rate	90	265	278	141	141	242
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.163	0.445	0.444	0.248	0.178	0.388
Departure Headway (Hd)	6.499	6.044	5.747	6.323	4.557	5.775
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	549	594	626	567	782	622
Service Time	4.568	3.791	3.494	4.08	2.313	3.829
HCM Lane V/C Ratio	0.164	0.446	0.444	0.249	0.18	0.389
HCM Control Delay	10.8	13.6	13	11.2	8.3	12.5
HCM Lane LOS	B	B	B	B	A	B
HCM 95th-tile Q	0.6	2.3	2.3	1	0.6	1.8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	1568	785	267	1511	0	831	5	88	37	46	7
Future Volume (vph)	49	1568	785	267	1511	0	831	5	88	37	46	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		200	150		0	0		150	0		0
Storage Lanes	1		1	1		0	2		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850		0.979	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5085	1583	1770	5085	0	3433	1863	1583	1770	1824	0
Flt Permitted	0.094			0.053			0.719			0.754		
Satd. Flow (perm)	175	5085	1583	99	5085	0	2598	1863	1583	1405	1824	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			401						96		5	
Link Speed (mph)		30			50			45			30	
Link Distance (ft)		506			2334			2241			368	
Travel Time (s)		11.5			31.8			34.0			8.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	53	1704	853	290	1642	0	903	5	96	40	50	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	1704	853	290	1642	0	903	5	96	40	58	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6			4		4	8		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		4	4	4	8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.5	23.5	23.5	23.5	23.5		23.5	23.5	23.5	23.5	23.5	
Total Split (s)	15.0	75.0	75.0	25.0	85.0		80.0	80.0	80.0	80.0	80.0	
Total Split (%)	8.3%	41.7%	41.7%	13.9%	47.2%		44.4%	44.4%	44.4%	44.4%	44.4%	
Maximum Green (s)	9.5	69.5	69.5	19.5	79.5		74.5	74.5	74.5	74.5	74.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5		5.5	5.5	5.5	5.5	5.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
Act Effct Green (s)	77.4	69.5	69.5	100.0	88.9		69.0	69.0	69.0	69.0	69.0	
Actuated g/C Ratio	0.43	0.39	0.39	0.56	0.49		0.38	0.38	0.38	0.38	0.38	
v/c Ratio	0.37	0.87	1.00	1.01	0.65		0.91	0.01	0.14	0.07	0.08	
Control Delay	28.6	56.9	58.0	109.8	37.1		65.8	31.6	5.7	33.8	31.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	28.6	56.9	58.0	109.8	37.1		65.8	31.6	5.7	33.8	31.0	
LOS	C	E	E	F	D		E	C	A	C	C	
Approach Delay		56.7			48.0			59.9			32.1	
Approach LOS		E			D			E			C	

Intersection Summary	
Area Type	Other
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 53.8	Intersection LOS: D
Intersection Capacity Utilization 89.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: State Highway 205 & State Highway 78



Intersection	
Int Delay, s/veh	3.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	409	136	51	221	96	36
Future Vol, veh/h	409	136	51	221	96	36
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	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	465	155	58	251	109	41

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	620	0	910	543
Stage 1	-	-	-	-	543	-
Stage 2	-	-	-	-	367	-
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	-	305	540
Stage 1	-	-	-	-	582	-
Stage 2	-	-	-	-	701	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	960	-	284	540
Mov Cap-2 Maneuver	-	-	-	-	284	-
Stage 1	-	-	-	-	582	-
Stage 2	-	-	-	-	652	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	21.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	284	540	-	-	960	-
HCM Lane V/C Ratio	0.384	0.076	-	-	0.06	-
HCM Control Delay (s)	25.4	12.2	-	-	9	0
HCM Lane LOS	D	B	-	-	A	A
HCM 95th %tile Q(veh)	1.7	0.2	-	-	0.2	-

Intersection	
Int Delay, s/veh	399.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	189	246	803	303	201	1020
Future Vol, veh/h	189	246	803	303	201	1020
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	191	248	811	306	203	1030

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1885	559	0	0	1117	0
Stage 1	964	-	-	-	-	-
Stage 2	921	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 62	472	-	-	621	-
Stage 1	331	-	-	-	-	-
Stage 2	348	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 15	472	-	-	621	-
Mov Cap-2 Maneuver	~ 15	-	-	-	-	-
Stage 1	331	-	-	-	-	-
Stage 2	~ 82	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, $	2519.2	0	5.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	15	472	621	-
HCM Lane V/C Ratio	-	-	-12.727	0.526	0.327	-
HCM Control Delay (s)	-	-	-$ 5771	20.8	13.6	3.7
HCM Lane LOS	-	-	F	C	B	A
HCM 95th %tile Q(veh)	-	-	24.9	3	1.4	-

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

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	19	8	1077	27	8	1193
Future Vol, veh/h	19	8	1077	27	8	1193
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	9	1171	29	9	1297

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1853	1186	0	0	1200	0
Stage 1	1186	-	-	-	-	-
Stage 2	667	-	-	-	-	-
Critical Hdwy	6.63	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	73	229	-	-	579	-
Stage 1	289	-	-	-	-	-
Stage 2	473	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	69	229	-	-	579	-
Mov Cap-2 Maneuver	69	-	-	-	-	-
Stage 1	289	-	-	-	-	-
Stage 2	447	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	66.1	0	0.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	87	579	-
HCM Lane V/C Ratio	-	-	0.337	0.015	-
HCM Control Delay (s)	-	-	66.1	11.3	0.3
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	1.3	0	

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	226	39	19	398	34	0
Future Vol, veh/h	226	39	19	398	34	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	246	42	21	433	37	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	288	0	526	144
Stage 1	-	-	-	-	267	-
Stage 2	-	-	-	-	259	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1271	-	482	877
Stage 1	-	-	-	-	754	-
Stage 2	-	-	-	-	761	-
Platoon blocked, %	-	-				
Mov Cap-1 Maneuver	-	-	1271		471	877
Mov Cap-2 Maneuver	-	-	-	-	471	-
Stage 1	-	-	-	-	754	-
Stage 2	-	-	-	-	744	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	13.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	471	-	-	1271	-
HCM Lane V/C Ratio	0.078	-	-	0.016	-
HCM Control Delay (s)	13.3	-	-	7.9	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	

Intersection												
Int Delay, s/veh	4.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑			↑			↑	
Traffic Vol, veh/h	11	0	5	7	0	34	8	29	12	58	43	19
Future Vol, veh/h	11	0	5	7	0	34	8	29	12	58	43	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized			None			None	-		None			None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	5	8	0	37	9	32	13	63	47	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	259	247	58	243	251	39	68	0	0	45	0	0
Stage 1	184	184	-	57	57	-	-	-	-	-	-	-
Stage 2	75	63	-	186	194	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	694	655	1008	711	652	1033	1533	-	-	1563	-	-
Stage 1	818	747	-	955	847	-	-	-	-	-	-	-
Stage 2	934	842	-	816	740	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	645	624	1008	681	621	1033	1533	-	-	1563	-	-
Mov Cap-2 Maneuver	645	624	-	681	621	-	-	-	-	-	-	-
Stage 1	813	716	-	949	842	-	-	-	-	-	-	-
Stage 2	895	837	-	778	709	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.1	9	1.2	3.6
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1533	-	-	727	949	1563	-	-
HCM Lane V/C Ratio	0.006	-	-	0.024	0.047	0.04	-	-
HCM Control Delay (s)	7.4	0	-	10.1	9	7.4	0	-
HCM Lane LOS	A	A	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0.1	-	-

Intersection						
Int Delay, s/veh	1.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑			↑
Traffic Vol, veh/h	23	0	58	19	19	135
Future Vol, veh/h	23	0	58	19	19	135
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	0	63	21	21	147

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	263	74	0	0	84	0
Stage 1	74	-	-	-	-	-
Stage 2	189	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	726	988	-	-	1513	-
Stage 1	949	-	-	-	-	-
Stage 2	843	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	715	988	-	-	1513	-
Mov Cap-2 Maneuver	715	-	-	-	-	-
Stage 1	949	-	-	-	-	-
Stage 2	830	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.2	0	0.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	715	1513	-
HCM Lane V/C Ratio	-	-	0.035	0.014	-
HCM Control Delay (s)	-	-	10.2	7.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	97	58	0	200	34	0
Future Vol, veh/h	97	58	0	200	34	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	105	63	0	217	37	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	168	0	246	84
Stage 1	-	-	-	-	137	-
Stage 2	-	-	-	-	109	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1407	-	721	958
Stage 1	-	-	-	-	875	-
Stage 2	-	-	-	-	903	-
Platoon blocked, %	-	-			-	
Mov Cap-1 Maneuver	-	-	1407	-	721	958
Mov Cap-2 Maneuver	-	-	-	-	721	-
Stage 1	-	-	-	-	875	-
Stage 2	-	-	-	-	903	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	721	-	-	1407	-
HCM Lane V/C Ratio	0.051	-	-	-	-
HCM Control Delay (s)	10.3	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	77	189	8	5	11
Future Vol, veh/h	19	77	189	8	5	11
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	21	84	205	9	5	12

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	214	0	-	0	294	107
Stage 1	-	-	-	-	210	-
Stage 2	-	-	-	-	84	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1353	-	-	-	673	926
Stage 1	-	-	-	-	805	-
Stage 2	-	-	-	-	930	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1353	-	-	-	662	926
Mov Cap-2 Maneuver	-	-	-	-	662	-
Stage 1	-	-	-	-	792	-
Stage 2	-	-	-	-	930	-

Approach	EB	WB	SB
HCM Control Delay, s	1.5	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1353	-	-	-	823
HCM Lane V/C Ratio	0.015	-	-	-	0.021
HCM Control Delay (s)	7.7	0	-	-	9.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection												
Int Delay, s/veh	4.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	139	147	39	8	92	0	23	0	5	0	0	82
Future Vol, veh/h	139	147	39	8	92	0	23	0	5	0	0	82
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized			None			None			None			None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	151	160	42	9	100	0	25	0	5	0	0	89

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	100	0	0	202	0	0	551	601	101	500	622	50
Stage 1	-	-	-	-	-	-	483	483	-	118	118	-
Stage 2	-	-	-	-	-	-	68	118	-	382	504	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1490	-	-	1367	-	-	417	413	935	454	401	1008
Stage 1	-	-	-	-	-	-	534	551	-	874	797	-
Stage 2	-	-	-	-	-	-	934	797	-	612	539	-
Platoon blocked, %		-	-			-						
Mov Cap-1 Maneuver	1490	-	-	1367	-	-	345	363	935	410	352	1008
Mov Cap-2 Maneuver	-	-	-	-	-	-	345	363	-	410	352	-
Stage 1	-	-	-	-	-	-	473	488	-	773	791	-
Stage 2	-	-	-	-	-	-	845	791	-	538	477	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.4	0.6	15	8.9
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	389	1490	-	-	1367	-	-	1008
HCM Lane V/C Ratio	0.078	0.101	-	-	0.006	-	-	0.088
HCM Control Delay (s)	15	7.7	0.2		7.7	0		8.9
HCM Lane LOS	C	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.3	0.3	-	-	0	-	-	0.3

Intersection						
Int Delay, s/veh	1.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	113	39	12	76	23	7
Future Vol, veh/h	113	39	12	76	23	7
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	123	42	13	83	25	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	165	0	212	83
Stage 1	-	-	-	-	144	-
Stage 2	-	-	-	-	68	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1411	-	757	960
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	947	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1411	-	749	960
Mov Cap-2 Maneuver	-	-	-	-	749	-
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	938	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	9.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	789	-	-	1411	-
HCM Lane V/C Ratio	0.041	-	-	0.009	-
HCM Control Delay (s)	9.8	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	0	0	21	71	12
Future Vol, veh/h	7	0	0	21	71	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	0	0	23	77	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	107	84	90	0	-	0
Stage 1	84	-	-	-	-	-
Stage 2	23	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	891	975	1505	-	-	-
Stage 1	939	-	-	-	-	-
Stage 2	1000	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	891	975	1505	-	-	-
Mov Cap-2 Maneuver	891	-	-	-	-	-
Stage 1	939	-	-	-	-	-
Stage 2	1000	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1505	-	891	-	-
HCM Lane V/C Ratio	-	-	0.009	-	-
HCM Control Delay (s)	0	-	9.1	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Kimley»Horn

Synchro™ Output – 2031 Background Traffic

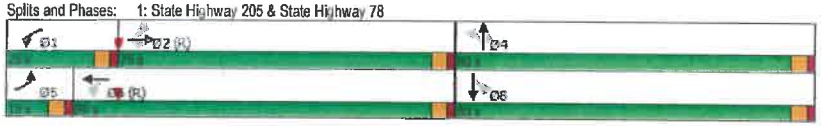
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	858	523	257	1006	0	1062	6	65	27	24	15
Future Volume (vph)	24	858	523	257	1006	0	1062	6	65	27	24	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		200	150		0	0		150	0		0
Storage Lanes	1		1	1		0	2		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850		0.943	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5085	1583	1770	5085	0	3433	1863	1583	1770	1757	0
Flt Permitted	0.223			0.194			0.730			0.753		
Satd. Flow (perm)	415	5085	1583	361	5085	0	2638	1863	1583	1403	1757	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			487						82		16	
Link Speed (mph)		30			50			45			30	
Link Distance (ft)		506			2334			2241			368	
Travel Time (s)		11.5			31.8			34.0			8.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	26	933	568	279	1093	0	1154	7	71	29	26	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	933	568	279	1093	0	1154	7	71	29	42	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6			4		4	8		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		4	4	4	8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.5	23.5	23.5	23.5	23.5		23.5	23.5	23.5	23.5	23.5	
Total Split (s)	15.0	75.0	75.0	25.0	85.0		80.0	80.0	80.0	80.0	80.0	
Total Split (%)	8.3%	41.7%	41.7%	13.9%	47.2%		44.4%	44.4%	44.4%	44.4%	44.4%	
Maximum Green (s)	9.5	69.5	69.5	19.5	79.5		74.5	74.5	74.5	74.5	74.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5		5.5	5.5	5.5	5.5	5.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
Act Effct Green (s)	76.9	70.1	70.1	94.5	86.8		74.5	74.5	74.5	74.5	74.5	
Actuated g/C Ratio	0.43	0.39	0.39	0.52	0.48		0.41	0.41	0.41	0.41	0.41	
v/c Ratio	0.11	0.47	0.62	0.83	0.45		1.06	0.01	0.10	0.05	0.06	
Control Delay	22.8	42.1	9.6	45.6	32.2		93.5	31.2	4.4	32.1	21.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	22.8	42.1	9.6	45.6	32.2		93.5	31.2	4.4	32.1	21.5	
LOS	C	D	A	D	C		F	C	A	C	C	
Approach Delay		29.7			34.9			88.0			25.8	
Approach LOS		C			C			F			C	

Intersection Summary

Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 180
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.06
Intersection Signal Delay: 48.4 — Intersection LOS: D
Intersection Capacity Utilization 81.5% — ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 1: State Highway 205 & State Highway 78



Intersection	
Int Delay, s/veh	144.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	132	191	149	539	260	168
Future Vol, veh/h	132	191	149	539	260	168
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	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	165	239	186	674	325	210

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	404	0	1331	285
Stage 1	-	-	-	-	285	-
Stage 2	-	-	-	-	1046	-
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	0	-	1155	0	~ 170	754
Stage 1	-	-	-	-	763	-
Stage 2	0	-	-	-	338	-
Platoon blocked, %	-	-			-	
Mov Cap-1 Maneuver	-	-	1155	-	~ 126	754
Mov Cap-2 Maneuver	-	-	-	-	~ 126	-
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	~ 251	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	$ 483.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	126	754	-	-	1155	-
HCM Lane V/C Ratio	2.579	0.279	-	-	0.161	-
HCM Control Delay (s)	$ 788.2	11.6	-	-	8.7	0
HCM Lane LOS	F	B	-	-	A	A
HCM 95th %tile Q(veh)	29.1	1.1	-	-	0.6	-

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

Intersection	
Int Delay, s/veh	96.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	146	162	1003	58	35	945
Future Vol, veh/h	146	162	1003	58	35	945
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	155	172	1067	62	37	1005

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1675	565	0	0	1129	0
Stage 1	1098	-	-	-	-	-
Stage 2	577	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 86	468	-	-	615	-
Stage 1	281	-	-	-	-	-
Stage 2	525	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 74	468	-	-	615	-
Mov Cap-2 Maneuver	~ 74	-	-	-	-	-
Stage 1	281	-	-	-	-	-
Stage 2	454	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, $	733.5	0	1.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	133	615	-
HCM Lane V/C Ratio	-	-	2.464	0.061	-
HCM Control Delay (s)	-	-	$ 733.5	11.2	0.7
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	28.6	0.2	-

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

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	37	4	1	15	30	94
Future Vol, veh/h	37	4	1	15	30	94
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-		0	0	
Grade, %	0	-	-	0	0	-
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	50	5	1	20	41	127

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	127	105	168	0	-	0
Stage 1	105	-	-	-	-	-
Stage 2	22	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	868	949	1410	-	-	-
Stage 1	919	-	-	-	-	-
Stage 2	1001	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	867	949	1410	-	-	-
Mov Cap-2 Maneuver	867	-	-	-	-	-
Stage 1	918	-	-	-	-	-
Stage 2	1001	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1410	-	874	-	-
HCM Lane V/C Ratio	0.001	-	0.063	-	-
HCM Control Delay (s)	7.5	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	9	1045	7	9	1070
Future Vol, veh/h	7	9	1045	7	9	1070
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0		0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	10	1136	8	10	1163

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1742	572	0	0	1144	0
Stage 1	1140	-	-	-	-	-
Stage 2	602	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	78	463	-	-	606	-
Stage 1	267	-	-	-	-	-
Stage 2	510	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	74	463	-	-	606	-
Mov Cap-2 Maneuver	74	-	-	-	-	-
Stage 1	267	-	-	-	-	-
Stage 2	486	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	34.3	0	0.4
HCM LOS	D		

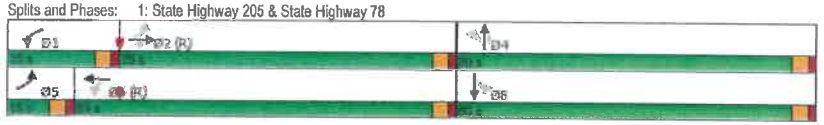
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	140	606	-
HCM Lane V/C Ratio	-	-	0.124	0.016	-
HCM Control Delay (s)	-	-	34.3	11	0.3
HCM Lane LOS	-	-	D	B	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	1854	853	340	1928	0	901	6	112	47	59	9
Future Volume (vph)	62	1854	853	340	1928	0	901	6	112	47	59	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		200	150		0	0		150	0		0
Storage Lanes	1		1	1		0	2		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850		0.980	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5085	1583	1770	5085	0	3433	1863	1583	1770	1825	0
Flt Permitted	0.058			0.053			0.709			0.753		
Satd. Flow (perm)	108	5085	1583	99	5085	0	2562	1863	1583	1403	1825	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			368						122		5	
Link Speed (mph)		30			50			45			30	
Link Distance (ft)		506			2334			2241			368	
Travel Time (s)		11.5			31.8			34.0			8.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	67	2015	927	370	2096	0	979	7	122	51	64	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	67	2015	927	370	2096	0	979	7	122	51	74	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6			4		4	8		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		4	4	4	8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.5	23.5	23.5	23.5	23.5		23.5	23.5	23.5	23.5	23.5	
Total Split (s)	15.0	75.0	75.0	25.0	85.0		80.0	80.0	80.0	80.0	80.0	
Total Split (%)	8.3%	41.7%	41.7%	13.9%	47.2%		44.4%	44.4%	44.4%	44.4%	44.4%	
Maximum Green (s)	9.5	69.5	69.5	19.5	79.5		74.5	74.5	74.5	74.5	74.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5		5.5	5.5	5.5	5.5	5.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
Act Effct Green (s)	77.9	69.5	69.5	96.5	82.6		72.5	72.5	72.5	72.5	72.5	
Actuated g/C Ratio	0.43	0.39	0.39	0.54	0.46		0.40	0.40	0.40	0.40	0.40	
v/c Ratio	0.54	1.03	1.11	1.47	0.90		0.95	0.01	0.17	0.09	0.10	
Control Delay	44.3	80.7	95.0	270.3	51.5		69.6	31.2	5.2	33.1	30.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	44.3	80.7	95.0	270.3	51.5		69.6	31.2	5.2	33.1	30.9	
LOS	D	F	F	F	D		E	C	A	C	C	
Approach Delay		84.3			84.3			62.3			31.8	
Approach LOS		F			F			E			C	

Intersection Summary			
Area Type	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.47			
Intersection Signal Delay: 79.7		Intersection LOS: E	
Intersection Capacity Utilization 100.8%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 1: State Highway 205 & State Highway 78



Intersection	
Int Delay, s/veh	4.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	522	144	36	283	106	29
Future Vol, veh/h	522	144	36	283	106	29
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	0
Veh in Median Storage, #	0	-	-	0	0	
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	593	164	41	322	120	33

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	757	0	1079	675
Stage 1	-	-	-	-	675	-
Stage 2	-	-	-	-	404	-
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	-	-	854	-	242	454
Stage 1	-	-	-	-	506	-
Stage 2	-	-	-	-	674	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	854	-	228	454
Mov Cap-2 Maneuver	-	-	-	-	228	-
Stage 1	-	-	-	-	506	-
Stage 2	-	-	-	-	635	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.1	32.1
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	228	454	-	-	854	-
HCM Lane V/C Ratio	0.528	0.073	-	-	0.048	-
HCM Control Delay (s)	37.2	13.5	-	-	9.4	0
HCM Lane LOS	E	B	-	-	A	A
HCM 95th %tile Q(veh)	2.8	0.2	-	-	0.2	-

Intersection	
Int Delay, s/veh	278.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	103	157	1025	176	109	1302
Future Vol, veh/h	103	157	1025	176	109	1302
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-		0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	104	159	1035	178	110	1315

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2002	607	0	0	1213	0
Stage 1	1124	-	-	-	-	-
Stage 2	878	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 52	439	-	-	571	-
Stage 1	272	-	-	-	-	-
Stage 2	367	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 15	439	-	-	571	-
Mov Cap-2 Maneuver	~ 15	-	-	-	-	-
Stage 1	272	-	-	-	-	-
Stage 2	105	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 3049.3	0	4.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	36	571	-
HCM Lane V/C Ratio	-	-	7.295	0.193	-
HCM Control Delay (s)	-	-	$ 3049.3	12.8	3.9
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	31.5	0.7	

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

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	38	3	3	34	31	65
Future Vol, veh/h	38	3	3	34	31	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	4	4	41	37	78

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	125	76	115	0	-	0
Stage 1	76	-	-			
Stage 2	49	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	870	985	1474	-	-	-
Stage 1	947	-	-	-	-	-
Stage 2	973	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	867	985	1474	-	-	-
Mov Cap-2 Maneuver	867	-	-	-	-	-
Stage 1	944	-	-	-	-	-
Stage 2	973	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1474	-	875	-	-
HCM Lane V/C Ratio	0.002	-	0.056	-	-
HCM Control Delay (s)	7.4	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	10	1164	10	10	1384
Future Vol, veh/h	10	10	1164	10	10	1384
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None		None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	11	1265	11	11	1504

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2045	638	0	0	1276	0
Stage 1	1271	-	-	-	-	-
Stage 2	774	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	49	419	-	-	540	-
Stage 1	227	-	-	-	-	-
Stage 2	415	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	43	419	-	-	540	
Mov Cap-2 Maneuver	43	-	-	-	-	-
Stage 1	227	-	-	-	-	-
Stage 2	364	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	68.1	0	0.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)		78	540	-
HCM Lane V/C Ratio	-	- 0.279	0.02	-
HCM Control Delay (s)	-	68.1	11.8	0.7
HCM Lane LOS	-	- F	B	A
HCM 95th %tile Q(veh)		1	0.1	-

Kimley»Horn

Synchro™ Output - 2031 Background Plus Site Traffic

Intersection	
Intersection Delay, s/veh	10.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	103	22	0	359	0	71	15	0	17	36	135
Future Vol, veh/h	43	103	22	0	359	0	71	15	0	17	36	135
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	58	139	30	0	485	0	96	20	0	23	49	182
Number of Lanes	0	2	0	0	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	10.6	10.6	10.9	11.8
HCM LOS	B	B	B	B

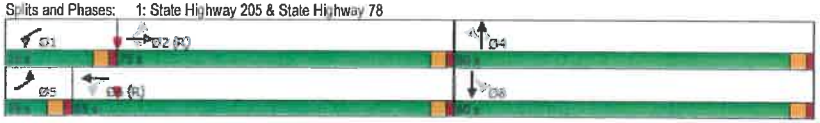
Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	83%	46%	0%	0%	0%	9%
Vol Thru, %	17%	54%	70%	100%	100%	19%
Vol Right, %	0%	0%	30%	0%	0%	72%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	86	95	74	180	180	188
LT Vol	71	43	0	0	0	17
Through Vol	15	52	52	180	180	36
RT Vol	0	0	22	0	0	135
Lane Flow Rate	116	128	99	243	243	254
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.202	0.229	0.166	0.402	0.283	0.382
Departure Headway (Hd)	6.245	6.449	6.004	5.965	4.205	5.407
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	573	556	595	602	849	663
Service Time	4.308	4.207	3.762	3.715	1.954	3.459
HCM Lane V/C Ratio	0.202	0.23	0.166	0.404	0.286	0.383
HCM Control Delay	10.9	11.1	10	12.7	8.6	11.8
HCM Lane LOS	B	B	A	B	A	B
HCM 95th-tile Q	0.7	0.9	0.6	1.9	1.2	1.8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	887	552	257	1006	0	1220	6	65	27	24	15
Future Volume (vph)	24	887	552	257	1006	0	1220	6	65	27	24	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		200	150		0	0		150	0		0
Storage Lanes	1		1	1		0	2		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850		0.943	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5085	1583	1770	5085	0	3433	1863	1583	1770	1757	0
Flt Permitted	0.223			0.184			0.730			0.753		
Satd. Flow (perm)	415	5085	1583	343	5085	0	2638	1863	1583	1403	1757	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			498						82		16	
Link Speed (mph)		30			50			45			30	
Link Distance (ft)		506			2334			2241			368	
Travel Time (s)		11.5			31.8			34.0			8.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	26	964	600	279	1093	0	1326	7	71	29	26	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	964	600	279	1093	0	1326	7	71	29	42	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6			4		4	8		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		4	4	4	8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.5	23.5	23.5	23.5	23.5		23.5	23.5	23.5	23.5	23.5	
Total Split (s)	15.0	75.0	75.0	25.0	85.0		80.0	80.0	80.0	80.0	80.0	
Total Split (%)	8.3%	41.7%	41.7%	13.9%	47.2%		44.4%	44.4%	44.4%	44.4%	44.4%	
Maximum Green (s)	9.5	69.5	69.5	19.5	79.5		74.5	74.5	74.5	74.5	74.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5		5.5	5.5	5.5	5.5	5.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
Act Effct Green (s)	76.9	70.1	70.1	94.5	86.8		74.5	74.5	74.5	74.5	74.5	
Actuated g/C Ratio	0.43	0.39	0.39	0.52	0.48		0.41	0.41	0.41	0.41	0.41	
v/c Ratio	0.11	0.49	0.65	0.85	0.45		1.22	0.01	0.10	0.05	0.06	
Control Delay	22.8	42.5	11.0	48.1	32.2		149.9	31.2	4.4	32.1	21.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	22.8	42.5	11.0	48.1	32.2		149.9	31.2	4.4	32.1	21.5	
LOS	C	D	B	D	C		F	C	A	C	C	
Approach Delay		30.3			35.4			142.0			25.8	
Approach LOS		C			D			F			C	

Intersection Summary	
Area Type	Other
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.22	
Intersection Signal Delay: 67.2	Intersection LOS: E
Intersection Capacity Utilization 86.6%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: State Highway 205 & State Highway 78



Intersection	
Int Delay, s/veh	174.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	132	197	155	539	278	186
Future Vol, veh/h	132	197	155	539	278	186
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	0
Veh in Median Storage, #	0			0	0	
Grade, %	0			0	0	
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	165	246	194	674	348	233

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	411	0	1350	288
Stage 1					288	
Stage 2					1062	
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			1148		~ 166	751
Stage 1					761	
Stage 2					~ 332	
Platoon blocked, %						
Mov Cap-1 Maneuver			1148		~ 121	751
Mov Cap-2 Maneuver					~ 121	
Stage 1					761	
Stage 2					~ 242	

Approach	EB	WB	NB
HCM Control Delay, s	0	2	$ 556.3
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	121	751			1148	
HCM Lane V/C Ratio	2.872	0.31	-	-	0.169	-
HCM Control Delay (s)	$ 920.5	11.9			8.8	0
HCM Lane LOS	F	B	-	-	A	A
HCM 95th %tile Q(veh)	32.3	1.3			0.6	

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

Intersection	
Int Delay, s/veh	230

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	286	320	1003	99	64	945
Future Vol, veh/h	286	320	1003	99	64	945
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0		0			0
Grade, %	0		0			0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	304	340	1067	105	68	1005

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1759	586	0	0	1172	0
Stage 1	1120					
Stage 2	639					
Critical Hdwy	6.84	6.94			4.14	
Critical Hdwy Stg 1	5.84					
Critical Hdwy Stg 2	5.84					
Follow-up Hdwy	3.52	3.32			2.22	
Pot Cap-1 Maneuver	~ 76	454			592	
Stage 1	~ 274					
Stage 2	488					
Platoon blocked, %						
Mov Cap-1 Maneuver	~ 56	454			592	
Mov Cap-2 Maneuver	~ 56					
Stage 1	~ 274					
Stage 2	361					

Approach	WB	NB	SB
HCM Control Delay, s	$ 1027.5	0	2.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)			56	454	592	
HCM Lane V/C Ratio			~ 5.433	0.75	0.115	
HCM Control Delay (s)			$ 2140.1	33.1	11.9	1.4
HCM Lane LOS			F	D	B	A
HCM 95th %tile Q(veh)			34.4	6.2	0.4	

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

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	24	7	869	12	7	1006
Future Vol, veh/h	24	7	869	12	7	1006
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	8	945	13	8	1093

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1515	952	0	0	958	0
Stage 1	952	-	-	-	-	-
Stage 2	563	-	-	-	-	-
Critical Hdwy	6.63	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	120	314	-	-	716	-
Stage 1	374	-	-	-	-	-
Stage 2	535	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	117	314	-	-	716	-
Mov Cap-2 Maneuver	117	-	-	-	-	-
Stage 1	374	-	-	-	-	-
Stage 2	520	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	40	0	0.2
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	136	716	-
HCM Lane V/C Ratio	-	-	0.248	0.011	-
HCM Control Delay (s)	-	-	40	10.1	0.1
HCM Lane LOS	-	-	E	B	A
HCM 95th %tile Q(veh)	-	-	0.9	0	-

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	91	12	6	595	53	0
Future Vol, veh/h	91	12	6	595	53	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized		None		None		None
Storage Length	-	-	-	-	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	99	13	7	647	58	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	112	0	444	56
Stage 1	-	-	-	-	106	-
Stage 2	-	-	-	-	338	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1475	-	542	999
Stage 1	-	-	-	-	907	-
Stage 2	-	-	-	-	694	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1475	-	538	999
Mov Cap-2 Maneuver	-	-	-	-	538	-
Stage 1	-	-	-	-	907	-
Stage 2	-	-	-	-	689	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	12.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	538	-	-	1475	-
HCM Lane V/C Ratio	0.107	-	-	0.004	-
HCM Control Delay (s)	12.5	-	-	7.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0	-

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	18	0	7	11	0	53	2	13	4	18	48	6
Future Vol, veh/h	18	0	7	11	0	53	2	13	4	18	48	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized			None			None			None			None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0			0			0			0	
Grade, %		0			0			0			0	
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	0	8	12	0	58	2	14	4	20	52	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	145	118	56	120	119	16	59	0	0	18	0	0
Stage 1	96	96	-	20	20	-	-	-	-	-	-	-
Stage 2	49	22	-	100	99	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	824	772	1011	855	771	1063	1545	-	-	1599	-	-
Stage 1	911	815	-	999	879	-	-	-	-	-	-	-
Stage 2	964	877	-	906	813	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	771	761	1011	840	760	1063	1545	-	-	1599	-	-
Mov Cap-2 Maneuver	771	761	-	840	760	-	-	-	-	-	-	-
Stage 1	910	804	-	998	878	-	-	-	-	-	-	-
Stage 2	911	876	-	887	802	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	8.8	0.8	1.8
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1545	-	-	826	1017	1599	-	-
HCM Lane V/C Ratio	0.001	-	-	0.033	0.068	0.012	-	-
HCM Control Delay (s)	7.3	0	-	9.5	8.8	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0	-	-

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↕			↕
Traffic Vol, veh/h	35	0	43	6	6	66
Future Vol, veh/h	35	0	43	6	6	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0			0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	0	47	7	7	72

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	137	51	0	0	54	0
Stage 1	51	-	-	-	-	-
Stage 2	86	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	856	1017	-	-	1551	-
Stage 1	971	-	-	-	-	-
Stage 2	937	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	852	1017	-	-	1551	-
Mov Cap-2 Maneuver	852	-	-	-	-	-
Stage 1	971	-	-	-	-	-
Stage 2	932	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.4	0	0.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 852	1551	-
HCM Lane V/C Ratio	-	- 0.045	0.004	-
HCM Control Delay (s)	-	9.4	7.3	0
HCM Lane LOS	-	- A	A	A
HCM 95th %tile Q(veh)	-	0.1	0	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	Y	
Traffic Vol, veh/h	29	18	0	307	53	0
Future Vol, veh/h	29	18	0	307	53	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None		None	-	None
Storage Length	-	-	-	-	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	20	0	334	58	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	52	0	209	26
Stage 1	-	-	-	-	42	-
Stage 2	-	-	-	-	167	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1552	-	760	1044
Stage 1	-	-	-	-	975	-
Stage 2	-	-	-	-	845	-
Platoon blocked, %	-	-				
Mov Cap-1 Maneuver	-	-	1552	-	760	1044
Mov Cap-2 Maneuver	-	-	-	-	760	-
Stage 1	-	-	-	-	975	-
Stage 2	-	-	-	-	845	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	760	-	-	1552	-
HCM Lane V/C Ratio	0.076	-	-	-	-
HCM Control Delay (s)	10.1	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		Y	
Traffic Vol, veh/h	6	23	289	2	7	18
Future Vol, veh/h	6	23	289	2	7	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #		0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	25	314	2	8	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	316	0	-	0	342	158
Stage 1	-	-	-	-	315	-
Stage 2	-	-	-	-	27	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1241	-	-	-	628	859
Stage 1	-	-	-	-	713	-
Stage 2	-	-	-	-	992	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1241	-	-	-	624	859
Mov Cap-2 Maneuver	-	-	-	-	624	-
Stage 1	-	-	-	-	709	-
Stage 2	-	-	-	-	992	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	9.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1241	-	-	-	777
HCM Lane V/C Ratio	0.005	-	-	-	0.035
HCM Control Delay (s)	7.9	0	-	-	9.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection												
Int Delay, s/veh	4.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	51	12	2	131	0	35	0	7	0	0	125
Future Vol, veh/h	42	51	12	2	131	0	35	0	7	0	0	125
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized			None			None			None			None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0			0			0			0	
Grade, %		0			0			0			0	
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	46	55	13	2	142	0	38	0	8	0	0	136

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	142	0	0	68	0	0	229	300	34	266	306	71
Stage 1							154	154		146	146	
Stage 2							75	146		120	160	
Critical Hdwy	4.14			4.14			7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1							6.54	5.54		6.54	5.54	
Critical Hdwy Stg 2							6.54	5.54		6.54	5.54	
Follow-up Hdwy	2.22			2.22			3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1438			1531			707	611	1032	665	606	977
Stage 1							833	769		842	775	
Stage 2							926	775		872	764	
Platoon blocked, %												
Mov Cap-1 Maneuver	1438			1531			593	590	1032	643	585	977
Mov Cap-2 Maneuver							593	590		643	585	
Stage 1							806	744		814	774	
Stage 2							796	774		837	739	

Approach	EB	WB	NB	SB
HCM Control Delay, s	3	0.1	11.1	9.3
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	638	1438	-	-	1531	-	-	977
HCM Lane V/C Ratio	0.072	0.032	-	-	0.001	-	-	0.139
HCM Control Delay (s)	11.1	7.6	0	-	7.4	0	-	9.3
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.5

Intersection						
Int Delay, s/veh	2.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	46	12	4	99	35	11
Future Vol, veh/h	46	12	4	99	35	11
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	50	13	4	108	38	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	63	0	119	32
Stage 1					57	
Stage 2					62	
Critical Hdwy			4.14		6.84	6.94
Critical Hdwy Stg 1					5.84	
Critical Hdwy Stg 2					5.84	
Follow-up Hdwy			2.22		3.52	3.32
Pot Cap-1 Maneuver			1538		864	1035
Stage 1					959	
Stage 2					953	
Platoon blocked, %						
Mov Cap-1 Maneuver			1538		861	1035
Mov Cap-2 Maneuver					861	
Stage 1					959	
Stage 2					950	

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	897	-	-	1538	-
HCM Lane V/C Ratio	0.056	-	-	0.003	-
HCM Control Delay (s)	9.3	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	0	0	26	8	4
Future Vol, veh/h	11	0	0	26	8	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	0	0	28	9	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	39	11	13	0	-	0
Stage 1	11	-	-	-	-	-
Stage 2	28	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	973	1070	1606	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	995	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	973	1070	1606	-	-	-
Mov Cap-2 Maneuver	973	-	-	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	995	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1606	-	973	-	-
HCM Lane V/C Ratio	-	-	0.012	-	-
HCM Control Delay (s)	0	-	8.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Intersection Delay, s/veh	12.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	342	60	0	234	0	48	27	0	56	43	102
Future Vol, veh/h	49	342	60	0	234	0	48	27	0	56	43	102
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	59	412	72	0	282	0	58	33	0	67	52	123
Number of Lanes	0	2	0	0	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	13.3	9.8	10.8	12.5
HCM LOS	B	A	B	B

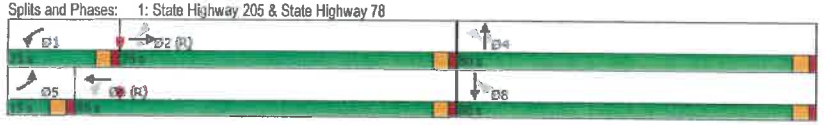
Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	64%	22%	0%	0%	0%	28%
Vol Thru, %	36%	78%	74%	100%	100%	21%
Vol Right, %	0%	0%	26%	0%	0%	51%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	75	220	231	117	117	201
LT Vol	48	49	0	0	0	56
Through Vol	27	171	171	117	117	43
RT Vol	0	0	60	0	0	102
Lane Flow Rate	90	265	278	141	141	242
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.163	0.445	0.444	0.248	0.178	0.388
Departure Headway (Hd)	6.499	6.044	5.747	6.323	4.557	5.775
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	549	594	626	567	782	622
Service Time	4.568	3.791	3.494	4.08	2.313	3.829
HCM Lane V/C Ratio	0.164	0.446	0.444	0.249	0.18	0.389
HCM Control Delay	10.8	13.6	13	11.2	8.3	12.5
HCM Lane LOS	B	B	B	B	A	B
HCM 95th-tile Q	0.6	2.3	2.3	1	0.6	1.8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	1568	785	267	1511	0	831	5	88	37	46	7
Future Volume (vph)	49	1568	785	267	1511	0	831	5	88	37	46	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		200	150		0	0		150	0		0
Storage Lanes	1		1	1		0	2		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850		0.979	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5085	1583	1770	5085	0	3433	1863	1583	1770	1824	0
Flt Permitted	0.094			0.053			0.719			0.754		
Satd. Flow (perm)	175	5085	1583	99	5085	0	2598	1863	1583	1405	1824	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			401						96		5	
Link Speed (mph)		30			50			45			30	
Link Distance (ft)		506			2334			2241			368	
Travel Time (s)		11.5			31.8			34.0			8.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	53	1704	853	290	1642	0	903	5	96	40	50	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	1704	853	290	1642	0	903	5	96	40	58	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6			4		4	8		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		4	4	4	8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.5	23.5	23.5	23.5	23.5		23.5	23.5	23.5	23.5	23.5	
Total Split (s)	15.0	75.0	75.0	25.0	85.0		80.0	80.0	80.0	80.0	80.0	
Total Split (%)	8.3%	41.7%	41.7%	13.9%	47.2%		44.4%	44.4%	44.4%	44.4%	44.4%	
Maximum Green (s)	9.5	69.5	69.5	19.5	79.5		74.5	74.5	74.5	74.5	74.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5		5.5	5.5	5.5	5.5	5.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
Act Effct Green (s)	77.4	69.5	69.5	100.0	88.9		69.0	69.0	69.0	69.0	69.0	
Actuated g/C Ratio	0.43	0.39	0.39	0.56	0.49		0.38	0.38	0.38	0.38	0.38	
v/c Ratio	0.37	0.87	1.00	1.01	0.65		0.91	0.01	0.14	0.07	0.08	
Control Delay	28.6	56.9	58.0	109.8	37.1		65.8	31.6	5.7	33.8	31.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	28.6	56.9	58.0	109.8	37.1		65.8	31.6	5.7	33.8	31.0	
LOS	C	E	E	F	D		E	C	A	C	C	
Approach Delay		56.7			48.0			59.9			32.1	
Approach LOS		E			D			E			C	

Intersection Summary	
Area Type	Other
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 53.8	Intersection LOS: D
Intersection Capacity Utilization 89.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: State Highway 205 & State Highway 78



Intersection	
Int Delay, s/veh	3.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	409	136	51	221	96	36
Future Vol, veh/h	409	136	51	221	96	36
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	0
Veh in Median Storage, #	0	-	-	0	0	
Grade, %	0	-	-	0	0	
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	465	155	58	251	109	41

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	620	0	910	543
Stage 1					543	
Stage 2					367	
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		305	540
Stage 1					582	
Stage 2					701	
Platoon blocked, %						
Mov Cap-1 Maneuver			960		284	540
Mov Cap-2 Maneuver					284	
Stage 1					582	
Stage 2					652	

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	21.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	284	540			960	
HCM Lane V/C Ratio	0.384	0.076	-	-	0.06	-
HCM Control Delay (s)	25.4	12.2			9	0
HCM Lane LOS	D	B	-	-	A	A
HCM 95th %tile Q(veh)	1.7	0.2			0.2	

Intersection	
Int Delay, s/veh	399.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	189	246	803	303	201	1020
Future Vol, veh/h	189	246	803	303	201	1020
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	191	248	811	306	203	1030

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1885	559	0	0	1117	0
Stage 1	964					
Stage 2	921					
Critical Hdwy	6.84	6.94			4.14	
Critical Hdwy Stg 1	5.84					
Critical Hdwy Stg 2	5.84					
Follow-up Hdwy	3.52	3.32			2.22	
Pot Cap-1 Maneuver	~ 62	472			621	
Stage 1	331					
Stage 2	348					
Platoon blocked, %						
Mov Cap-1 Maneuver	~ 15	472			621	
Mov Cap-2 Maneuver	~ 15					
Stage 1	331					
Stage 2	~ 82					

Approach	WB	NB	SB
HCM Control Delay, $	2519.2	0	5.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)			15	472	621	
HCM Lane V/C Ratio	-	-	-12.727	0.526	0.327	-
HCM Control Delay (s)			-$ 5771	20.8	13.6	3.7
HCM Lane LOS	-	-	F	C	B	A
HCM 95th %tile Q(veh)	-	-	24.9	3	1.4	

Notes

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

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	19	8	1077	27	8	1193
Future Vol, veh/h	19	8	1077	27	8	1193
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None		None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	9	1171	29	9	1297

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1853	1186	0	0	1200	0
Stage 1	1186	-	-	-	-	-
Stage 2	667	-	-	-	-	-
Critical Hdwy	6.53	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	73	229	-	-	579	-
Stage 1	289	-	-	-	-	-
Stage 2	473	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	69	229	-	-	579	-
Mov Cap-2 Maneuver	69	-	-	-	-	-
Stage 1	289	-	-	-	-	-
Stage 2	447	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	66.1	0	0.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	87	579	-
HCM Lane V/C Ratio	-	-	0.337	0.015	-
HCM Control Delay (s)	-	-	66.1	11.3	0.3
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	1.3	0	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	226	39	19	398	34	0
Future Vol, veh/h	226	39	19	398	34	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	246	42	21	433	37	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	288	0	526	144
Stage 1	-	-	-	-	267	-
Stage 2	-	-	-	-	259	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1271	-	482	877
Stage 1	-	-	-	-	754	-
Stage 2	-	-	-	-	761	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1271	-	471	877
Mov Cap-2 Maneuver	-	-	-	-	471	-
Stage 1	-	-	-	-	754	-
Stage 2	-	-	-	-	744	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	13.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	471	-	-	1271	-
HCM Lane V/C Ratio	0.078	-	-	0.016	-
HCM Control Delay (s)	13.3	-	-	7.9	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	0	5	7	0	34	8	29	12	58	43	19
Future Vol, veh/h	11	0	5	7	0	34	8	29	12	58	43	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized			None			None			None			None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	5	8	0	37	9	32	13	63	47	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	259	247	58	243	251	39	68	0	0	45	0	0
Stage 1	184	184	-	57	57							
Stage 2	75	63	-	186	194	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12			4.12		
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52							
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	694	655	1008	711	652	1033	1533	-	-	1563	-	-
Stage 1	818	747	-	955	847	-	-	-	-	-	-	-
Stage 2	934	842	-	816	740							
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	645	624	1008	681	621	1033	1533			1563		
Mov Cap-2 Maneuver	645	624	-	681	621	-	-	-	-	-	-	-
Stage 1	813	716	-	949	842	-	-	-	-	-	-	-
Stage 2	895	837	-	778	709	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.1	9	1.2	3.6
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1533	-	-	727	949	1563	-	-
HCM Lane V/C Ratio	0.006	-	-	0.024	0.047	0.04	-	-
HCM Control Delay (s)	7.4	0	-	10.1	9	7.4	0	-
HCM Lane LOS	A	A	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	23	0	58	19	19	135
Future Vol, veh/h	23	0	58	19	19	135
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0			0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	0	63	21	21	147

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	263	74	0	0	84	0
Stage 1	74	-	-			
Stage 2	189	-	-	-	-	-
Critical Hdwy	6.42	6.22	-		4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-			
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	726	988	-	-	1513	-
Stage 1	949	-	-	-	-	-
Stage 2	843	-	-			
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	715	988	-	-	1513	-
Mov Cap-2 Maneuver	715	-	-	-	-	-
Stage 1	949	-	-	-	-	-
Stage 2	830	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.2	0	0.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	715	1513	-
HCM Lane V/C Ratio	-	-	0.035	0.014	-
HCM Control Delay (s)	-	-	10.2	7.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	97	58	0	200	34	0
Future Vol, veh/h	97	58	0	200	34	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized		None		None		None
Storage Length	-	-	-	-	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	105	63	0	217	37	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	168	0	246	84
Stage 1	-	-	-	-	137	-
Stage 2	-	-	-	-	109	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1407	-	721	958
Stage 1	-	-	-	-	875	-
Stage 2	-	-	-	-	903	-
Platoon blocked, %	-	-			-	
Mov Cap-1 Maneuver	-	-	1407	-	721	958
Mov Cap-2 Maneuver	-	-	-	-	721	-
Stage 1	-	-	-	-	875	-
Stage 2	-	-	-	-	903	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	721	-	-	1407	-
HCM Lane V/C Ratio	0.051	-	-	-	-
HCM Control Delay (s)	10.3	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	77	189	8	5	11
Future Vol, veh/h	19	77	189	8	5	11
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	21	84	205	9	5	12

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	214	0	-	0	294	107
Stage 1	-	-	-	-	210	-
Stage 2	-	-	-	-	84	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1353	-	-	-	673	926
Stage 1	-	-	-	-	805	-
Stage 2	-	-	-	-	930	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1353	-	-	-	662	926
Mov Cap-2 Maneuver	-	-	-	-	662	-
Stage 1	-	-	-	-	792	-
Stage 2	-	-	-	-	930	-

Approach	EB	WB	SB
HCM Control Delay, s	1.5	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1353	-	-	-	823
HCM Lane V/C Ratio	0.015	-	-	-	0.021
HCM Control Delay (s)	7.7	0	-	-	9.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	139	147	39	8	92	0	23	0	5	0	0	82
Future Vol, veh/h	139	147	39	8	92	0	23	0	5	0	0	82
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	151	160	42	9	100	0	25	0	5	0	0	89

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	100	0	0	202	0	0	551	601	101	500	622	50
Stage 1	-	-	-	-	-	-	483	483	-	118	118	-
Stage 2	-	-	-	-	-	-	68	118	-	382	504	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1490	-	-	1367	-	-	417	413	935	454	401	1008
Stage 1	-	-	-	-	-	-	534	551	-	874	797	-
Stage 2	-	-	-	-	-	-	934	797	-	612	539	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1490	-	-	1367	-	-	345	363	935	410	352	1008
Mov Cap-2 Maneuver	-	-	-	-	-	-	345	363	-	410	352	-
Stage 1	-	-	-	-	-	-	473	488	-	773	791	-
Stage 2	-	-	-	-	-	-	845	791	-	538	477	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.4	0.6	15	8.9
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	389	1490	-	-	1367	-	-	1008
HCM Lane V/C Ratio	0.078	0.101	-	-	0.006	-	-	0.088
HCM Control Delay (s)	15	7.7	0.2	-	7.7	0	-	8.9
HCM Lane LOS	C	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.3	0.3	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	113	39	12	76	23	7
Future Vol, veh/h	113	39	12	76	23	7
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	123	42	13	83	25	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	165	0	212	83
Stage 1	-	-	-	-	144	-
Stage 2	-	-	-	-	68	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1411	-	757	960
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	947	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1411	-	749	960
Mov Cap-2 Maneuver	-	-	-	-	749	-
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	938	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	9.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	789	-	-	1411	-
HCM Lane V/C Ratio	0.041	-	-	0.009	-
HCM Control Delay (s)	9.8	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1			0	

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	0	0	21	71	12
Future Vol, veh/h	7	0	0	21	71	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	0	0	23	77	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	107	84	90	0	-	0
Stage 1	84					
Stage 2	23	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12			
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42					
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	891	975	1505			
Stage 1	939	-	-	-	-	-
Stage 2	1000					
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	891	975	1505			
Mov Cap-2 Maneuver	891	-	-	-	-	-
Stage 1	939	-	-	-	-	-
Stage 2	1000	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1505	-	891		
HCM Lane V/C Ratio	-	-	0.009	-	-
HCM Control Delay (s)	0	-	9.1	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Kimley»Horn

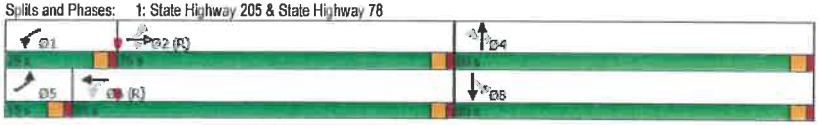
Synchro™ Output – 2031 Background Traffic

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	858	523	257	1006	0	1062	6	65	27	24	15
Future Volume (vph)	24	858	523	257	1006	0	1062	6	65	27	24	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		200	150		0	0		150	0		0
Storage Lanes	1		1	1		0	2		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850		0.943	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5085	1583	1770	5085	0	3433	1863	1583	1770	1757	0
Flt Permitted	0.223			0.194			0.730			0.753		
Satd. Flow (perm)	415	5085	1583	361	5085	0	2638	1863	1583	1403	1757	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			487						82		16	
Link Speed (mph)		30			50			45			30	
Link Distance (ft)		506			2334			2241			368	
Travel Time (s)		11.5			31.8			34.0			8.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	26	933	568	279	1093	0	1154	7	71	29	26	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	933	568	279	1093	0	1154	7	71	29	42	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6			4		4	8		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		4	4	4	8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.5	23.5	23.5	23.5	23.5		23.5	23.5	23.5	23.5	23.5	
Total Split (s)	15.0	75.0	75.0	25.0	85.0		80.0	80.0	80.0	80.0	80.0	
Total Split (%)	8.3%	41.7%	41.7%	13.9%	47.2%		44.4%	44.4%	44.4%	44.4%	44.4%	
Maximum Green (s)	9.5	69.5	69.5	19.5	79.5		74.5	74.5	74.5	74.5	74.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5		5.5	5.5	5.5	5.5	5.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
Act Effct Green (s)	76.9	70.1	70.1	94.5	86.8		74.5	74.5	74.5	74.5	74.5	
Actuated g/C Ratio	0.43	0.39	0.39	0.52	0.48		0.41	0.41	0.41	0.41	0.41	
v/c Ratio	0.11	0.47	0.62	0.83	0.45		1.06	0.01	0.10	0.05	0.06	
Control Delay	22.8	42.1	9.6	45.6	32.2		93.5	31.2	4.4	32.1	21.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	22.8	42.1	9.6	45.6	32.2		93.5	31.2	4.4	32.1	21.5	
LOS	C	D	A	D	C		F	C	A	C	C	
Approach Delay		29.7			34.9			88.0			25.8	
Approach LOS		C			C			F			C	

Intersection Summary			
Area Type	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.06			
Intersection Signal Delay: 48.4		Intersection LOS: D	
Intersection Capacity Utilization 81.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: State Highway 205 & State Highway 78



Intersection	
Int Delay, s/veh	144.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	132	191	149	539	260	168
Future Vol, veh/h	132	191	149	539	260	168
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	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	165	239	186	674	325	210

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	404	0	1331	285
Stage 1	-	-	-	-	285	-
Stage 2	-	-	-	-	1046	-
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	-	-	1155	-	~ 170	754
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	338	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1155	-	~ 126	754
Mov Cap-2 Maneuver	-	-	-	-	~ 126	-
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	~ 251	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	$ 483.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	126	754	-	-	1155	-
HCM Lane V/C Ratio	2.579	0.279	-	-	0.161	-
HCM Control Delay (s)	$ 788.2	11.6	-	-	8.7	0
HCM Lane LOS	F	B	-	-	A	A
HCM 95th %tile Q(veh)	29.1	1.1	-	-	0.6	-

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

Intersection	
Int Delay, s/veh	96.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	146	162	1003	58	35	945
Future Vol, veh/h	146	162	1003	58	35	945
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	155	172	1067	62	37	1005

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1675	565	0	0	1129	0
Stage 1	1098	-	-	-	-	-
Stage 2	577	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 86	468	-	-	615	-
Stage 1	281	-	-	-	-	-
Stage 2	525	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 74	468	-	-	615	-
Mov Cap-2 Maneuver	~ 74	-	-	-	-	-
Stage 1	281	-	-	-	-	-
Stage 2	454	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, $	733.5	0	1.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	133	615	-
HCM Lane V/C Ratio	-	-	2.464	0.061	-
HCM Control Delay (s)	-	-	$ 733.5	11.2	0.7
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	28.6	0.2	-

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

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	37	4	1	15	30	94
Future Vol, veh/h	37	4	1	15	30	94
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	50	5	1	20	41	127

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	127	105	168	0	-	0
Stage 1	105	-	-	-	-	-
Stage 2	22	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	868	949	1410	-	-	-
Stage 1	919	-	-	-	-	-
Stage 2	1001	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	867	949	1410	-	-	-
Mov Cap-2 Maneuver	867	-	-	-	-	-
Stage 1	918	-	-	-	-	-
Stage 2	1001	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1410	-	874	-	-
HCM Lane V/C Ratio	0.001	-	0.063	-	-
HCM Control Delay (s)	7.6	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	9	1045	7	9	1070
Future Vol, veh/h	7	9	1045	7	9	1070
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0			0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	10	1136	8	10	1163

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1742	572	0	0	1144	0
Stage 1	1140	-	-	-	-	-
Stage 2	602	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	78	463	-	-	606	-
Stage 1	267	-	-	-	-	-
Stage 2	510	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	74	463	-	-	606	-
Mov Cap-2 Maneuver	74	-	-	-	-	-
Stage 1	267	-	-	-	-	-
Stage 2	486	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	34.3	0	0.4
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	140	606	-
HCM Lane V/C Ratio	-	-	0.124	0.016	-
HCM Control Delay (s)	-	-	34.3	11	0.3
HCM Lane LOS	-	-	D	B	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

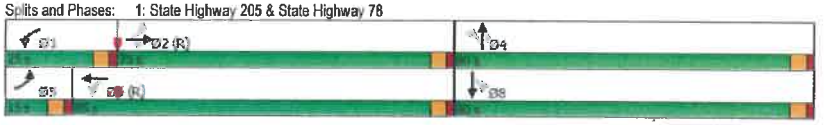
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	1854	853	340	1928	0	901	6	112	47	59	9
Future Volume (vph)	62	1854	853	340	1928	0	901	6	112	47	59	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		200	150		0	0		150	0		0
Storage Lanes	1		1	1		0	2		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850		0.980	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5085	1583	1770	5085	0	3433	1863	1583	1770	1825	0
Flt Permitted	0.058			0.053			0.709			0.753		
Satd. Flow (perm)	108	5085	1583	99	5085	0	2562	1863	1583	1403	1825	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			368						122		5	
Link Speed (mph)		30			50			45			30	
Link Distance (ft)		506			2334			2241			368	
Travel Time (s)		11.5			31.8			34.0			8.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	67	2015	927	370	2096	0	979	7	122	51	64	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	67	2015	927	370	2096	0	979	7	122	51	74	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6			4		4	8		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		4	4	4	8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.5	23.5	23.5	23.5	23.5		23.5	23.5	23.5	23.5	23.5	
Total Split (s)	15.0	75.0	75.0	25.0	85.0		80.0	80.0	80.0	80.0	80.0	
Total Split (%)	8.3%	41.7%	41.7%	13.9%	47.2%		44.4%	44.4%	44.4%	44.4%	44.4%	
Maximum Green (s)	9.5	69.5	69.5	19.5	79.5		74.5	74.5	74.5	74.5	74.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5		5.5	5.5	5.5	5.5	5.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
Act Effct Green (s)	77.9	69.5	69.5	96.5	82.6		72.5	72.5	72.5	72.5	72.5	
Actuated g/C Ratio	0.43	0.39	0.39	0.54	0.46		0.40	0.40	0.40	0.40	0.40	
v/c Ratio	0.54	1.03	1.11	1.47	0.90		0.95	0.01	0.17	0.09	0.10	
Control Delay	44.3	80.7	95.0	270.3	51.5		69.6	31.2	5.2	33.1	30.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	44.3	80.7	95.0	270.3	51.5		69.6	31.2	5.2	33.1	30.9	
LOS	D	F	F	F	D		E	C	A	C	C	
Approach Delay		84.3			84.3			62.3			31.8	
Approach LOS		F			F			E			C	

Intersection Summary

Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 180
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.47
Intersection Signal Delay: 79.7 Intersection LOS: E
Intersection Capacity Utilization 100.8% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 1: State Highway 205 & State Highway 78



Intersection	
Int Delay, s/veh	4.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	522	144	36	283	106	29
Future Vol, veh/h	522	144	36	283	106	29
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	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	593	164	41	322	120	33

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	757	0	1079	675
Stage 1	-	-	-	-	675	-
Stage 2	-	-	-	-	404	-
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	-	-	854	-	242	454
Stage 1	-	-	-	-	506	-
Stage 2	-	-	-	-	674	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	854	-	228	454
Mov Cap-2 Maneuver	-	-	-	-	228	-
Stage 1	-	-	-	-	506	-
Stage 2	-	-	-	-	635	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.1	32.1
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	228	454	-	-	854	-
HCM Lane V/C Ratio	0.528	0.073	-	-	0.048	-
HCM Control Delay (s)	37.2	13.5	-	-	9.4	0
HCM Lane LOS	E	B	-	-	A	A
HCM 95th %tile Q(veh)	2.8	0.2	-	-	0.2	-

Intersection	
Int Delay, s/veh	278.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	103	157	1025	176	109	1302
Future Vol, veh/h	103	157	1025	176	109	1302
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	104	159	1035	178	110	1315

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2002	607	0	0	1213	0
Stage 1	1124	-	-	-	-	-
Stage 2	878	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 52	439	-	-	571	-
Stage 1	272	-	-	-	-	-
Stage 2	367	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 15	439	-	-	571	-
Mov Cap-2 Maneuver	~ 15	-	-	-	-	-
Stage 1	272	-	-	-	-	-
Stage 2	105	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, $	3049.3	0	4.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	36	571	-
HCM Lane V/C Ratio	-	-	7.295	0.193	-
HCM Control Delay (s)	-	-	$ 3049.3	12.8	3.9
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	31.5	0.7	-

Notes

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

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	38	3	3	34	31	65
Future Vol, veh/h	38	3	3	34	31	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	4	4	41	37	78

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	125	76	115	0	-	0
Stage 1	76	-	-	-	-	-
Stage 2	49	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	870	985	1474	-	-	-
Stage 1	947	-	-	-	-	-
Stage 2	973	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	867	985	1474	-	-	-
Mov Cap-2 Maneuver	867	-	-	-	-	-
Stage 1	944	-	-	-	-	-
Stage 2	973	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT EBLn1	SBT	SBR
Capacity (veh/h)	1474	- 875	-	-
HCM Lane V/C Ratio	0.002	- 0.056	-	-
HCM Control Delay (s)	7.4	0 9.4	-	-
HCM Lane LOS	A	A A	-	-
HCM 95th %tile Q(veh)	0	- 0.2	-	-

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	10	1164	10	10	1384
Future Vol, veh/h	10	10	1164	10	10	1384
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	11	1265	11	11	1504

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2045	638	0	0	1276	0
Stage 1	1271	-	-	-	-	-
Stage 2	774	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	49	419	-	-	540	-
Stage 1	227	-	-	-	-	-
Stage 2	415	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	43	419	-	-	540	-
Mov Cap-2 Maneuver	43	-	-	-	-	-
Stage 1	227	-	-	-	-	-
Stage 2	364	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	68.1	0	0.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR WBLn1	SBL	SBT
Capacity (veh/h)	-	- 78	540	-
HCM Lane V/C Ratio	-	- 0.279	0.02	-
HCM Control Delay (s)	-	- 68.1	11.8	0.7
HCM Lane LOS	-	- F	B	A
HCM 95th %tile Q(veh)	-	- 1	0.1	-

Kimley»Horn

Synchro™ Output - 2031 Background Plus Site Traffic

Intersection	
Intersection Delay, s/veh	10.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	103	22	0	359	0	71	15	0	17	36	135
Future Vol, veh/h	43	103	22	0	359	0	71	15	0	17	36	135
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	58	139	30	0	485	0	96	20	0	23	49	182
Number of Lanes	0	2	0	0	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	10.6	10.6	10.9	11.8
HCM LOS	B	B	B	B

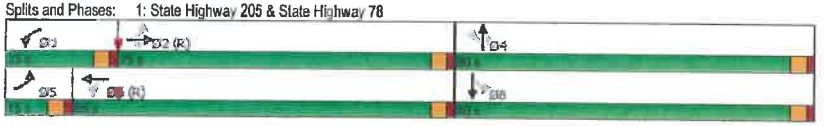
Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	83%	46%	0%	0%	0%	9%
Vol Thru, %	17%	54%	70%	100%	100%	19%
Vol Right, %	0%	0%	30%	0%	0%	72%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	86	95	74	180	180	188
LT Vol	71	43	0	0	0	17
Through Vol	15	52	52	180	180	36
RT Vol	0	0	22	0	0	135
Lane Flow Rate	116	128	99	243	243	254
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.202	0.229	0.166	0.402	0.283	0.382
Departure Headway (Hd)	6.245	6.449	6.004	5.965	4.205	5.407
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	573	556	595	602	849	663
Service Time	4.308	4.207	3.762	3.715	1.954	3.459
HCM Lane V/C Ratio	0.202	0.23	0.166	0.404	0.286	0.383
HCM Control Delay	10.9	11.1	10	12.7	8.6	11.8
HCM Lane LOS	B	B	A	B	A	B
HCM 95th-tile Q	0.7	0.9	0.6	1.9	1.2	1.8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	887	552	257	1006	0	1220	6	65	27	24	15
Future Volume (vph)	24	887	552	257	1006	0	1220	6	65	27	24	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		200	150		0	0		150	0		0
Storage Lanes	1		1	1		0	2		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850		0.943	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5085	1583	1770	5085	0	3433	1863	1583	1770	1757	0
Flt Permitted	0.223			0.184			0.730			0.753		
Satd. Flow (perm)	415	5085	1583	343	5085	0	2638	1863	1583	1403	1757	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			498						82		16	
Link Speed (mph)		30			50			45			30	
Link Distance (ft)		506			2334			2241			368	
Travel Time (s)		11.5			31.8			34.0			8.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	26	964	600	279	1093	0	1326	7	71	29	26	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	964	600	279	1093	0	1326	7	71	29	42	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6			4		4	8		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		4	4	4	8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.5	23.5	23.5	23.5	23.5		23.5	23.5	23.5	23.5	23.5	
Total Split (s)	15.0	75.0	75.0	25.0	85.0		80.0	80.0	80.0	80.0	80.0	
Total Split (%)	8.3%	41.7%	41.7%	13.9%	47.2%		44.4%	44.4%	44.4%	44.4%	44.4%	
Maximum Green (s)	9.5	69.5	69.5	19.5	79.5		74.5	74.5	74.5	74.5	74.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5		5.5	5.5	5.5	5.5	5.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
Act Effct Green (s)	76.9	70.1	70.1	94.5	86.8		74.5	74.5	74.5	74.5	74.5	
Actuated g/C Ratio	0.43	0.39	0.39	0.52	0.48		0.41	0.41	0.41	0.41	0.41	
v/c Ratio	0.11	0.49	0.65	0.85	0.45		1.22	0.01	0.10	0.05	0.06	
Control Delay	22.8	42.5	11.0	48.1	32.2		149.9	31.2	4.4	32.1	21.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	22.8	42.5	11.0	48.1	32.2		149.9	31.2	4.4	32.1	21.5	
LOS	C	D	B	D	C		F	C	A	C	C	
Approach Delay		30.3			35.4			142.0			25.8	
Approach LOS		C			D			F			C	

Intersection Summary	
Area Type	Other
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.22	
Intersection Signal Delay: 67.2	Intersection LOS: E
Intersection Capacity Utilization: 86.6%	ICU Level of Service E
Analysis Period (min): 15	

Splits and Phases: 1: State Highway 205 & State Highway 78



Intersection	
Int Delay, s/veh	174.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	132	197	155	539	278	186
Future Vol, veh/h	132	197	155	539	278	186
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	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	165	246	194	674	348	233

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	411	0	1350	288
Stage 1	-	-	-	-	288	-
Stage 2	-	-	-	-	1062	-
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	-	-	1148	-	~ 166	751
Stage 1	-	-	-	-	761	-
Stage 2	-	-	-	-	~ 332	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1148	-	~ 121	751
Mov Cap-2 Maneuver	-	-	-	-	~ 121	-
Stage 1	-	-	-	-	761	-
Stage 2	-	-	-	-	~ 242	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2	$ 556.3
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	121	751	-	-	1148	-
HCM Lane V/C Ratio	2.872	0.31	-	-	0.169	-
HCM Control Delay (s)	$ 920.5	11.9	-	-	8.8	0
HCM Lane LOS	F	B	-	-	A	A
HCM 95th %tile Q(veh)	32.3	1.3	-	-	0.6	-

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

Intersection	
Int Delay, s/veh	230

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	286	320	1003	99	64	945
Future Vol, veh/h	286	320	1003	99	64	945
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None	-	None		None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	304	340	1067	105	68	1005

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1759	586	0	0	1172	0
Stage 1	1120	-	-	-	-	-
Stage 2	639	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 76	454	-	-	592	-
Stage 1	~ 274	-	-	-	-	-
Stage 2	488	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 56	454	-	-	592	-
Mov Cap-2 Maneuver	~ 56	-	-	-	-	-
Stage 1	~ 274	-	-	-	-	-
Stage 2	361	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 1027.5	0	2.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	56	454	592	-
HCM Lane V/C Ratio	-	-	5.433	0.75	0.115	-
HCM Control Delay (s)	-	-	$ 2140.1	33.1	11.9	1.4
HCM Lane LOS	-	-	F	D	B	A
HCM 95th %tile Q(veh)	-	-	34.4	6.2	0.4	-

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

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	9	1086	13	9	1210
Future Vol, veh/h	25	9	1086	13	9	1210
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	10	1180	14	10	1315

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1865	597	0	0	1194	0
Stage 1	1187	-	-	-	-	-
Stage 2	678	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	64	446	-	-	580	-
Stage 1	252	-	-	-	-	-
Stage 2	466	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	60	446	-	-	580	-
Mov Cap-2 Maneuver	60	-	-	-	-	-
Stage 1	252	-	-	-	-	-
Stage 2	436	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	87.2	0	0.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	78	580	-
HCM Lane V/C Ratio	-	- 0.474	0.017	-
HCM Control Delay (s)	-	- 87.2	11.3	0.4
HCM Lane LOS	-	- F	B	A
HCM 95th %tile Q(veh)	-	- 2	0.1	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	100	12	6	604	53	0
Future Vol, veh/h	100	12	6	604	53	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized		None		None		None
Storage Length	-	-	-	-	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	109	13	7	657	58	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	122	0	459	61
Stage 1	-	-	-	-	116	-
Stage 2	-	-	-	-	343	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1463	-	531	991
Stage 1	-	-	-	-	896	-
Stage 2	-	-	-	-	690	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1463	-	527	991
Mov Cap-2 Maneuver	-	-	-	-	527	-
Stage 1	-	-	-	-	896	-
Stage 2	-	-	-	-	684	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	12.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	527	-	-	1463	-
HCM Lane V/C Ratio	0.109	-	-	0.004	-
HCM Control Delay (s)	12.7	-	-	7.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0	-

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	18	0	7	11	0	53	2	16	4	18	61	6
Future Vol, veh/h	18	0	7	11	0	53	2	16	4	18	61	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	0	8	12	0	58	2	17	4	20	66	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	162	135	70	137	136	19	73	0	0	21	0	0
Stage 1	110	110	-	23	23	-	-	-	-	-	-	-
Stage 2	52	25	-	114	113	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	803	756	993	834	755	1059	1527	-	-	1595	-	-
Stage 1	895	804	-	995	876	-	-	-	-	-	-	-
Stage 2	961	874	-	891	802	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	752	745	993	819	744	1059	1527	-	-	1595	-	-
Mov Cap-2 Maneuver	752	745	-	819	744	-	-	-	-	-	-	-
Stage 1	894	794	-	994	875	-	-	-	-	-	-	-
Stage 2	908	873	-	873	792	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.6	8.8	0.7	1.5
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1527	-	-	807	1008	1595	-	-
HCM Lane V/C Ratio	0.001	-	-	0.034	0.069	0.012	-	-
HCM Control Delay (s)	7.4	0	-	9.6	8.8	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0	-	-

Intersection	
Int Delay, s/veh	2.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	35	0	55	6	6	78
Future Vol, veh/h	35	0	55	6	6	78
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	0	60	7	7	85

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	163	64	0	0	67	0
Stage 1	64	-	-	-	-	-
Stage 2	99	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	828	1000	-	-	1535	-
Stage 1	959	-	-	-	-	-
Stage 2	925	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	824	1000	-	-	1535	-
Mov Cap-2 Maneuver	824	-	-	-	-	-
Stage 1	959	-	-	-	-	-
Stage 2	920	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.6	0	0.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	824	1535	-
HCM Lane V/C Ratio	-	-	0.046	0.004	-
HCM Control Delay (s)	-	-	9.6	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	Y	
Traffic Vol, veh/h	29	18	0	307	53	0
Future Vol, veh/h	29	18	0	307	53	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	20	0	334	58	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	52	0	209	26
Stage 1	-	-	-	-	42	-
Stage 2	-	-	-	-	167	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1552	-	760	1044
Stage 1	-	-	-	-	975	-
Stage 2	-	-	-	-	845	-
Platoon blocked, %	-	-				
Mov Cap-1 Maneuver	-	-	1552	-	760	1044
Mov Cap-2 Maneuver	-	-	-	-	760	-
Stage 1	-	-	-	-	975	-
Stage 2	-	-	-	-	845	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	760	-	-	1552	-
HCM Lane V/C Ratio	0.076	-	-	-	-
HCM Control Delay (s)	10.1	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		Y	
Traffic Vol, veh/h	6	23	289	2	7	18
Future Vol, veh/h	6	23	289	2	7	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	25	314	2	8	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	316	0	-	0	342	158
Stage 1	-	-	-	-	315	-
Stage 2	-	-	-	-	27	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1241	-	-	-	626	859
Stage 1	-	-	-	-	713	-
Stage 2	-	-	-	-	992	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1241	-	-	-	624	859
Mov Cap-2 Maneuver	-	-	-	-	624	-
Stage 1	-	-	-	-	709	-
Stage 2	-	-	-	-	992	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	9.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1241	-	-	-	777
HCM Lane V/C Ratio	0.005	-	-	-	0.035
HCM Control Delay (s)	7.9	0	-	-	9.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	42	51	12	2	131	0	35	0	7	0	0	125
Future Vol, veh/h	42	51	12	2	131	0	35	0	7	0	0	125
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	46	55	13	2	142	0	38	0	8	0	0	136

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	142	0	0	68	0	0	229	300	34	266	306	71
Stage 1	-	-	-	-	-	-	154	154	-	146	146	-
Stage 2	-	-	-	-	-	-	75	146	-	120	160	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1438	-	-	1531	-	-	707	611	1032	665	606	977
Stage 1	-	-	-	-	-	-	833	769	-	842	775	-
Stage 2	-	-	-	-	-	-	926	775	-	872	764	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1438	-	-	1531	-	-	593	590	1032	643	585	977
Mov Cap-2 Maneuver	-	-	-	-	-	-	593	590	-	643	585	-
Stage 1	-	-	-	-	-	-	806	744	-	814	774	-
Stage 2	-	-	-	-	-	-	796	774	-	837	739	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3	0.1	11.1	9.3
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	638	1438	-	-	1531	-	-	977
HCM Lane V/C Ratio	0.072	0.032	-	-	0.001	-	-	0.139
HCM Control Delay (s)	11.1	7.6	0	-	7.4	0	-	9.3
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.5

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↕			↕	↓	
Traffic Vol, veh/h	46	12	4	99	35	11
Future Vol, veh/h	46	12	4	99	35	11
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	50	13	4	108	38	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	63	0	119	32
Stage 1	-	-	-	-	57	-
Stage 2	-	-	-	-	62	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1538	-	864	1035
Stage 1	-	-	-	-	959	-
Stage 2	-	-	-	-	953	-
Platoon blocked, %	-	-			-	
Mov Cap-1 Maneuver	-	-	1538	-	861	1035
Mov Cap-2 Maneuver	-	-	-	-	861	-
Stage 1	-	-	-	-	959	-
Stage 2	-	-	-	-	950	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	897	-	-	1538	-
HCM Lane V/C Ratio	0.056	-	-	0.003	-
HCM Control Delay (s)	9.3	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	0	0	33	10	4
Future Vol, veh/h	11	0	0	33	10	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0			0	0	
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	0	0	36	11	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	49	13	15	0	-	0
Stage 1	13					
Stage 2	36	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12			
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42					
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	960	1067	1603			
Stage 1	1010	-	-	-	-	-
Stage 2	986	-				
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	960	1067	1603			
Mov Cap-2 Maneuver	960	-	-	-	-	-
Stage 1	1010					
Stage 2	986	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1603	-	960	-	-
HCM Lane V/C Ratio	-	-	0.012	-	-
HCM Control Delay (s)	0	-	8.8	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Intersection Delay, s/veh	12.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	57	342	61	0	234	0	49	34	0	56	50	107
Future Vol, veh/h	57	342	61	0	234	0	49	34	0	56	50	107
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	69	412	73	0	282	0	59	41	0	67	60	129
Number of Lanes	0	2	0	0	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	13.8	10	11.1	13.1
HCM LOS	B	A	B	B

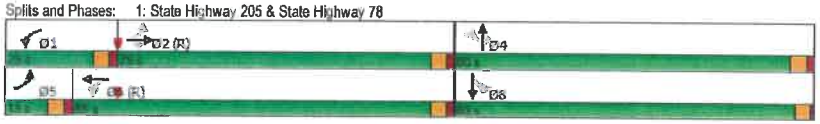
Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	59%	25%	0%	0%	0%	26%
Vol Thru, %	41%	75%	74%	100%	100%	23%
Vol Right, %	0%	0%	26%	0%	0%	50%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	83	228	232	117	117	213
LT Vol	49	57	0	0	0	56
Through Vol	34	171	171	117	117	50
RT Vol	0	0	61	0	0	107
Lane Flow Rate	100	275	280	141	141	257
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.183	0.47	0.454	0.252	0.183	0.417
Departure Headway (Hd)	6.577	6.157	5.843	6.446	4.678	5.845
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	542	582	615	554	760	613
Service Time	4.656	3.915	3.601	4.217	2.448	3.907
HCM Lane V/C Ratio	0.185	0.473	0.455	0.255	0.186	0.419
HCM Control Delay	11.1	14.3	13.4	11.4	8.5	13.1
HCM Lane LOS	B	B	B	B	A	B
HCM 95th-tile Q	0.7	2.5	2.4	1	0.7	2.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	1951	950	340	1928	0	1004	6	112	47	59	9
Future Volume (vph)	62	1951	950	340	1928	0	1004	6	112	47	59	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		200	150		0	0		150	0		0
Storage Lanes	1		1	1		0	2		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850		0.980	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5085	1583	1770	5085	0	3433	1863	1583	1770	1825	0
Flt Permitted	0.058			0.053			0.709			0.753		
Satd. Flow (perm)	108	5085	1583	99	5085	0	2562	1863	1583	1403	1825	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			390						122		5	
Link Speed (mph)		30			50			45			30	
Link Distance (ft)		506			2334			2241			368	
Travel Time (s)		11.5			31.8			34.0			8.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	67	2121	1033	370	2096	0	1091	7	122	51	64	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	67	2121	1033	370	2096	0	1091	7	122	51	74	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6			4		4	8		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		4	4	4	8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.5	23.5	23.5	23.5	23.5		23.5	23.5	23.5	22.5	22.5	
Total Split (s)	15.0	75.0	75.0	25.0	85.0		80.0	80.0	80.0	80.0	80.0	
Total Split (%)	8.3%	41.7%	41.7%	13.9%	47.2%		44.4%	44.4%	44.4%	44.4%	44.4%	
Maximum Green (s)	9.5	69.5	69.5	19.5	79.5		74.5	74.5	74.5	75.5	75.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5		5.5	5.5	5.5	4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
Act Effct Green (s)	77.9	69.5	69.5	94.5	80.6		74.5	74.5	74.5	75.5	75.5	
Actuated g/C Ratio	0.43	0.39	0.39	0.52	0.45		0.41	0.41	0.41	0.42	0.42	
v/c Ratio	0.54	1.08	1.22	1.59	0.92		1.03	0.01	0.17	0.09	0.10	
Control Delay	44.5	97.1	136.6	320.5	54.5		86.0	31.2	5.2	32.1	29.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	44.5	97.1	136.6	320.5	54.5		86.0	31.2	5.2	32.1	29.9	
LOS	D	F	F	F	D		F	C	A	C	C	
Approach Delay		108.7			94.4			77.6			30.8	
Approach LOS		F			F			E			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.59			
Intersection Signal Delay: 96.9		Intersection LOS: F	
Intersection Capacity Utilization 105.6%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 1: State Highway 205 & State Highway 78



Intersection	
Int Delay, s/veh	6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	522	163	55	283	117	40
Future Vol, veh/h	522	163	55	283	117	40
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	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	593	185	63	322	133	45

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	778	0	1134	686
Stage 1	-	-	-	-	686	-
Stage 2	-	-	-	-	448	-
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	-	-	839	-	224	447
Stage 1	-	-	-	-	500	-
Stage 2	-	-	-	-	644	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver			839		204	447
Mov Cap-2 Maneuver	-	-	-	-	204	-
Stage 1	-	-	-	-	500	-
Stage 2	-	-	-	-	585	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	41.3
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	204	447	-	-	839	-
HCM Lane V/C Ratio	0.652	0.102	-	-	0.074	-
HCM Control Delay (s)	50.7	14	-	-	9.6	0
HCM Lane LOS	F	B	-	-	A	A
HCM 95th %tile Q(veh)	3.9	0.3	-	-	0.2	-

Intersection	
Int Delay, s/veh	3.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	194	260	1025	311	206	1302
Future Vol, veh/h	194	260	1025	311	206	1302
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None	-	None		None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	196	263	1035	314	208	1315

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2266	675	0	0	1349	0
Stage 1	1192	-	-	-	-	-
Stage 2	1074	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	34	396	-	-	506	-
Stage 1	250	-	-	-	-	-
Stage 2	289	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	0	396	-	-	506	-
Mov Cap-2 Maneuver	0	-	-	-	-	-
Stage 1	250	-	-	-	-	-
Stage 2	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		0	7.9
HCM LOS	-		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	396	506	-
HCM Lane V/C Ratio	-	-	-	0.663	0.411	-
HCM Control Delay (s)	-	-	-	30.3	17	6.5
HCM Lane LOS	-	-	-	D	C	A
HCM 95th %tile Q(veh)	-	-	-	4.6	2	-

Notes

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

Intersection	
Int Delay, s/veh	3.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	10	1299	29	10	1475
Future Vol, veh/h	21	10	1299	29	10	1475
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	11	1412	32	11	1603

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2252	722	0	0	1444	0
Stage 1	1428	-	-	-	-	-
Stage 2	824	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	35	369	-	-	465	-
Stage 1	187	-	-	-	-	-
Stage 2	391	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	27	369	-	-	465	-
Mov Cap-2 Maneuver	27	-	-	-	-	-
Stage 1	187	-	-	-	-	-
Stage 2	307	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	258.6	0	1.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)			39	465	-
HCM Lane V/C Ratio	-	-	0.864	0.023	-
HCM Control Delay (s)	-	-	258.6	12.9	1.4
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	3.2	0.1	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	235	39	19	407	34	0
Future Vol, veh/h	235	39	19	407	34	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized		None		None		None
Storage Length	-	-	-	-	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	255	42	21	442	37	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	297	0	539	149
Stage 1	-	-	-	-	276	-
Stage 2	-	-	-	-	263	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1261	-	473	871
Stage 1	-	-	-	-	746	-
Stage 2	-	-	-	-	757	-
Platoon blocked, %	-	-				
Mov Cap-1 Maneuver	-	-	1261	-	463	871
Mov Cap-2 Maneuver	-	-	-	-	463	-
Stage 1	-	-	-	-	746	-
Stage 2	-	-	-	-	740	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	13.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	463	-	-	1261	-
HCM Lane V/C Ratio	0.08	-	-	0.016	-
HCM Control Delay (s)	13.4	-	-	7.9	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑			↑			↑	
Traffic Vol, veh/h	11	0	5	7	0	34	8	37	12	58	55	19
Future Vol, veh/h	11	0	5	7	0	34	8	37	12	58	55	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized			None			None			None			None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0			0			0			0	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	5	8	0	37	9	40	13	63	60	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	280	268	71	264	272	47	81	0	0	53	0	0
Stage 1	197	197		65	65							
Stage 2	83	71	-	199	207	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12			4.12		
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52		6.12	5.52							
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	672	638	991	689	635	1022	1517	-		1553	-	-
Stage 1	805	738	-	946	841	-	-	-	-	-	-	-
Stage 2	925	836		803	731							
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	624	607	991	659	604	1022	1517	-		1553	-	-
Mov Cap-2 Maneuver	624	607	-	659	604	-	-	-	-	-	-	-
Stage 1	800	706	-	940	836	-	-	-	-	-	-	-
Stage 2	886	831	-	764	700	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.2	9	1	3.3
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1517	-	-	706	934	1553	-	-
HCM Lane V/C Ratio	0.006	-	-	0.025	0.048	0.041	-	-
HCM Control Delay (s)	7.4	0	-	10.2	9	7.4	0	
HCM Lane LOS	A	A	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑			↑
Traffic Vol, veh/h	23	0	74	19	19	151
Future Vol, veh/h	23	0	74	19	19	151
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized		None		None		None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0		-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	0	80	21	21	164

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	297	91	0	0	101	0
Stage 1	91	-				
Stage 2	206	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42					
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	694	967	-		1491	-
Stage 1	933	-	-	-	-	-
Stage 2	829					
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	684	967	-	-	1491	-
Mov Cap-2 Maneuver	684	-	-	-	-	-
Stage 1	933	-	-	-	-	-
Stage 2	817	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	0.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	684	1491	-
HCM Lane V/C Ratio	-	- 0.037	0.014	-
HCM Control Delay (s)	-	- 10.5	7.4	0
HCM Lane LOS	-	- B	A	A
HCM 95th %tile Q(veh)	-	- 0.1	0	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	97	58	0	200	34	0
Future Vol, veh/h	97	58	0	200	34	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	105	63	0	217	37	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	168	0	246	84
Stage 1	-	-	-	-	137	-
Stage 2	-	-	-	-	109	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1407	-	721	958
Stage 1	-	-	-	-	875	-
Stage 2	-	-	-	-	903	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1407	-	721	958
Mov Cap-2 Maneuver	-	-	-	-	721	-
Stage 1	-	-	-	-	875	-
Stage 2	-	-	-	-	903	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	721	-	-	1407	-
HCM Lane V/C Ratio	0.051	-	-	-	-
HCM Control Delay (s)	10.3	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	77	189	8	5	11
Future Vol, veh/h	19	77	189	8	5	11
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	21	84	205	9	5	12

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	214	0	-	0	294	107
Stage 1	-	-	-	-	210	-
Stage 2	-	-	-	-	84	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1353	-	-	-	673	926
Stage 1	-	-	-	-	805	-
Stage 2	-	-	-	-	930	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1353	-	-	-	662	926
Mov Cap-2 Maneuver	-	-	-	-	662	-
Stage 1	-	-	-	-	792	-
Stage 2	-	-	-	-	930	-

Approach	EB	WB	SB
HCM Control Delay, s	1.5	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1353	-	-	-	823
HCM Lane V/C Ratio	0.015	-	-	-	0.021
HCM Control Delay (s)	7.7	0	-	-	9.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	139	147	39	8	92	0	23	0	5	0	0	82
Future Vol, veh/h	139	147	39	8	92	0	23	0	5	0	0	82
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized			None			None			None			None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #		0			0			0			0	
Grade, %		0			0			0			0	
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	151	160	42	9	100	0	25	0	5	0	0	89

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	100	0	0	202	0	0	551	601	101	500	622	50
Stage 1	-	-	-	-	-	-	483	483	-	118	118	-
Stage 2	-	-	-	-	-	-	68	118	-	382	504	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1490	-	-	1367	-	-	417	413	935	454	401	1008
Stage 1	-	-	-	-	-	-	534	551	-	874	797	-
Stage 2	-	-	-	-	-	-	934	797	-	612	539	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1490	-	-	1367	-	-	345	363	935	410	352	1008
Mov Cap-2 Maneuver	-	-	-	-	-	-	345	363	-	410	352	-
Stage 1	-	-	-	-	-	-	473	488	-	773	791	-
Stage 2	-	-	-	-	-	-	845	791	-	538	477	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.4	0.6	15	8.9
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	389	1490	-	-	1367	-	-	1008
HCM Lane V/C Ratio	0.078	0.101	-	-	0.006	-	-	0.088
HCM Control Delay (s)	15	7.7	0.2	-	7.7	0	-	8.9
HCM Lane LOS	C	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.3	0.3	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	113	39	12	76	23	7
Future Vol, veh/h	113	39	12	76	23	7
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	123	42	13	83	25	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	165	0	212	83
Stage 1	-	-	-	-	144	-
Stage 2	-	-	-	-	68	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1411	-	757	960
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	947	-
Platoon blocked, %	-	-				
Mov Cap-1 Maneuver	-	-	1411	-	749	960
Mov Cap-2 Maneuver	-	-	-	-	749	-
Stage 1	-	-	-	-	858	-
Stage 2	-	-	-	-	938	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	9.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	789	-	-	1411	-
HCM Lane V/C Ratio	0.041	-	-	0.009	-
HCM Control Delay (s)	9.8	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	0	0	27	90	12
Future Vol, veh/h	7	0	0	27	90	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	0	0	29	98	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	134	105	111	0	-	0
Stage 1	105	-	-	-	-	-
Stage 2	29	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	860	949	1479	-	-	-
Stage 1	919	-	-	-	-	-
Stage 2	994	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	860	949	1479	-	-	-
Mov Cap-2 Maneuver	860	-	-	-	-	-
Stage 1	919	-	-	-	-	-
Stage 2	994	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.2	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT EBLn1	SBT	SBR
Capacity (veh/h)	1479	- 860	-	-
HCM Lane V/C Ratio	-	- 0.009	-	-
HCM Control Delay (s)	0	- 9.2	-	-
HCM Lane LOS	A	- A	-	-
HCM 95th %tile Q(veh)	0	- 0	-	-

Exhibit H
Parks, Trails and Open Space

NORTH

SCALE: 1" = 500'-0"

LAVON TRACT / CONCEPTUAL LANDSCAPE PLAN

Lavon, Texas

SHEET 1 OF 29
City Submittal 8-26-2021

CODY JOHNSON
s·t·u·d·i·o

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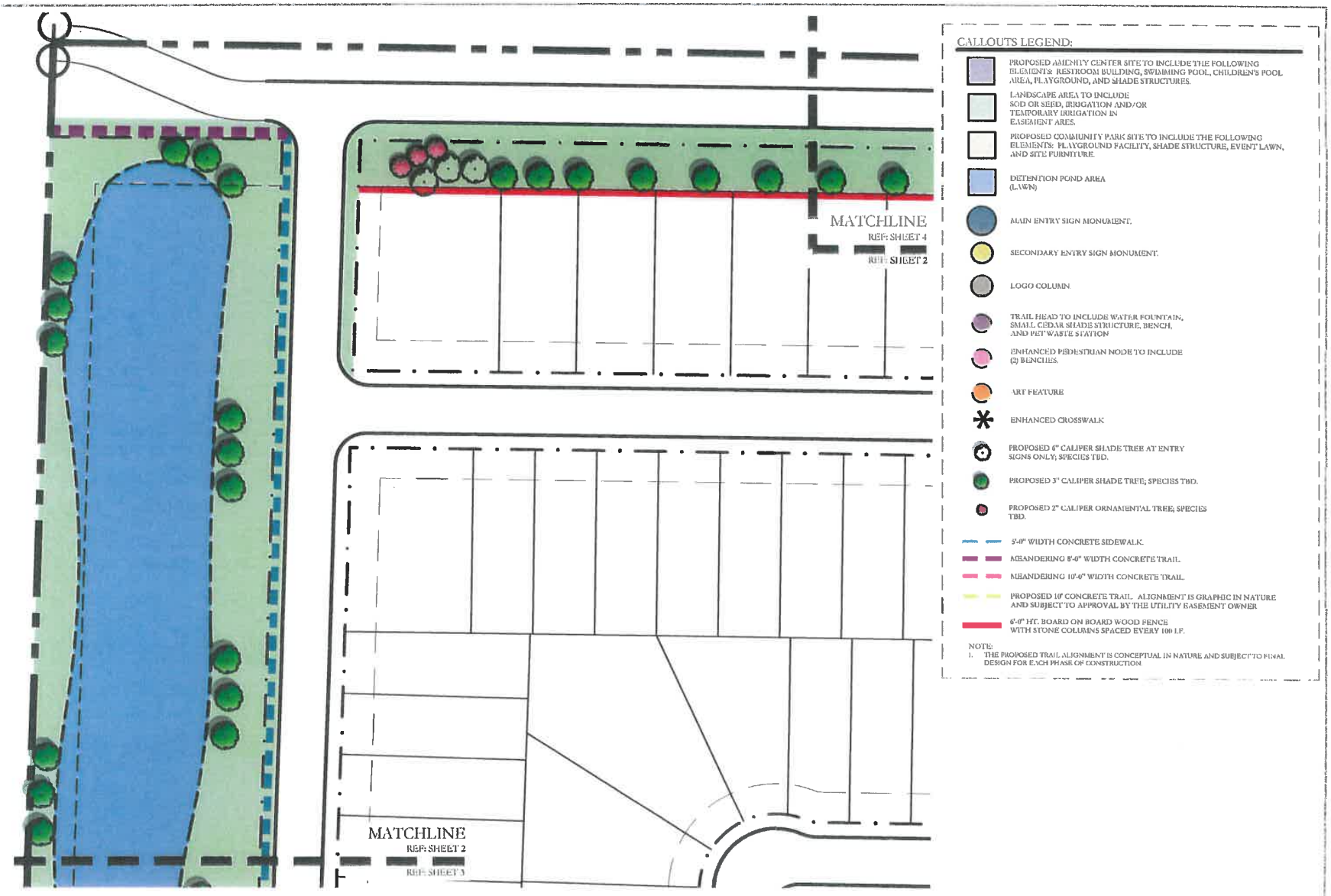

NORTH
SCALE: 1" = 80'-0"

LAVON TRACT / CONCEPTUAL LANDSCAPE PLAN

Lavon, Texas

SHEET 2 OF 29
City Submittal 8-26-2021

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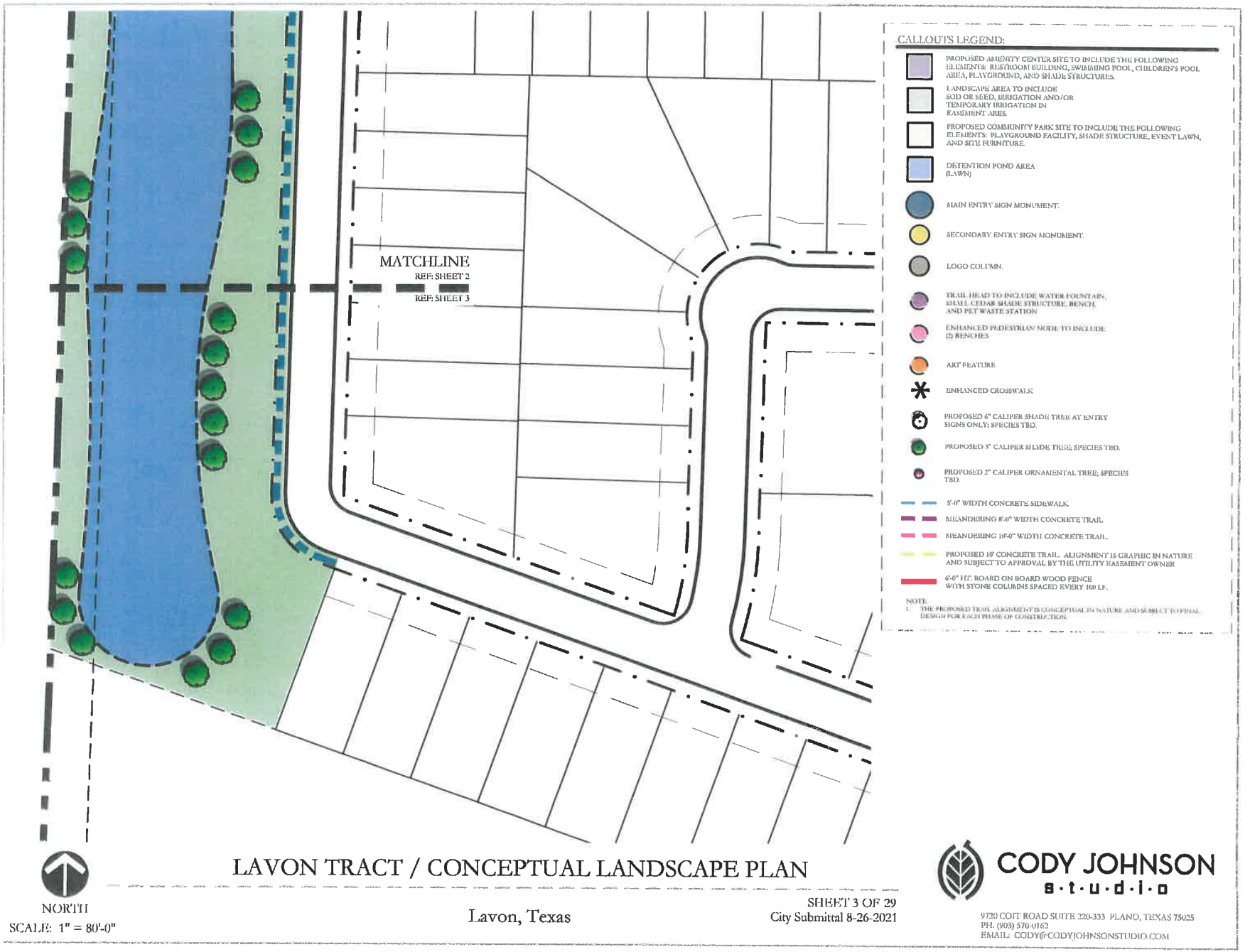

NORTH
SCALE: 1" = 80'-0"

LAVON TRACT / CONCEPTUAL LANDSCAPE PLAN

Lavon, Texas

SHEET 3 OF 29
City Submittal 8-26-2021

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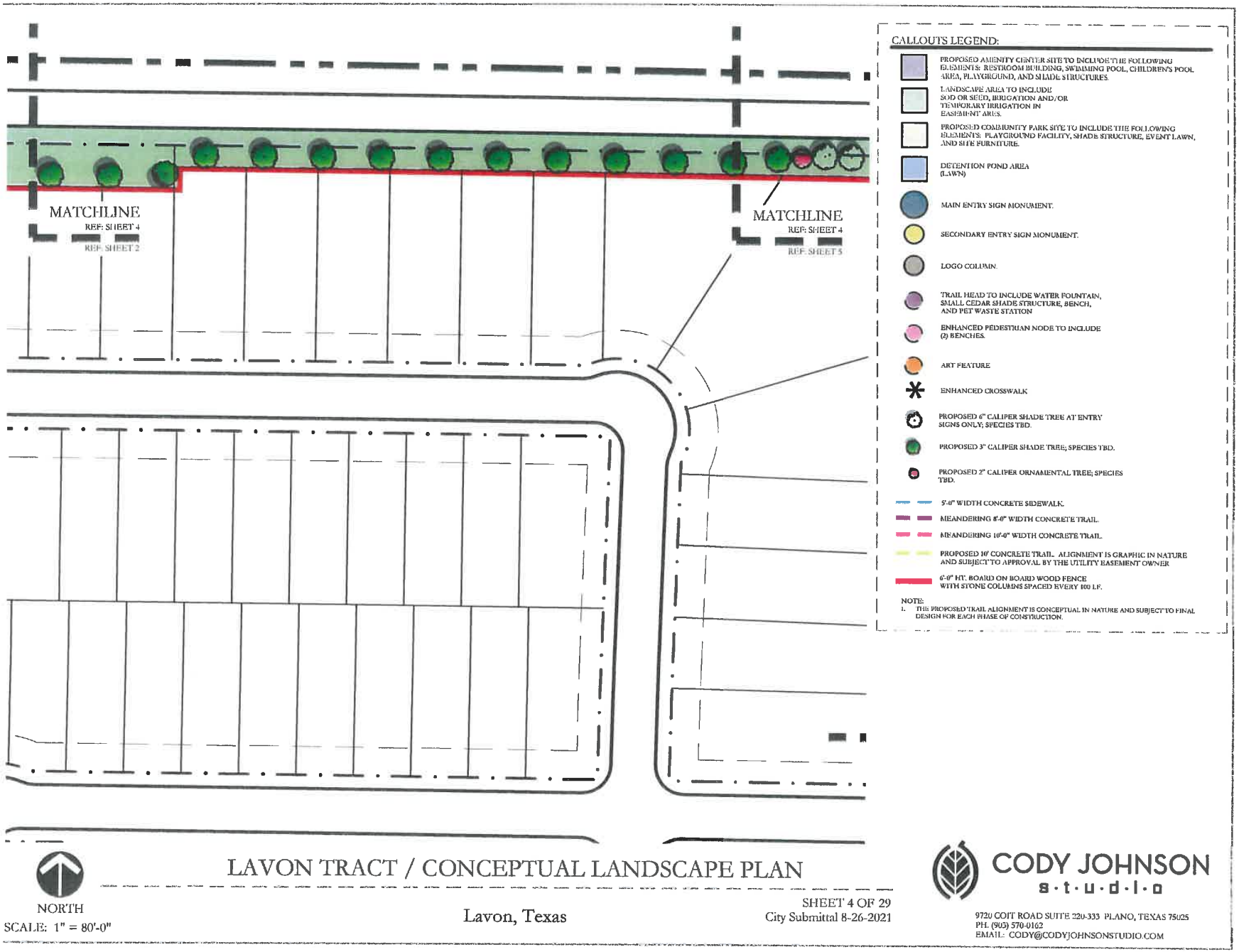

LAVON TRACT / CONCEPTUAL LANDSCAPE PLAN

NORTH
SCALE: 1" = 80'-0"

Lavon, Texas

SHEET 4 OF 29
City Submittal 8-26-2021

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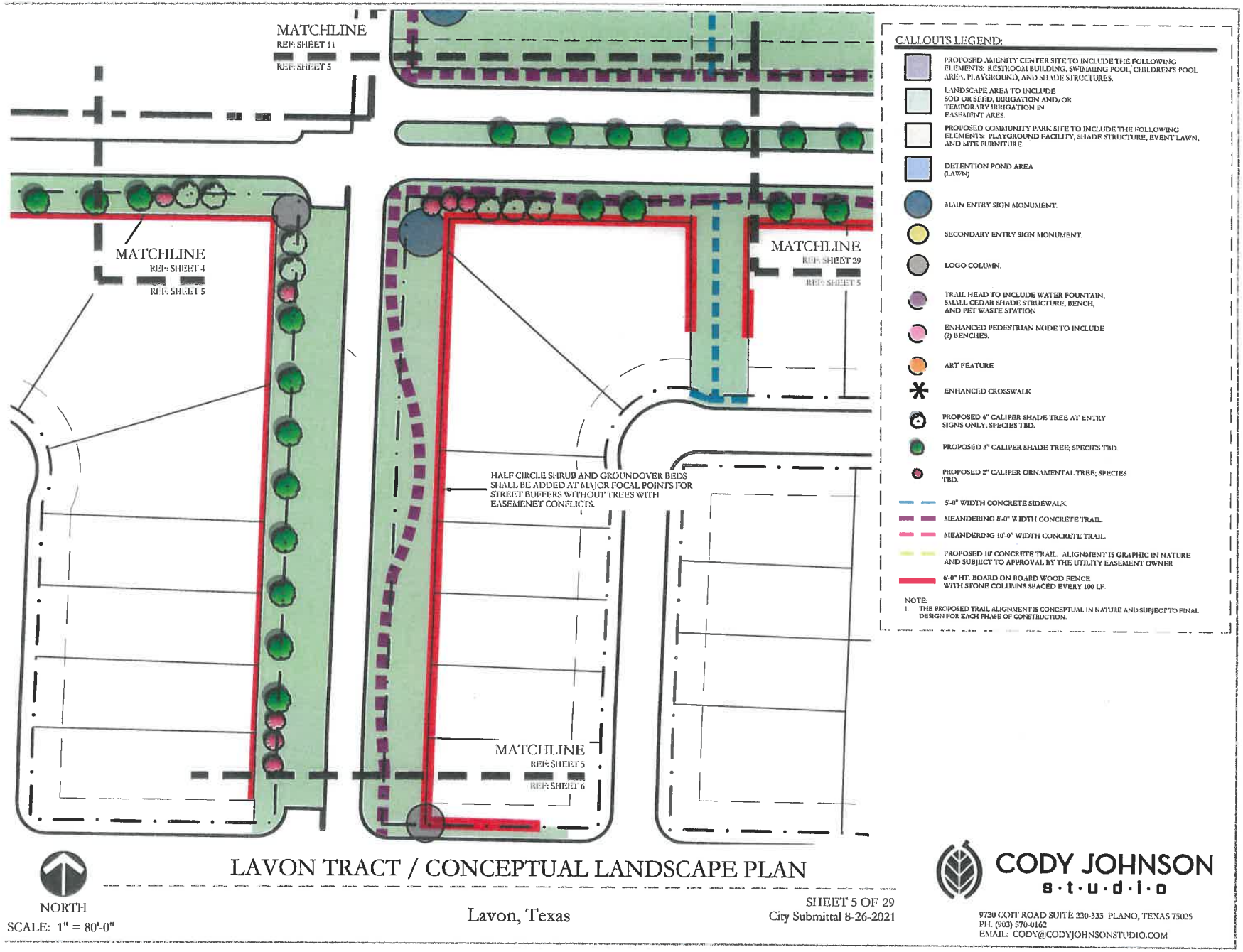

LAVON TRACT / CONCEPTUAL LANDSCAPE PLAN

NORTH

SCALE: 1" = 80'-0"

Lavon, Texas

SHEET 5 OF 29
City Submittal 8-26-2021

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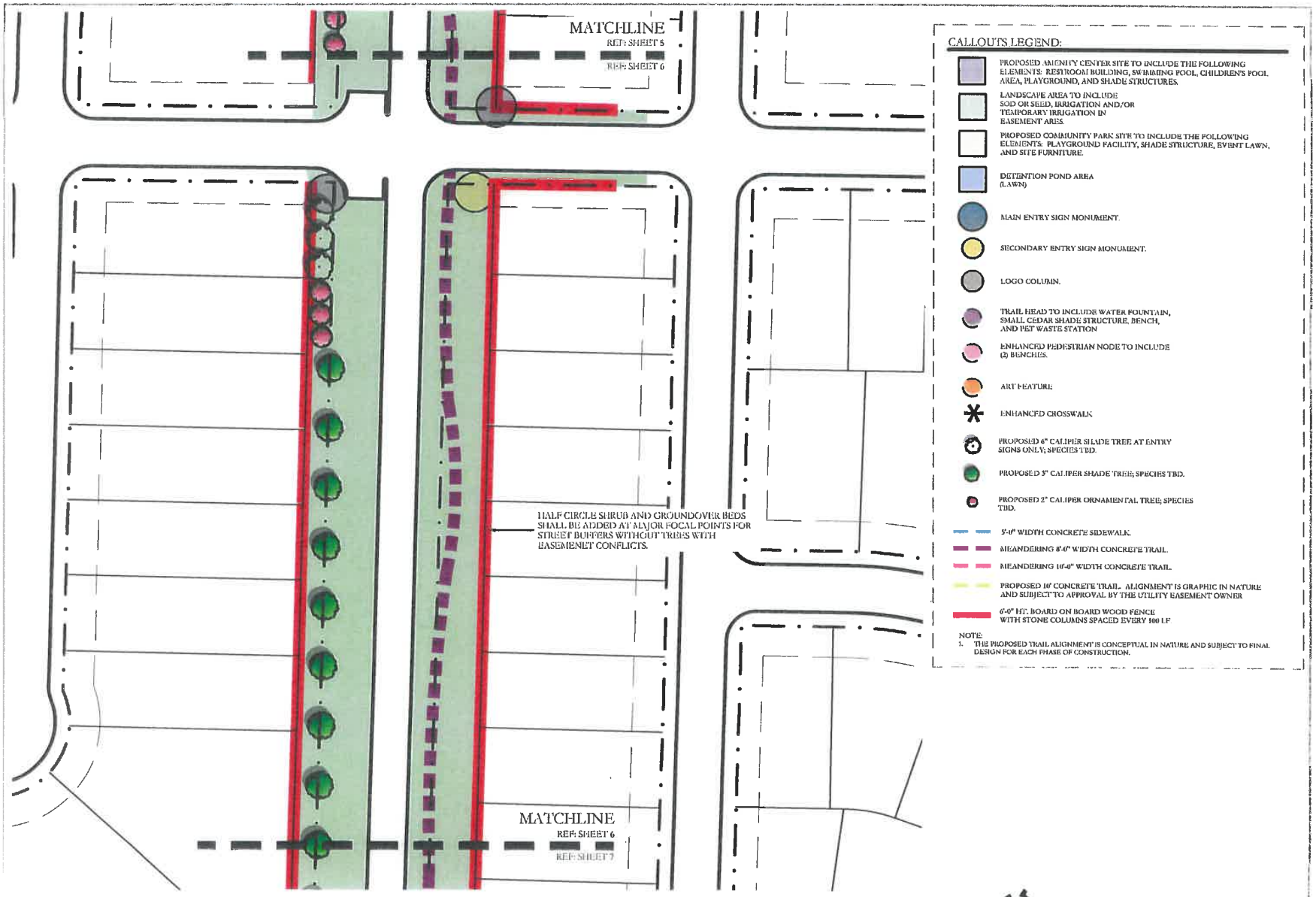

NORTH
SCALE: 1" = 80'-0"

LAVON TRACT / CONCEPTUAL LANDSCAPE PLAN

Lavon, Texas

SHEET 6 OF 29
City Submittal 8-26-2021

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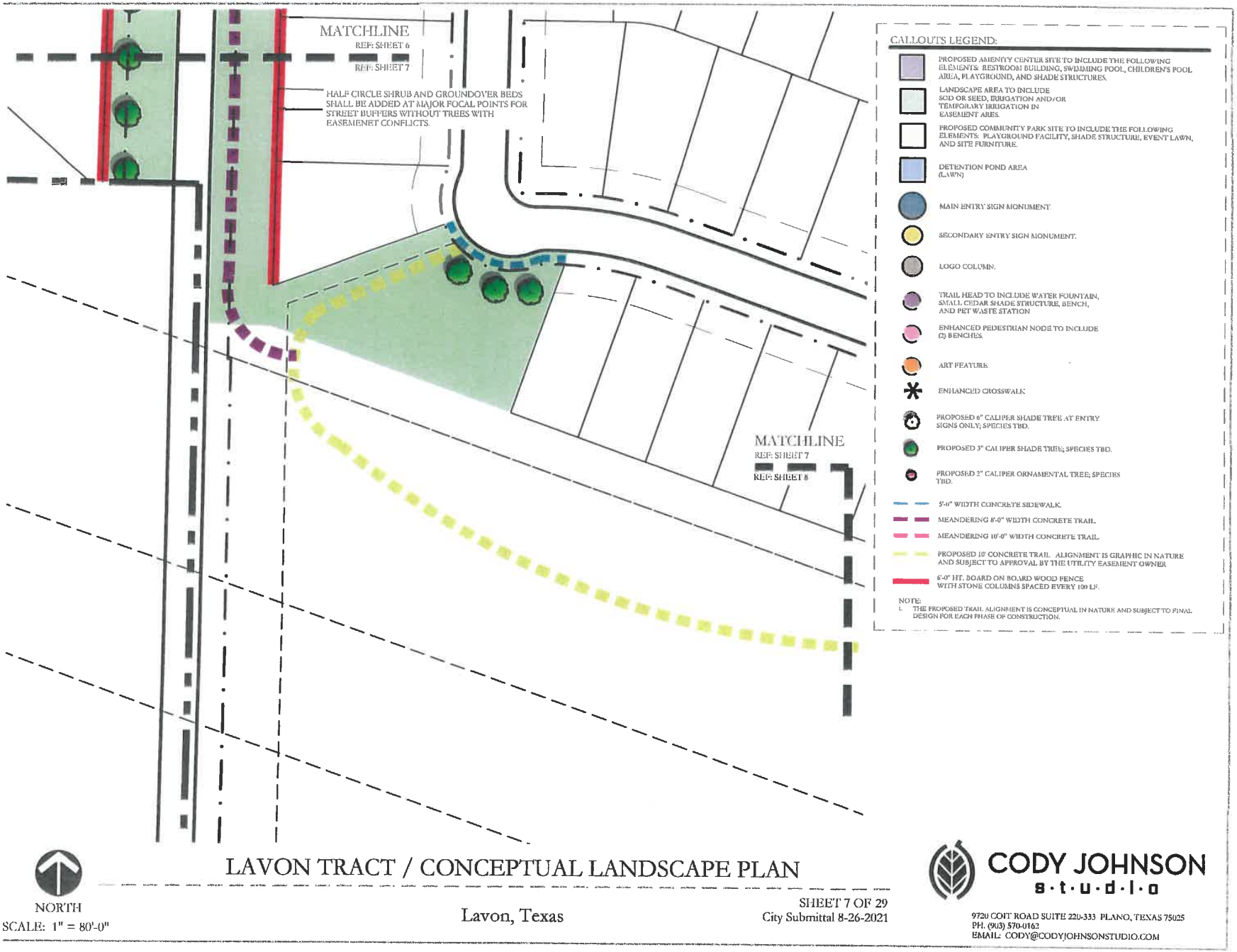

NORTH

SCALE: 1" = 80'-0"

LAVON TRACT / CONCEPTUAL LANDSCAPE PLAN

Lavon, Texas

SHEET 7 OF 29
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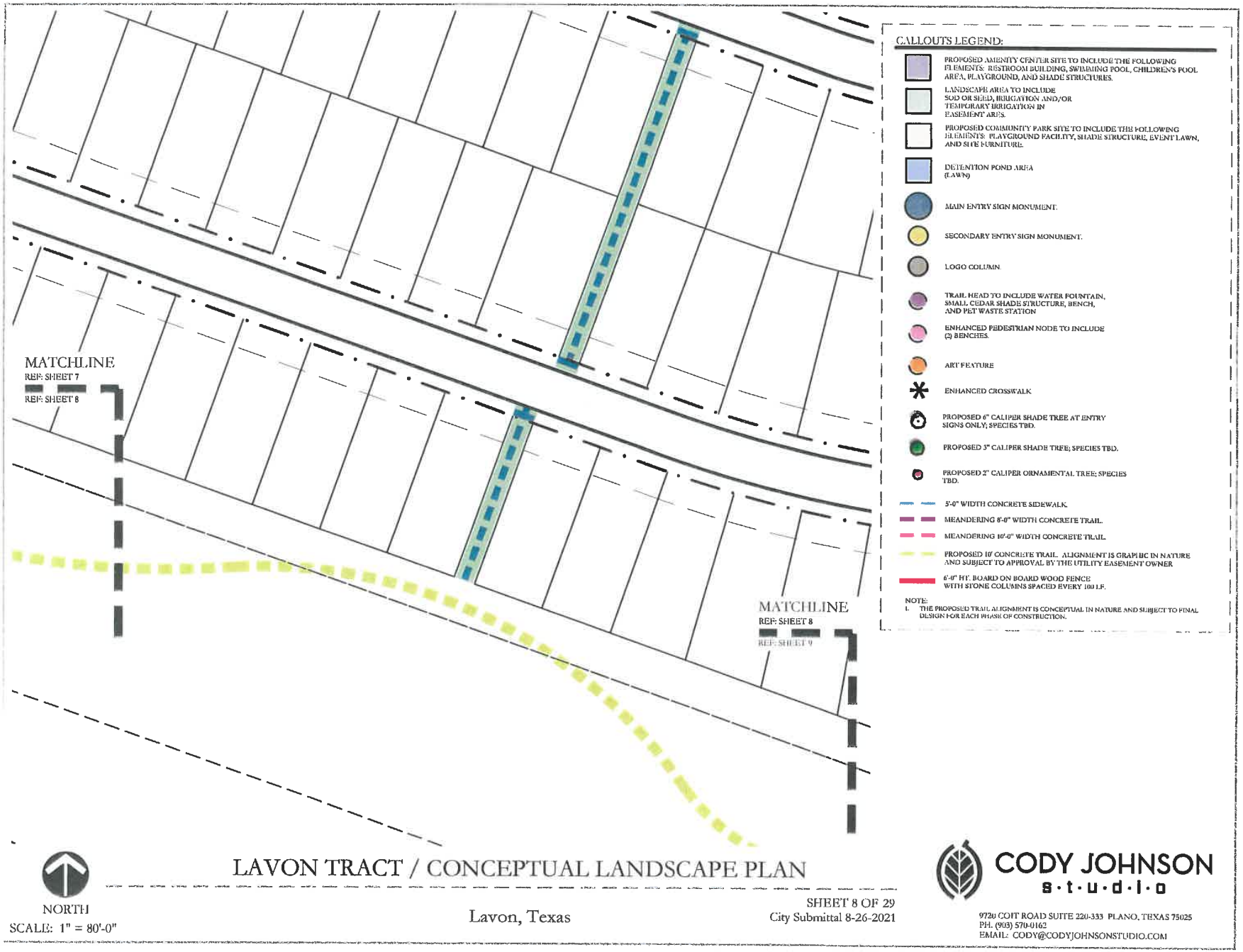

LAVON TRACT / CONCEPTUAL LANDSCAPE PLAN

NORTH
SCALE: 1" = 80'-0"

Lavon, Texas

SHEET 8 OF 29
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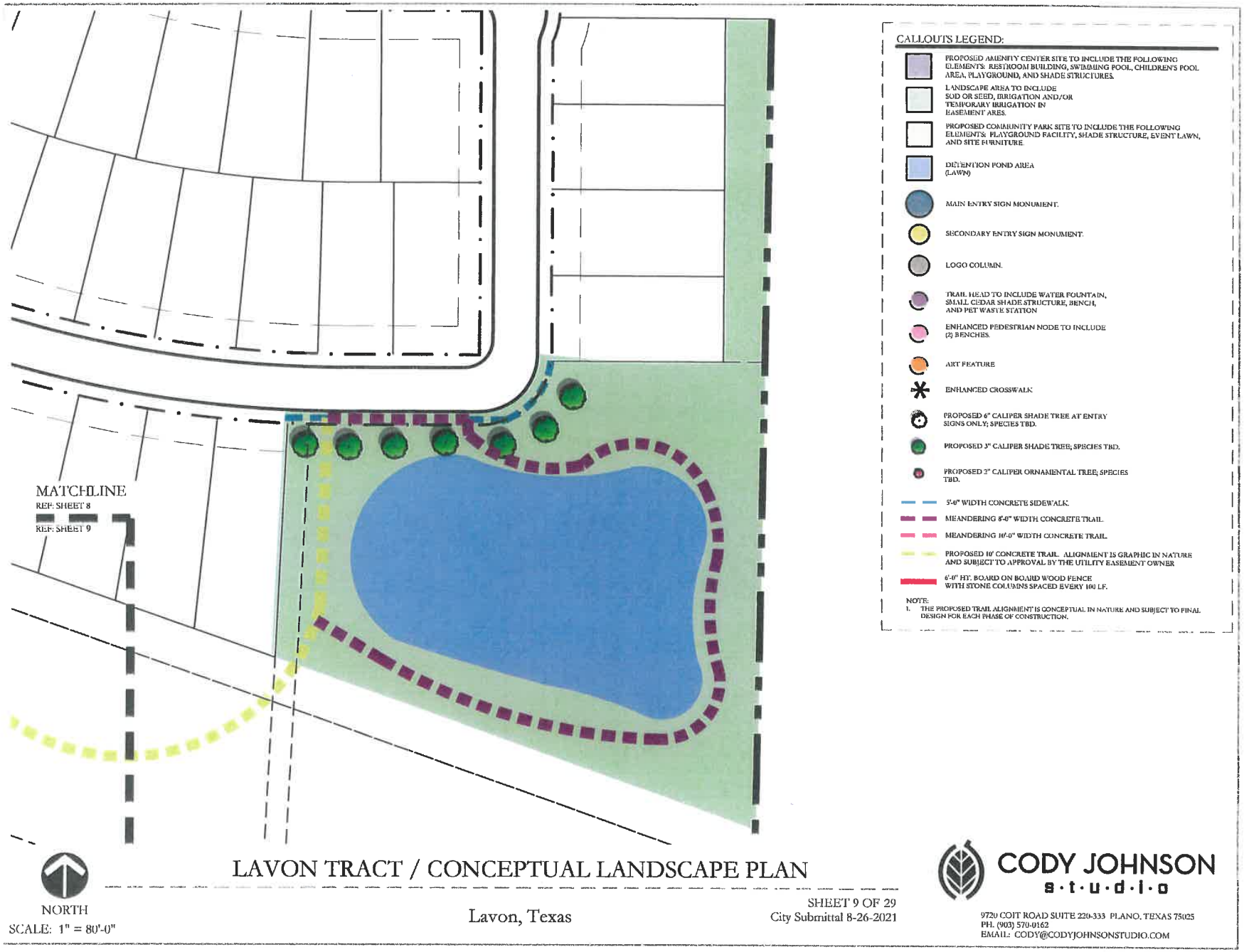

LAVON TRACT / CONCEPTUAL LANDSCAPE PLAN

Lavon, Texas

SHEET 9 OF 29
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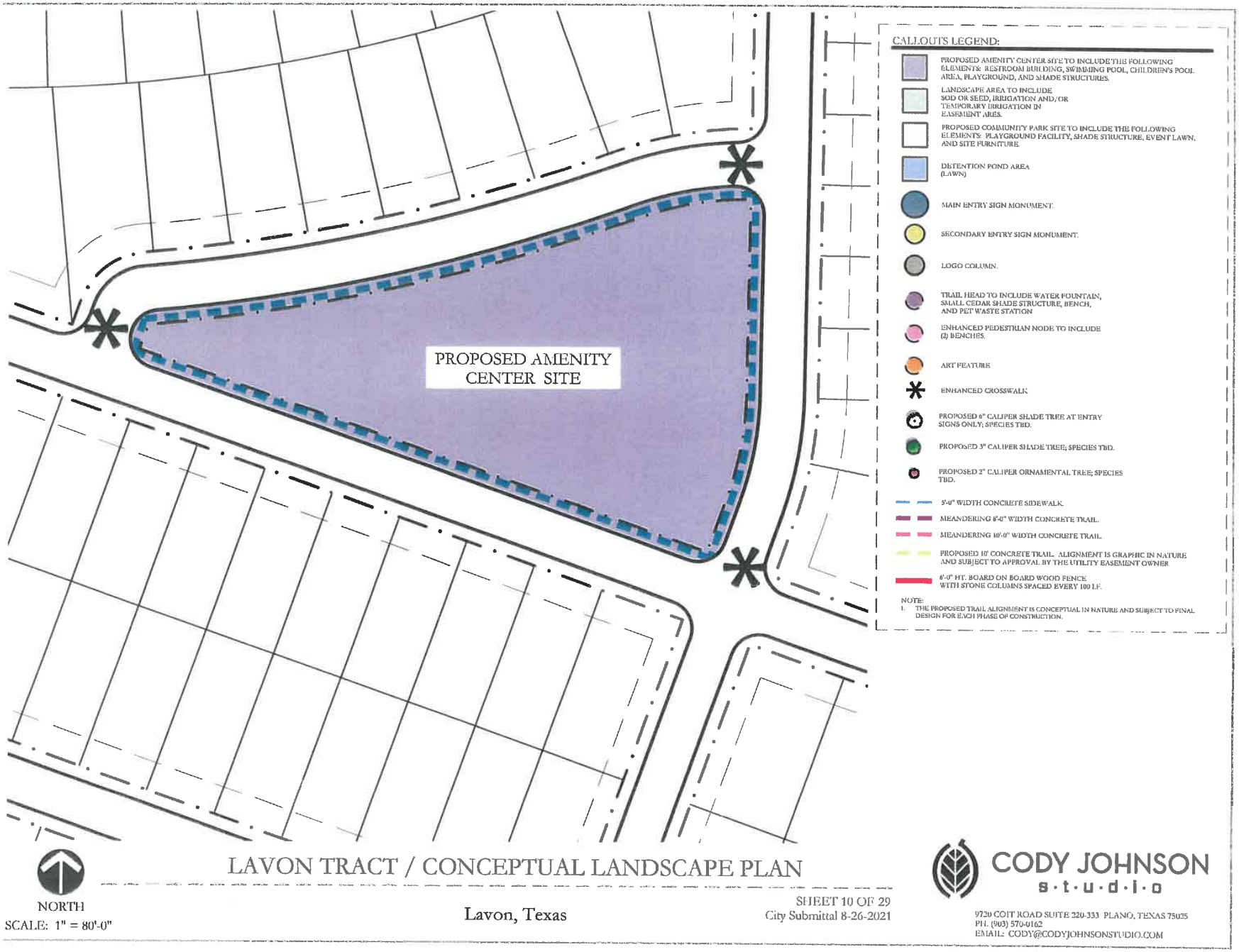

LAVON TRACT / CONCEPTUAL LANDSCAPE PLAN

Lavon, Texas

SHEET 10 OF 29
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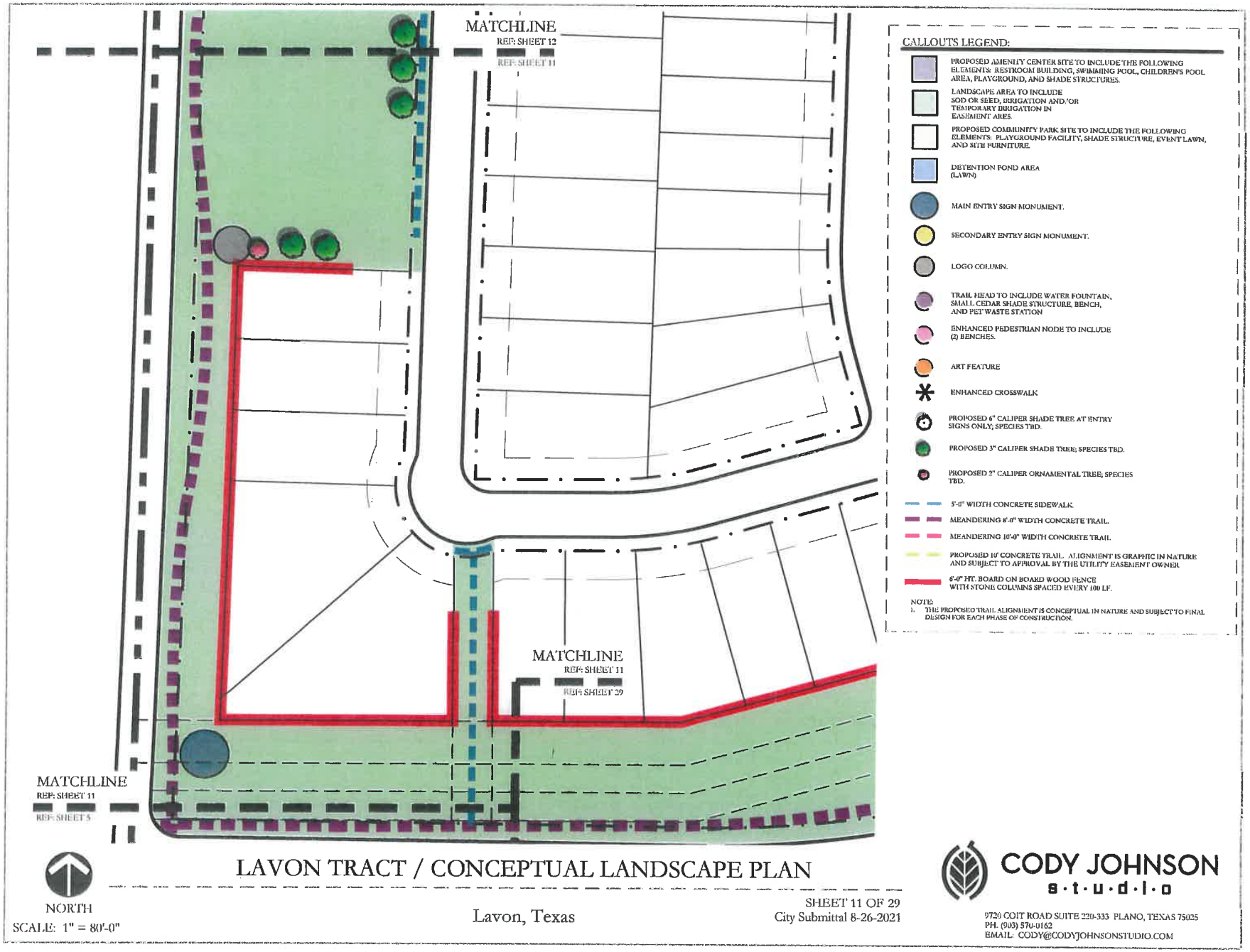
MATCHLINE
REF: SHEET 12
REF: SHEET 11
MATCHLINE
REF: SHEET 11
REF: SHEET 29
MATCHLINE
REF: SHEET 11
REF: SHEET 5
CALLOUTS LEGEND:
PROPOSED AMENITY CENTER SITE TO INCLUDE THE FOLLOWING ELEMENTS: RESTROOM BUILDING, SWIMMING POOL, CHILDREN'S POOL AREA, PLAYGROUND, AND SHADE STRUCTURES.
LANDSCAPE AREA TO INCLUDE SOD OR SEED, IRRIGATION AND/OR TEMPORARY IRRIGATION IN EASEMENT ARES.
PROPOSED COMMUNITY PARK SITE TO INCLUDE THE FOLLOWING ELEMENTS: PLAYGROUND FACILITY, SHADE STRUCTURE, EVENT LAWN, AND SITE FURNITURE.
DETENTION POND AREA (LAWN)
MAIN ENTRY SIGN MONUMENT.
SECONDARY ENTRY SIGN MONUMENT.
LOGO COLUMN.
TRAIL HEAD TO INCLUDE WATER FOUNTAIN, SMALL CEDAR SHADE STRUCTURE, BENCH, AND PET WASTE STATION
ENHANCED PEDESTRIAN NODE TO INCLUDE (2) BENCHES.
ART FEATURE
ENHANCED CROSSWALK
PROPOSED 6" CALIPER SHADE TREE AT ENTRY SIGNS ONLY; SPECIES TBD.
PROPOSED 3" CALIPER SHADE TREE; SPECIES TBD.
PROPOSED 2" CALIPER ORNAMENTAL TREE; SPECIES TBD.
5'-0" WIDTH CONCRETE SIDEWALK.
MEANDERING 8'-0" WIDTH CONCRETE TRAIL.
MEANDERING 10'-0" WIDTH CONCRETE TRAIL.
PROPOSED 10' CONCRETE TRAIL. ALIGNMENT IS GRAPHIC IN NATURE AND SUBJECT TO APPROVAL BY THE UTILITY EASEMENT OWNER
6'-0" HT. BOARD ON BOARD WOOD FENCE WITH STONE COLUMNS SPACED EVERY 100 LF.
NOTE:
1. THE PROPOSED TRAIL ALIGNMENT IS CONCEPTUAL IN NATURE AND SUBJECT TO FINAL DESIGN FOR EACH PHASE OF CONSTRUCTION.
NORTH
SCALE: 1" = 80'-0"
LAVON TRACT / CONCEPTUAL LANDSCAPE PLAN
Lavon, Texas
SHEET 11 OF 29
City Submittal 8-26-2021
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LAVON TRACT / CONCEPTUAL LANDSCAPE PLAN

Lavon, Texas

SHEET 12 OF 29
City Submittal 8-26-2021

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NORTH

SCALE: 1" = 80'-0"

LAVON TRACT / CONCEPTUAL LANDSCAPE PLAN

Lavon, Texas

SHEET 13 OF 29
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LAVON TRACT / CONCEPTUAL LANDSCAPE PLAN

NORTH
SCALE: 1" = 80'-0"

Lavon, Texas

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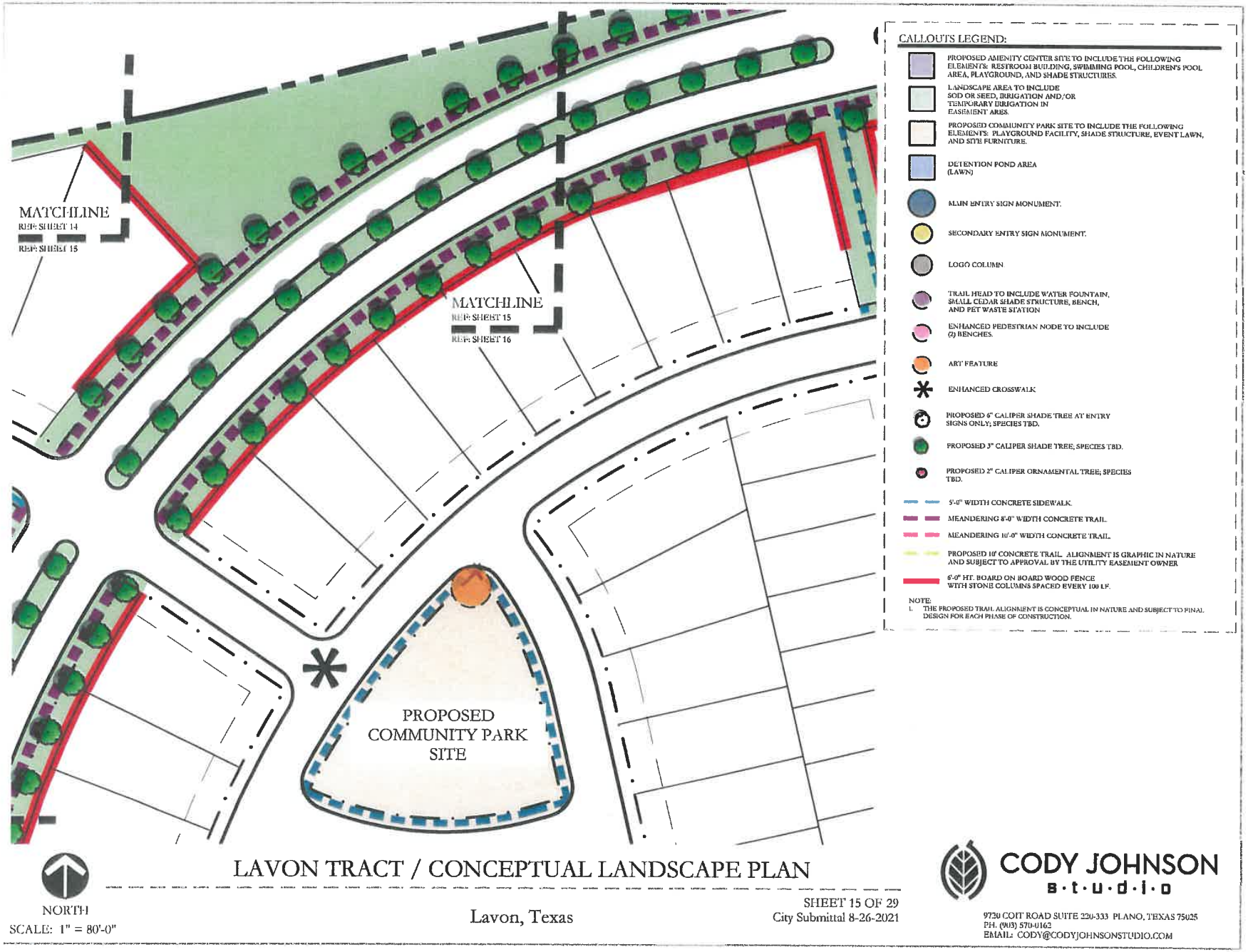

LAVON TRACT / CONCEPTUAL LANDSCAPE PLAN

NORTH

SCALE: 1" = 80'-0"

Lavon, Texas

SHEET 15 OF 29
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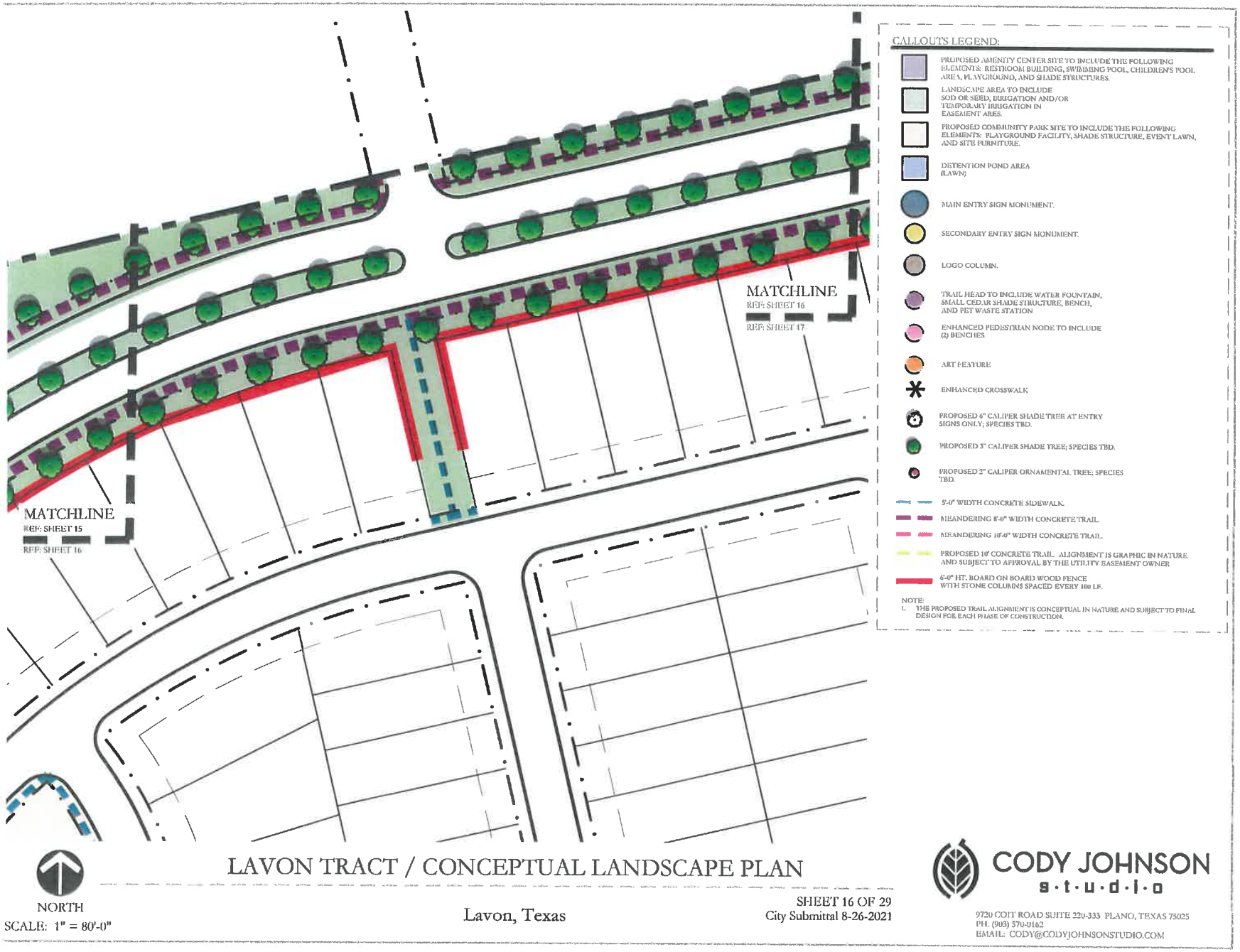

LAVON TRACT / CONCEPTUAL LANDSCAPE PLAN

Lavon, Texas

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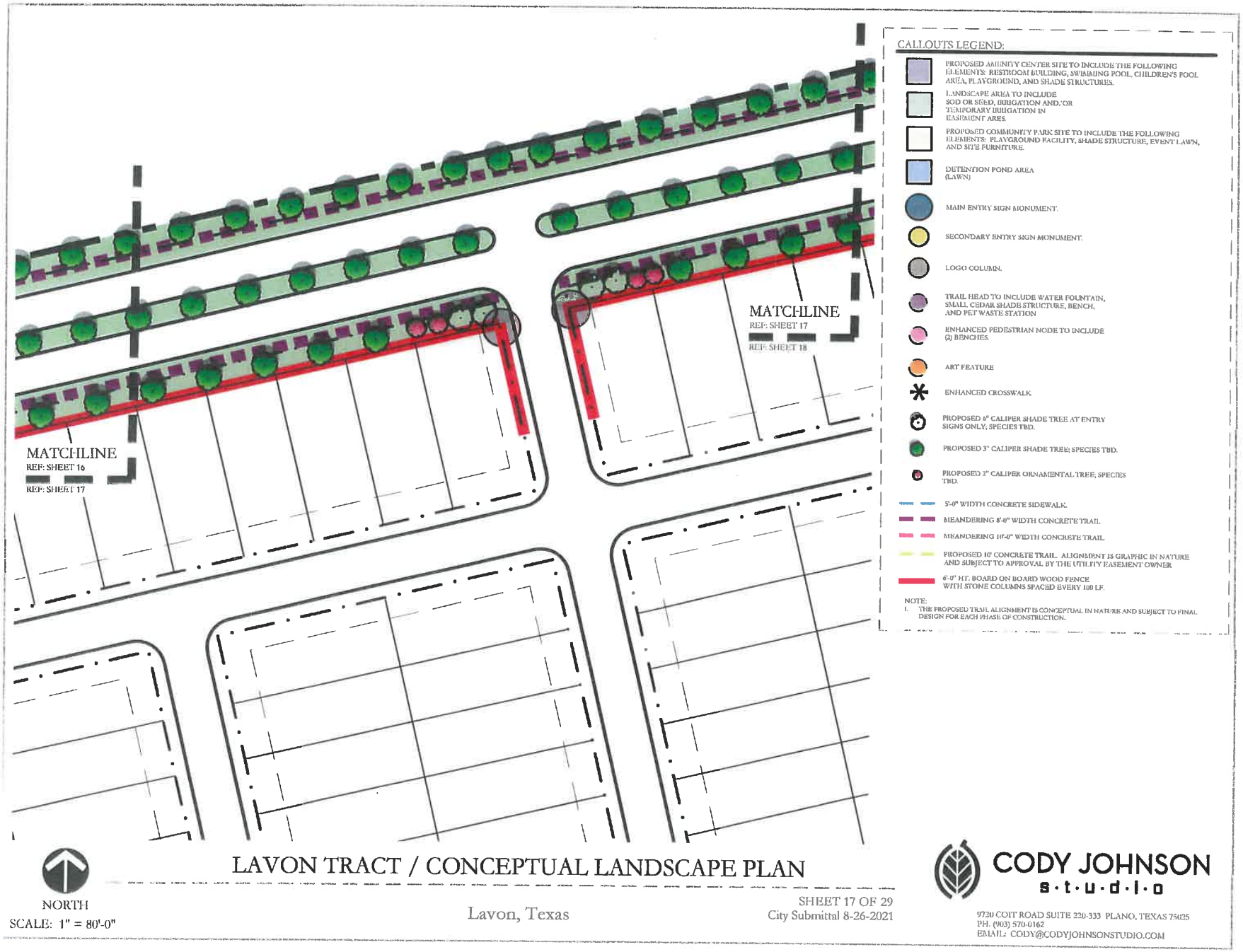

LAVON TRACT / CONCEPTUAL LANDSCAPE PLAN

NORTH
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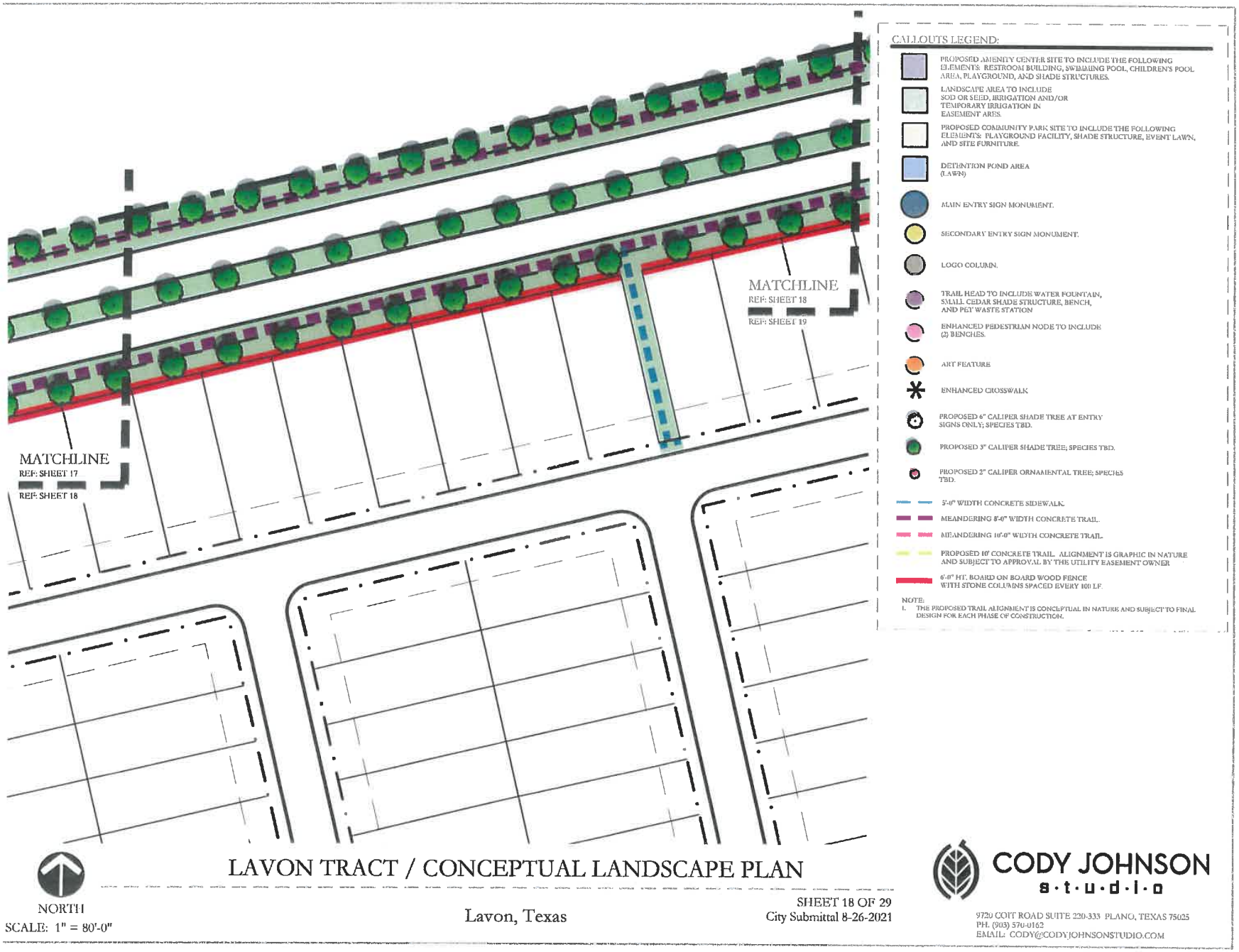

LAVON TRACT / CONCEPTUAL LANDSCAPE PLAN

NORTH
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