All property owners, tenants, and neighborhood associations within 500 feet of this rezoning have been notified per UDO Sec. 2.2.11 *Public Notification*.

BACKGROUND INFORMATION:

Location: 0, 0, 1701, and 1615 E. Williams Street (portion of)
Owners: ALA Commercial, LLC and Town of Apex
Applicant: Paxton Hollar, Strategic Real Estate Partners
Authorized Agents: Jason Barron and Leticia Shapiro, Morningstar Law Group; Jeff Roach, Peak Engineering and Design; Town of Apex

PROJECT DESCRIPTION:

Acreage: ±64.37
PINs: 0751003311, 0741915068, 0741915068 & 0741911743 (portion of)
Current Zoning: Planned Unit Development-Conditional Zoning (PUD-CZ #06CZ26)
Proposed Zoning: Planned Unit Development-Conditional Zoning (PUD-CZ)
2045 Land Use Map: Commercial Services and Office Employment/Industrial Employment
Town Limits: ETJ and Corporate Limits

Adjacent Zoning & Land Uses:

	Zoning	Land Use
North:	Light Industrial (LI)	Gas and fuel, wholesale (Dixie Pipeline Co)
South:	Planned Unit Development-Conditional Zoning (PUD-CZ #16CZ32)	Vacant
East:	Light Industrial (LI)	Vacant
West:	Planned Commercial-Conditional Use (PC-CU #05CU23 and 00CU02); Light Industrial (LI)	Apex Public Safety Station #4; E. Williams Street; Vacant land; Gas and fuel, wholesale; Contractor yard with storage

BACKGROUND

The Jessie Commons Planned Unit Development site background includes the following:

Date	Action
March 2007	Rezoning #06CZ26 Jessie Commons PUD approved
June 2008	Town of Apex Public Safety Station #4 portion constructed on northwest corner of Jessie Commons PUD
Transportation Amendments	
Feb 2019	Hwy 55 changed to a 6 lanes superstreet with a grade separated interchange. (Advance Apex 2045 Transportation Plan)
August 2023	• Future grade separated interchange at Hwy 55 and Jessie Dr. was removed at the request from development interest on the east side of Hwy 55. Added a future Reduced Conflict Intersection (RCI) at Hwy 55 and Jessie Dr. • Added future major collector street between future Jessie Dr. extension and future Gladsong Dr.

Prepared by: June Cowles, Senior Planner

	• Realign future Jessie Dr. extension for consistency as stated in the Jessie Dr. Feasibility Study Final Report.

EXISTING CONDITIONS

The proposed rezoning is located on the east side of E. Williams Street (NC 55), south of Pristine Water Drive and north of Bobbitt Road. The parcel includes mature woods and a stream transects the site north to south. The northwest corner of the project site includes a portion of the Apex (See Figure 1: Site Location and Existing Conditions).



Figure 1: Site Location and Existing Conditions

NEIGHBORHOOD MEETINGS

The applicant conducted the first neighborhood meeting on February 11, 2026, and the second neighborhood meeting on July 13, 2026. The neighborhood meeting reports are attached.

2045 LAND USE MAP

The 2045 Land Use Map classifies the properties subject to this rezoning as Commercial Services and Office Employment/Industrial Employment. The proposed amendments to the PUD-CZ zoning are consistent with those classifications.

APEX TRANSPORTATION PLAN

The Apex Thoroughfare and Collector Street Plan Map and Apex Bicycle and Pedestrian System Plan Map (See Figure 2: Apex Transportation Plan and Project Site) identify the following for the proposed rezoning:

- NC 55 (East Williams Street) is required to be improved to a 6-lane superstreet with a 10 ft wide side path on either side. The intersection of NC 55 and Jessie Drive is required to be constructed as an RCI.
- Jessie Drive is required to be constructed as a 4-lane thoroughfare with a median crossing the site east to west. A 10 ft wide side path will be required on either side.
- NC 55 (East Williams Street) is required to be improved to a 6-lane superstreet with a 10 ft wide side path on either side.
- A major collector street with bike lanes is required to be constructed south of Jessie Drive and west of the creek.
- A minor collector street is required to be constructed south of Jessie Drive and east of the creek along the eastern property line.



Figure 2: Apex Transportation Plan and Project Site

PROPOSED PLANNED UNIT DEVELOPMENT AMENDMENT

The approved Jessie Commons PUD includes designated commercial and office areas identified as C-1, C-2, O-1, and O-2, with corresponding design controls. (See Figure 3: Approved Jesse Common PUD (#06CZ26) Preliminary Land Use Plan).

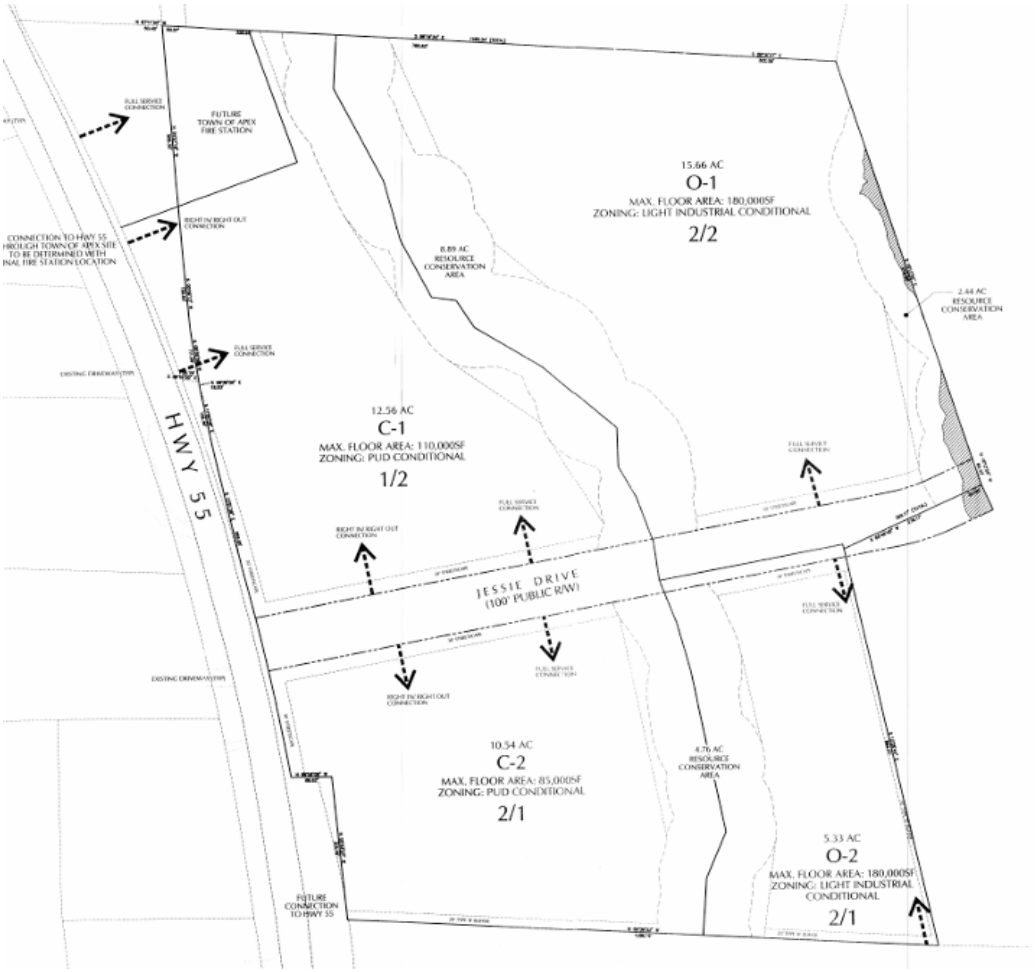


Figure 3: Approved Jessie Commons PUD (#06CZ26) Preliminary Land Use Plan

The applicant proposed the following revisions to the approved Jessie Commons PUD (#06CZ26):

Section 6.0 Design Controls:	Increase to the building square footage and height, deletions are shown with strikethrough and additions are shown in red.
Section 13.0 Public Facilities:	Deletions are shown in strikethrough and additions are shown in bold.

6.0 DESIGN CONTROLS

The applicant originally proposed an increase building square footage (total 60,000 sq ft):

- O-1 area from 180,000 sq ft to 200,000 sq ft.
- O-2 area from 60,000 sq ft to 100,000 sq ft.

Revised After the Planning Board October 12, 2026 meeting:

After the Planning Board meeting, the applicant revised the location of the proposed 60,000 sq ft addition:

- O-1 area from 180,000 sq ft to 240,000 sq ft

The applicant stated that O-2 area cannot accommodate the building square footage increase.

6.0 DESIGN CONTROLS

	C-1	C-2	O-1	O-2
Maximum non-residential SF	110,000	85,000	~~180,000~~ 240,000	60,000
Maximum building height	~~40'~~48'	~~40'~~48'	~~30'~~48'	~~30'~~48'
Minimum building setback to interior property line	10'	10'	0'	0'
Minimum parking/drive setback to interior property line	0'	0'	0'	0'
Minimum building setback to Hwy 55 / Jessie Drive	30'	30'	30'	30'
Minimum building setback to perimeter property line	30'	30'	30'	30'
Minimum building setback to RCA*	10'	10'	10'	10'
Minimum parking/drive setback to RCA*	5'	5'	5'	5'
Maximum impervious surface	70%	70%	70%	70%

* If no vegetation exists in RCA areas adjacent to building /drive area no setback shall be required.

13.0 PUBLIC FACILITIES

Revised after the October 12, 2026 Planning Board meeting:
The applicant revised several traffic conditions to address staff comments. Below are the applicant's currently proposed conditions (See Figure 4: Proposed Transportation Site Access and Movement);

All public facilities and infrastructure shall be designated per the current Town of Apex standards and specifications and shall be consistent with the Town of Apex Transportation Plan and Master Plan. Public facilities requirements established in UDO Sec. 2.3.4(F)(1)(f) are met as follows:

~~i) The on-site circulation system is determined by the Town of Apex Thoroughfare and Collector Street Plan for the most part with frontage on NC 55 and the construction of Jessie Drive on 100' public right-of-way from NC 55 to the eastern boundary of the site. The commercial site C-1 will connect to Jessie Drive and NC 55 by private drives shown on the site layout plan. The commercial site C-2 will connect to Jessie Drive by private drives shown on the site layout plan and include a stub to the west for future connection to NC 55 by others. The office/flex site O-1 will connect to Jessie Drive by a public Collector Street on 60' public right-of-way shown on the site layout plan. Jessie Drive shall be constructed as a four-lane divided roadway with landscaped median from NC 55 to the intersection of the full-service private driveways serving C-1 and C-2 in the first phase of this project. An additional northbound lane shall be constructed along the property frontage on NC 55 with the first phase of parcel development. The traffic signal at the intersection of NC 55 and Jessie Drive shall be constructed in the first phase of this project when permitted by North Carolina Department on Transportation. The extension of Jessie Drive to the eastern boundary of the site as an interim two-lane roadway with the left turn bays on 100' public right-of-way with grading for the ultimate four lane median-divided roadway shall be constructed in the second phase of this project. The Collector Street on 60' Construction of the private site driveways shall be completed with development of the parcel it abuts. Construction of the private site driveways shall be~~

~~completed in accordance with the recommendation in the Traffic Impact Analysis.~~

i) Recommended Improvements:

The following conditions regarding transportation improvements apply and shall be phased consistent with the Traffic Impact Analysis that has been performed for this rezoning, which is on file with the Town of Apex. All proposed driveway access and improvements on state-maintained roadways are subject to both Apex and NCDOT review and approval. Except as set forth herein, all proposed roadway infrastructure and right-of-way dedications will be consistent with the Town of Apex Comprehensive Transportation Plan, as amended with this rezoning.

The Developer shall construct the following, consistent with the Thoroughfare and Collector Street Plan Map and the Bicycle and Pedestrian Plan Map, subject to Town of Apex and NCDOT review and approval at the time of site and subdivision plans.

The following improvements were identified at the intersection of NC 55 at Jessie Drive Extension:

NC 55 at Jessie Drive Extension:

- **Construct the new intersection as a full-movement configuration and designed to allow for future conversion of this intersection (by others) to RCI.**
- **Terminate one of the westbound lanes of Jessie Drive Extension as a right-turn lane and the other westbound lane as a left-turn lane. Construct a second westbound left-turn lane with 350 feet of full width storage and appropriate tapers, subject to NCDOT approval.**
- **Construct an exclusive northbound right-turn lane on NC 55 with 100 feet of full width storage, 50 feet of deceleration, and 100 feet of taper.**
- **Construct dual southbound left-turn lanes on NC 55, each with 250 feet of full width storage, 50 feet of deceleration, and 100 feet of taper.**
- **Install a traffic signal for the full-movement intersection configuration.**

Jessie Drive Extension:

Developer shall construct Jessie Drive as a 76-foot back-to-back 4-lane median divided thoroughfare typical section including a 10-foot wide side path on both sides for the length of the project property from the eastern property line to NC 55 within an 110-foot typical section right-of-way. Such right-of-way construction shall be subject to NCDOT approval, including the ability to modify the section as needed through design.

NC 55:

Developer shall widen NC 55 and dedicate public right-of-way for the extent of the project frontage for the eastern half of a minimum 94-foot back-to-back 6-lane thoroughfare typical section including a 10-foot side path on the east side within an 150-foot typical section right-of-way. Additional road widening beyond the minimum typical section to accommodate the Transportation Improvements may require additional right of way dedication beyond the 150-

foot typical section. Such right-of-way construction shall be subject to NCDOT approval, including the ability to modify the section as needed through design.

NC 55 at Site Access A:

Construct the northernmost driveway on NC 55 (Site Access A) as a right-in/right- and provide 250 feet of Internal Protected Storage (IPS).

Jessie Drive Extension at Site Access B:

Construct the westernmost driveway on the north and south side (Site Access B) of Jessie Drive as right-in / right-out approximately 400 feet from NC 55 and provide 100 feet of IPS.

Jessie Drive Extension at Site Access C:

- **Construct Site Access C approximately 700 feet east of NC 55 with full-movement access accommodations to both parcels subject to NCDOT approval.**
  - **Construct the northern and southern legs of the intersection with one ingress lane and two egress lanes (exclusive left-turn lane and a shared through/right lane).**
  - **Provide 100 feet of IPS on both approaches.**

- **Provide an exclusive eastbound left-turn lane with 150 feet of storage and appropriate tapers, subject to NCDOT approval on Jessie Drive Extension.**

- **Provide an exclusive westbound left-turn lane with 150 feet of storage and appropriate tapers, subject to NCDOT approval on Jessie Drive Extension.**

Jessie Drive Extension at Site Access D:

Construct Site Access D as a southbound right-out only or right-in/right-out approximately 1,000 feet from NC 55

Jessie Drive Extension at Site Access E:

- **Construct the easternmost site driveway on the north and south side of Jessie Drive (Site Access E), approximately 1,300 feet east of NC 55, as a full movement intersection with 100 feet of IPS.**

- **Provide an exclusive eastbound left-turn lane on Jessie Drive with 100 feet of full width storage plus 50 feet of deceleration and 100 feet of taper.**

- **Provide a westbound left-turn lane on Jessie Drive to the extent possible until Jessie Drive terminates in advance of the property boundary.**

NC 55 at Site Access F:

Construct Site Access F as a right-in/right-out on NC 55 approximately 400 feet south of Jessie Drive. Provide 100 feet of IPS.

Transit Easement

The Developer shall construct concrete flatwork to the Town's Standard Specifications for bus stops (see sheets 300.32 1, 2, 3) for pair of future bus stops along Jessie Drive close to the proposed grocery store entrance. Such bus stops may be permitted within the right-of-way,

provided the Developer shall provide Permanent Transit Easement(s) if needed for areas outside the ROW. No bus stop amenities or signage shall be required to be purchased or installed by the applicant. Exact locations will be determined at site plan approval. It is desirable to Town staff to locate them in proximity to a pedestrian crosswalk across Jessie Drive if possible.

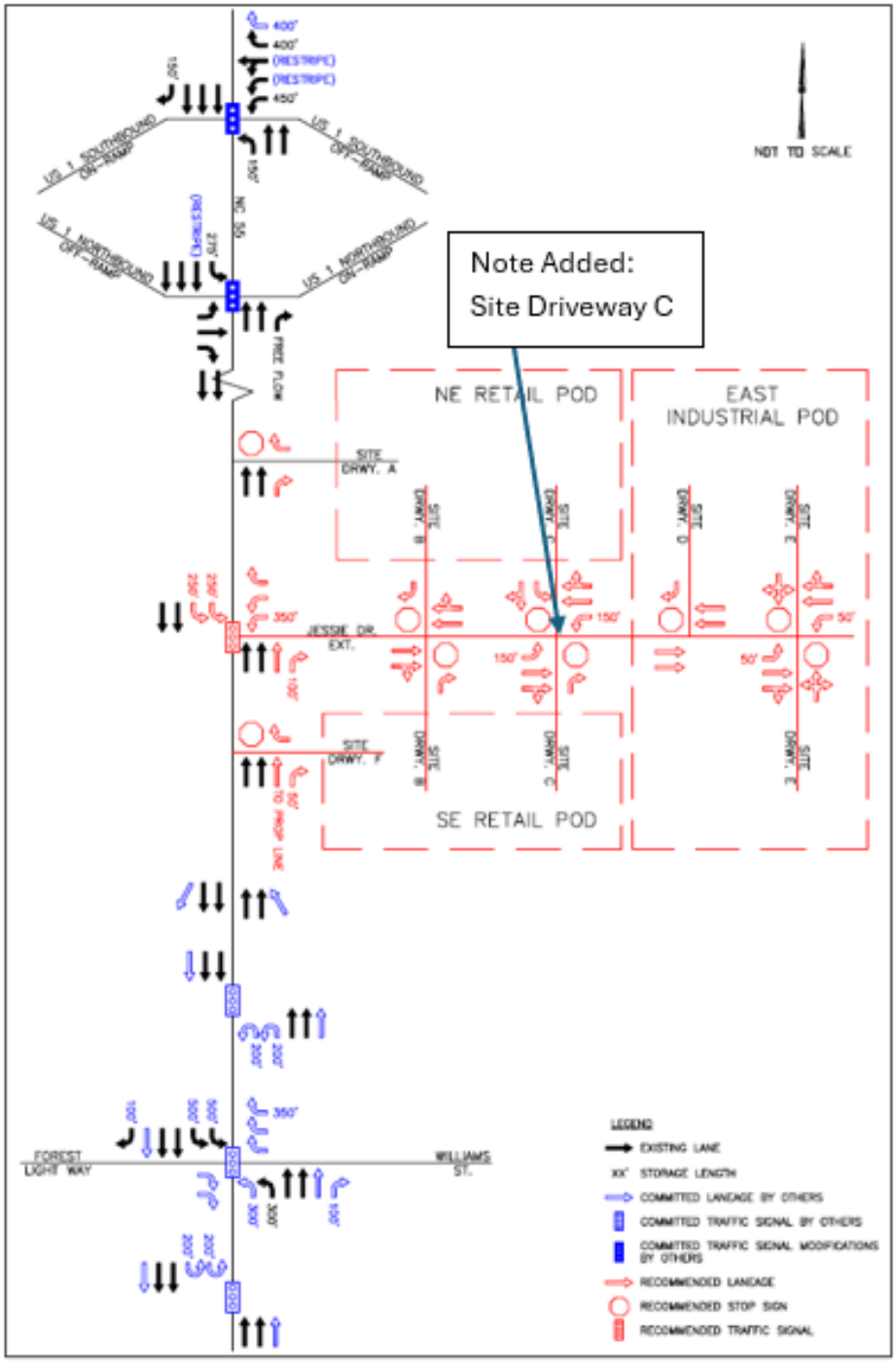


Figure 4: Proposed Transportation Site Access and Movement

Note: Site Driveway C should be showing left-turn lane and shared through/right-turn lane for both approaches based on applicant's revised conditions.

ii) A proposed water and wastewater system is provided on the accompanying utilities plan. The final proposed sanitary sewer system specifics shall be coordinated with the ~~Public Works~~ **Water Resources** group. Gravity line sizes shall also be coordinated with the Town as part of the non-residential subdivision plan and construction drawings. If oversizing is required by Apex to accommodate offsite development, the Developer shall be eligible for reimbursement in accordance with Apex policy. Details associated with the existing 16" watermain and construction of Jessie Drive shall also be coordinated with ~~Public Works~~ **Water Resources** to ensure water service interruption is minimized.

TRAFFIC IMPACT ANALYSIS

The applicant provided a Traffic Impact Analysis (TIA) prepared by Kimley-Horn and Associates. The report includes trip generation, distribution, traffic analyses, and recommendations for transportation improvements required to meet anticipated traffic demands in conjunction with development. As part of this development, Jessie Drive will be constructed from NC 55 through the site frontage but will not connect to the existing terminus at Horton Park Drive. The site is proposed to be accessed via multiple driveways on Jessie Drive Extension as well as a right-in/right-out access on NC 55 north of Jessie Drive Extension. Based on coordination with the Town of Apex and North Carolina Department of Transportation (NCDOT), the intersection of NC55 at Jessie Drive Extension was studied in 2 separate access configurations:

- Access Scenario #1: Full-Movement Access
- Access Scenario #2: Reduced Conflict Intersection (RCI) (a.k.a. "Superstreet")

The following improvements are recommended for the 2 different Scenarios:

<u>Access Scenario #1, Intersection of NC 55 at Jessie Drive Extension</u>

- Provide dual westbound left-turn lanes and an exclusive right-turn lane on Jessie Drive Extension, with 350 feet of storage provided for the inside left-turn lane.
- Construct an exclusive northbound right-turn lane on NC 55 with 100 feet of storage and appropriate tapers.
- Construct dual southbound left-turn lanes on NC 55, each with 250 feet of storage and appropriate tapers.
- Install a traffic signal to accommodate the full-movement intersection configuration.

<u>Access Scenario #2, Intersection of NC 55 at Jessie Drive Extension</u>

- Provide dual westbound right-turn lanes on Jessie Drive Extension
- Construct an exclusive northbound right-turn lane on NC 55 with 100 feet of storage and appropriate tapers.
- Construct dual southbound left-turn lanes on NC 55, each with 250 feet of storage and appropriate tapers.
- Install a traffic signal to accommodate the RCI configuration

NC55 at U-Turn North of Jessie Drive Extension

- Construct a U-turn bulb on NC 55 north of Jessie Drive Extension
- Provide a dual northbound U-turn lanes on NC 55, each with 200 feet of storage
- Install a traffic signal.

TIA Conclusions

Analyses indicate that all of the study intersections will operate acceptably at project build-out except for the signalized intersection of NC 55 at Jessie Drive Extension (and the associated U-turn, as applicable) and the unsignalized intersections of NC 55 at Site Access A and Jessie Drive Extension at Site Access C.

In Access Scenario 1, the signalized intersection of NC 55 at Jessie Drive Extension is expected to operate at LOS C in the AM peak hour and LOS F in the PM peak hour. Similarly, cumulative delays in each peak hour at this intersection pair in Access Scenario 2 (accounting for combined delays at the Jessie Drive Extension intersection and the north U-turn) also result in overall LOS C in the AM peak hour and LOS F in the PM peak hour but with 50% longer (cumulative) delays than the full-movement scenario. Since the resulting dual-lane U-turn bulb north of Jessie Drive Extension can likely not be accommodated within existing right-of-way and without significant impact to existing property access and operations and due to the shorter delays, Access Scenario 1 is recommended to be implemented as part of the project.

Unsignalized intersection of Jessie Drive Extension at Site Access C is expected to operate with long delays on the northbound minor street approach (Site Access C) in the PM peak hour at project build-out. However, it is typical for stop sign-controlled side streets and driveways intersecting major streets to experience long delays during peak hours, while the majority of the traffic moving through the intersection on the major street experiences little or no delay. SimTraffic simulations indicate that minor-street approach delays are expected to be less than 20 seconds, and no queuing issues on the minor street approaches at this intersection (or along Jessie Drive Extension from NC 55) are anticipated

APEX TRANSPORTATION & INFRASTRUCTURE DEVELOPMENT (TID) ANALYSIS

Transportation & Infrastructure Development (TID) Department staff reviewed the submitted Traffic Impact Analysis (TIA) dated March 2026, and provided a staff summary and comment letter for Jessie Commons TIA. (See Figure 6: TID Staff Recommended Revisions on Proposed Transportation Site Access and Movement). The TID Department summary comment letter is attached to the staff report packet.

After the October 12th Planning Board meeting the applicant revised several of the transportation conditions to address staff comments. However, there are still TID staff recommendations/conditions that have not been addressed related to the following intersections:

- NC55 at Jessie Drive Extension
- Jessie Drive Extension at Site Access C
- Jessie Drive Extension at Site Access E

Trip Generation

The site is projected to generate 455 trips entering and 268 trips exiting during the weekday AM peak hour (723 trips total), and 357 trips entering and 444 trips exiting the site during the weekday PM peak hour (801 trips total). The site is expected to add 10,750 daily trips to the adjacent roadway network.

Background Traffic Information:

NCDOT Project HL-0007 includes converting the intersection of NC 55 at Williams Street to a reduced conflict intersection (RCI) with signalized U-turn locations north and south of the intersection.

NC 55 at Jessie Drive Extension

Apex Staff Recommendation:

Apex staff recommends Access Scenario 2- Reduced Conflict Intersection (RCI):

- Jessie Drive Extension will be constructed as a 4-lane, median divided thoroughfare following the alignment shown in the Transportation Plan through this development ending as an RCI configuration at NC 55.
- The RCI configuration is consistent with the Town's Transportation Plan and the Jessie Drive Extension Feasibility Study.
- The Transportation Plan designates NC 55 in this area as a 6-lane, median divided superstreet (reduced conflict intersections (RCI).
- A portion of the functional design for Jessie Drive Extension at NC 55 from the feasibility study is shown in (See Figure 5: Jessie Drive Extension Functional Design (Jessie Drive Improvements and Extension Feasibility Study, 2020).
- The main intersection is anticipated to operate at an overall LOS C during the AM and PM peak hours under build conditions. The accompanying northern U-turn signal is expected at an overall LOS C during AM peak hour and overall LOS F during PM peak hour. The PM level of service improves to LOS D when 3 southbound through lanes are analyzed at this intersection, consistent with the NC 55 ultimate cross-section.
- Staff recommends a 3rd southbound through lane on NC 55 starting approximately 1,200 feet north of Site Access A (where previously approved frontage widening planned for Veridea terminates) and connection to the approved frontage widening planned for Veridea to the south of the site to mitigate LOS F.
- Staff recommends the additional northbound through lane on NC 55 begin at the southern property line, consistent with frontage widening requirements

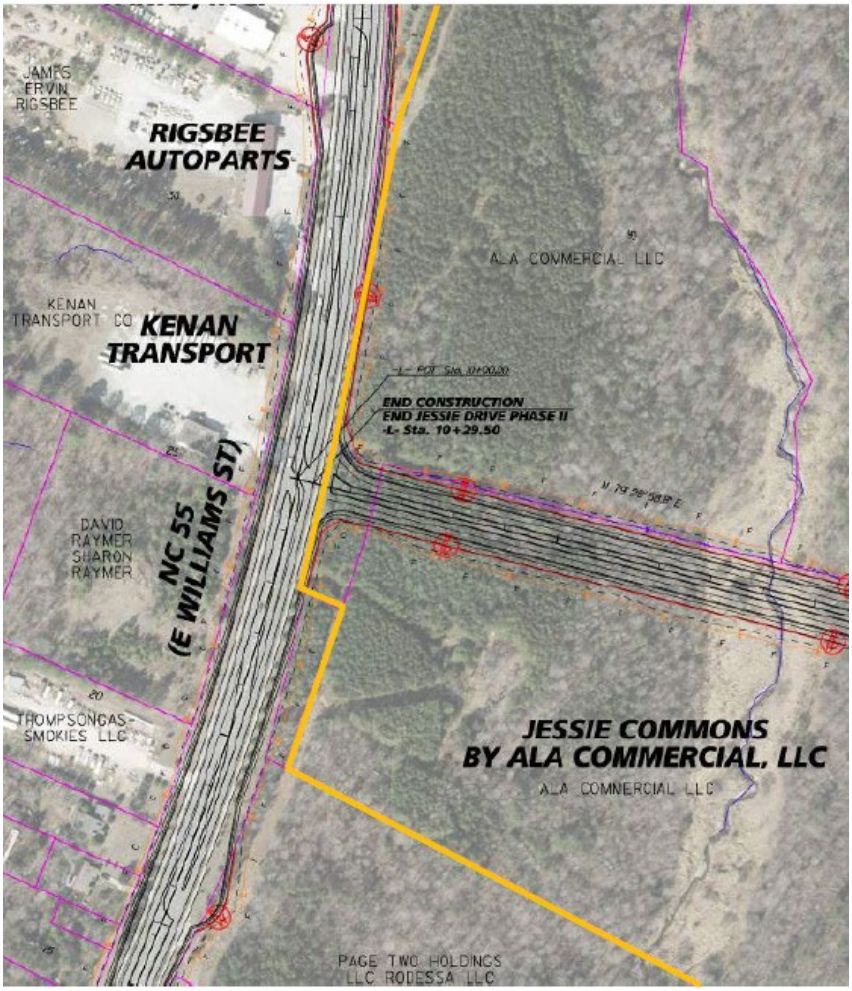


Figure 5: Jessie Drive Extension Functional Design
(Jessie Drive Improvements and Extension Feasibility Study, 2020)

Jessie Drive Extension at Site Access C

Apex staff recommends this intersection be constructed as a directional crossover restricting the northbound approach to right turn only. However, southbound left turns and through movements would be accommodated subject to NCDOT design approval.

- To meet NCDOT design minimums, Site Access C would need to be located a minimum of 1,200 feet from NC 55 to retain the median break for a full movement intersection. However, it is currently proposed at approximately 700 feet.
- Roadway design plans for all portions of Jessie Drive including private driveway access are required to be reviewed and approved by both Apex and NCDOT to be eligible for future state maintenance when ultimately accepted by NCDOT as a state route.

Jessie Drive Extension at Site Access E

Apex staff recommends the eastbound left-turn lane provide a minimum of 150 feet of full width storage plus appropriate taper to accommodate the increased U-turn volumes at this intersection because of the left-turn restriction at Site Access C as well as to accommodate longer-term traffic volumes when Jessie Drive is connected and avoid reconstruction of the median.

- The intersection should be constructed to accommodate the eastbound U-turns for a BUS-40 design vehicle subject to NCDOT design approval

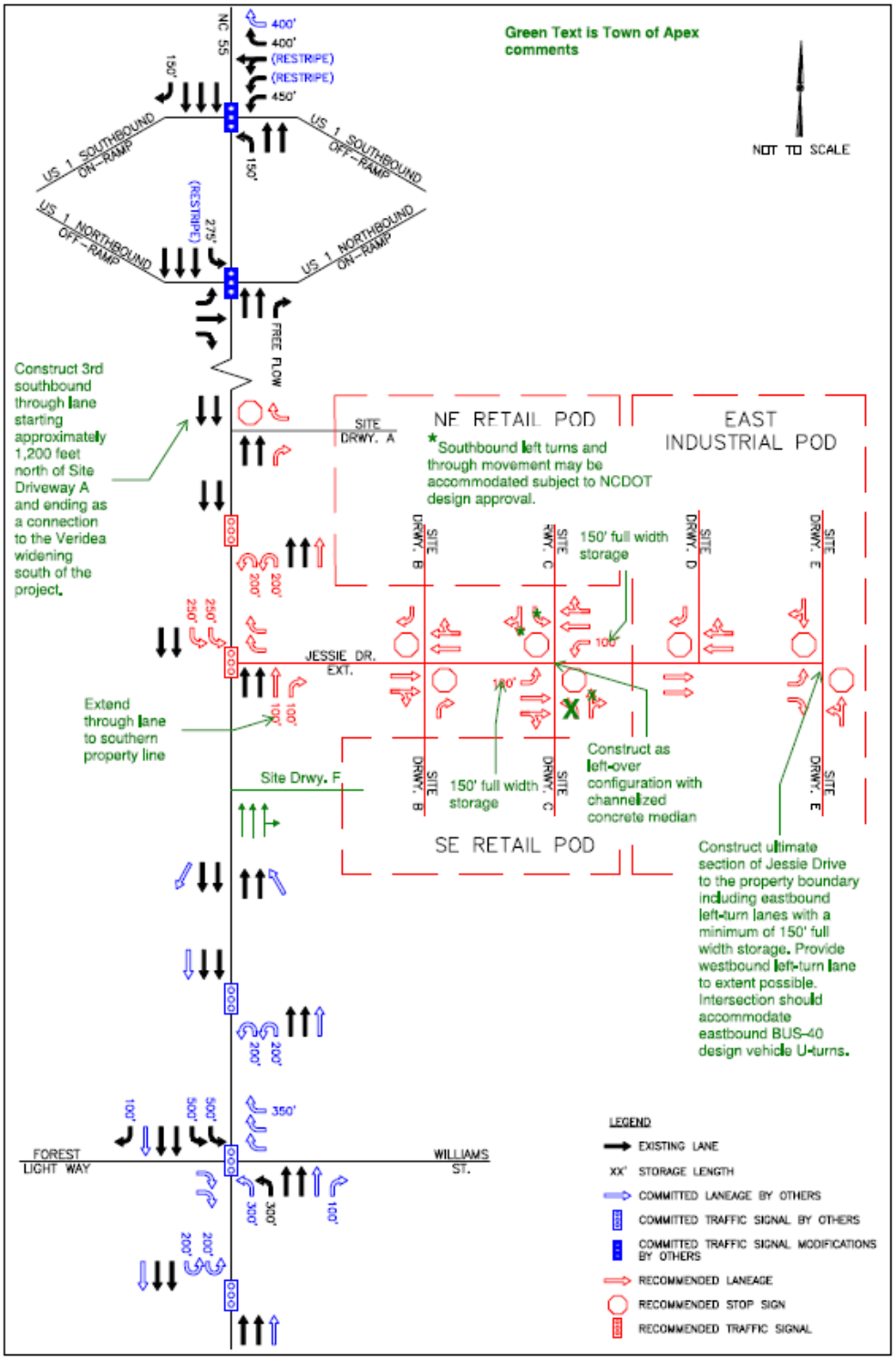


Figure 6: TID Staff Recommended Revisions on Proposed Transportation Site Access and Movement

TID STAFF RECOMMENDED PUD TEXT CONDITIONS:

Shown below are staff requested revisions to the conditions that the applicant has not provided. Attachment 1 shows the applicant's proposed conditions as compared to staff's requested conditions.

NC 55 at Jessie Drive Extension:

1. Developer shall construct the intersection of NC 55 (E. Williams St) and Jessie Drive as a Reduced Conflict Intersection (RCI) allowing left-in/right-in/right-out movements paired with a northern U-turn location meeting NCDOT standards.

a. The intersection configuration of NC 55 at Jessie Drive shall consist of:

i. Dual westbound right-turn lanes on Jessie Drive.

ii. An exclusive northbound right-turn lane with 100 feet of full width storage, 50 feet of deceleration and 100 feet of taper.

iii. An additional (third) northbound through lane from the southern property line terminating as a right-turn lane at Site Access A.

iv. An additional (third) southbound through lane from approximately 1,200 feet north of Site Access A (where previously approved frontage widening planned for Veridea terminates) to the approved frontage widening planned for Veridea to the south of the site.

v. Dual southbound left-turn lanes each with 250 feet of full width storage, 50 feet of deceleration and 100 feet of taper.

vi. Dual northbound left-turn lanes each with 200 feet of full width storage, 50 feet of deceleration and 100 feet of taper at the U-turn location.

vii. Installation of traffic signals.

b. If Offsite ROW cannot be obtained for construction of the northern dual lane U-turn to serve the RCI according to the process in Condition #2, then Developer shall pay the applicable fee in lieu and construct a full movement signalized intersection as described below and designed to allow for future conversion to a RCI.

i. Terminate one of the westbound lanes of Jessie Drive Extension as a right-turn lane and the other westbound lane as a left-turn lane. Construct a second westbound left-turn lane with 350 feet of full width storage plus 50 feet of deceleration and 100 feet of taper.

ii. Construct an additional (third) northbound through lane from the southern property line terminating as a right-turn lane at Site Access A.

iii. Construct northbound right-turn lane on NC 55 with 100 feet of full width storage plus 50 feet of deceleration and 100 feet of taper~~s~~.

iv. Construct an additional (third) southbound through lane from Site Access A to the approved frontage widening planned for Veridea to the south of the site subject to the ability to acquire Offsite ROW according to the process in Condition #2.

v. Construct dual southbound left-turn lanes on NC 55, each with 250 feet of full width storage, 50 feet of deceleration and 100 feet of taper~~s~~.

vi. Install a traffic signal.

2. If any of the committed transportation improvements require acquisition of offsite rights of way, easements, or other property interests (the "Offsite ROW"), Developer shall make good faith efforts to acquire the Offsite ROW. If Developer is unable to acquire any Offsite

ROW through private negotiation and the Town is unwilling or unable to assist in the acquisition, Developer shall pay a fee in lieu for the transportation improvement that cannot be completed, including estimated cost of acquisition, permitting fees, and construction, subject to Town review and approval of an engineer's estimate provided by the Developer.

Jessie Drive Extension at Site Access C

- Developer shall construct Jesse Drive Extension at Site Access C as a directional crossover restricting the northbound approach to right turn only. Southbound left turns and through movements would be accommodated subject to NCDOT design approval.

- Roadway design plans for all portions of Jessie Drive including private driveway access are required to be reviewed and approved by both Apex and NCDOT to be eligible for future state maintenance when ultimately accepted by NCDOT as a state route.

Jessie Drive Extension at Site Access E

- Developer shall provide an eastbound left-turn lane with a minimum of 150 feet of full-width storage plus appropriate taper.
- The intersection shall be designed to accommodate eastbound U-turns based on a minimum BUS-40 design vehicle subject to NCDOT design approval.

ENVIRONMENTAL ADVISORY BOARD

This rezoning was exempt from meeting with the Apex Environmental Advisory Board (EAB) per Unified Development Ordinance (UDO) Section 2.1.9.A.2.a. The rezoning amends zoning conditions which have no environmental impact on a site including, but not limited to, revisions to architectural standards, building height, setbacks, and uses.

PLANNING STAFF RECOMMENDATION

Planning staff recommends approval of Rezoning #26CZ02 Jessie Commons PUD Amendment if the recommended conditions by Transportation & Infrastructure Development staff are added by the applicant (see pages 14 and 15 for recommendations).

PLANNING BOARD RECOMMENDATION:

Planning Board held a public hearing on October 12, 2026 and recommended by a vote of 9 to 0, approval with the following conditions:

- Approval of road improvements indicated in Scenario 1
- The applicant work with staff on the conditions shown with an asterisk in the staff report prior to the Town Council hearing.
- The applicant share with staff communications from property owners affected by off-site road improvements.

ANALYSIS STATEMENT OF THE REASONABLENESS OF THE PROPOSED REZONING

This Statement will address consistency with the Town's comprehensive and other applicable plans, reasonableness, and effect on public interest:

While the proposed amendment to the current Planned Unit Development-Conditional Zoning (PUD-CZ) zoning district is consistent with the Commercial Services and Office

Employment/Industrial Employment classifications on the 2045 Land Use Map, it is not consistent with the Apex Transportation Plan. If the staff recommended transportation conditions are added by the applicant, the proposed PUD amendments will also be consistent with the Transportation Plan.

The proposed rezoning is reasonable and in the public interest only if the revised conditions as proposed by Transportation & Infrastructure Development staff are added. If those revisions are made, the rezoning will allow for an increase in the scale of development that is more in line with new development in the area while ensuring compliance with the existing conditions of the previously approved PUD and updating required road improvements. The proposed rezoning with staff recommended transportation conditions will ensure that NC 55 is built to the Town of Apex and NCDOT superstreet requirements.

PLANNED UNIT DEVELOPMENT DISTRICT AND CONDITIONAL ZONING STANDARDS

Standards

In return for greater flexibility in site design requirements, Planned Development (PD) Districts are expected to deliver exceptional quality community designs that preserve critical environmental resources; provide high quality community amenities; incorporate creative design in the layout of buildings, Resource Conservation Area and circulation; ensure compatibility with surrounding land uses and neighborhood character; provide high quality architecture; and provide greater efficiency in the layout and provision of roads, utilities, and other infrastructure. The Planned Development (PD) Districts shall not be used as a means of circumventing the Town's adopted land development regulations for routine developments.

1. Planned Unit Development (PUD-CZ) District
   In approving a Planned Development (PD) Zoning District designation for a PUD-CZ, the Town Council shall find the PUD-CZ district designation and PD Plan for PUD-CZ demonstrates compliance with the following standards:
   a) *Development parameters*
      (i) The uses proposed to be developed in the PD Plan for PUD-CZ are those uses permitted in Sec. 4.2.2 *Use Table.*
      (ii) The uses proposed in the PD Plan for PUD-CZ can be entirely residential, entirely non-residential, or a mix of residential and non-residential uses, provided a minimum percentage of non-residential land area is included in certain mixed use areas as specified on the 2045 Land Use Map. The location of uses proposed by the PUD-CZ must be shown in the PD Plan with a maximum density for each type of residential use and a maximum square footage for each type of non-residential use.
      (iii) The dimensional standards in Sec. 5.1.3 *Table of Intensity and Dimensional Standards, Planned Development Districts* may be varied in the PD Plan for PUD-CZ. The PUD-CZ shall demonstrate compliance with all other dimensional standards of the UDO, North Carolina Building Code, and North Carolina Fire Code.
      (iv) The development proposed in the PD Plan for PUD-CZ encourages cluster and compact development to the greatest extent possible that is interrelated and linked by pedestrian ways, bikeways and other transportation systems. At a minimum, the PD Plan must show sidewalk improvements as required by the Apex Transportation Plan and the *Town of Apex Standard Specifications and Standard Details*, and greenway improvements as required by the Town of Apex Parks, Recreation, Greenways, and Open Space Plan and the Apex Transportation Plan. In addition,

sidewalks shall be provided on both sides of all streets for single-family detached homes.

(v) The design of development in the PD Plan for PUD-CZ results in land use patterns that promote and expand opportunities for walkability, connectivity, public transportation, and an efficient compact network of streets. Cul-de-sacs shall be avoided unless the design of the subdivision and the existing or proposed street system in the surrounding area indicate that a through street is not essential in the location of the proposed cul-de-sac, or where sensitive environmental areas such as streams, floodplains, and wetlands would be substantially disturbed by making road connections.

(vi) The development proposed in the PD Plan for PUD-CZ is compatible with the character of surrounding land uses and maintains and enhances the value of surrounding properties.

(vii) The development proposed in the PD Plan for PUD-CZ has architectural and design standards that are exceptional and provide higher quality than routine developments. All residential uses proposed in a PD Plan for PUD-CZ shall provide architectural elevations representative of the residential structures to be built to ensure the Standards of this Section are met.

b) *Off-street parking and loading*. The PD Plan for PUD-CZ shall demonstrate compliance with the standards of Sec. 8.3 *Off-Street Parking and Loading*, except that variations from these standards may be permitted if a comprehensive parking and loading plan for the PUD-CZ is submitted as part of the PD Plan that is determined to be suitable for the PUD-CZ, and generally consistent with the intent and purpose of the off-street parking and loading standards.

c) *RCA*. The PD Plan for PUD-CZ shall demonstrate compliance with Sec. 8.1.2 Resource Conservation Area, except that the percentage of RCA required under Sec. 8.1.2 may be reduced by the Town Council by no more than 10% provided that the PD Plan for PUD-CZ includes one or more of the following:

(i) A non-residential component;

(ii) An overall density of 7 residential units per acre or more; or

(iii) Environmental measures including but not limited to the following:

a. The installation of a solar photovoltaic (PV) system on a certain number or percentage of single-family or townhouse lots or on a certain number or percentage of multifamily, mixed-use, or nonresidential buildings. All required solar installation shall be completed or under construction prior to 90% of the building permits being issued for the approved number of lots or buildings. For single-family or townhouse installations, the lots on which these homes are located shall be identified on the Master Subdivision Plat, which may be amended;

b. The installation of a geothermal system for a certain number or percentage of units within the development; or

c. Energy efficiency standards that exceed minimum Building Code requirements (i.e. SEER rating for HVAC).

d) *Landscaping*. The PD Plan for PUD-CZ shall demonstrate compliance with the standards of Sec. 8.2 *Landscaping, Buffering and Screening*, except that variations from these standards may be permitted where it is demonstrated that the proposed landscaping sufficiently buffers uses from each other, ensures compatibility with land uses on surrounding properties, creates attractive streetscapes and parking areas and is consistent with the character of the area. In

no case shall a buffer be less than one half of the width required by Sec. 8.2 or 10 feet in width, whichever is greater.

e) *Signs.* Signage in the PD Plan for PUD-CZ shall demonstrate compliance with Sec. 8.7 *Signs*, except that the standards can be varied if a master signage plan is submitted for review and approval concurrent with the PD plan and is determined by the Town Council to be suitable for the PUD-CZ and generally consistent with the intent and purpose of the sign standards of the UDO. The master signage plan shall have design standards that are exceptional and provide for higher quality signs than those in routine developments and shall comply with Sec. 8.7.2 *Prohibited Signs*.

f) *Public facilities.* The improvements standards and guarantees applicable to the public facilities that will serve the site shall comply with Article 7: *Subdivision and* Article 14: *Parks, Recreation, Greenways, and Open Space*.

(i) The PD Plan for PUD-CZ demonstrates a safe and adequate on-site transportation circulation system. The on-site transportation circulation system shall be integrated with the off-site transportation circulation system of the Town. The PD Plan for PUD-CZ shall be consistent with the Apex Transportation Plan and the *Town of Apex Standard Specifications and Standard Details* and show required right-of-way widths and road sections. A Traffic Impact Analysis (TIA) shall be required per Sec. 13.19.

(ii) The PD Plan for PUD-CZ demonstrates a safe and adequate on-site system of potable water and wastewater lines that can accommodate the proposed development, and are efficiently integrated into off-site potable water and wastewater public improvement plans. The PD Plan shall include a proposed water and wastewater plan.

(iii) Adequate off-site facilities for potable water supply, sewage disposal, solid waste disposal, electrical supply, fire protection and roads shall be planned and programmed for the development proposed in the PD Plan for PUD-CZ, and the development is conveniently located in relation to schools and police protection services.

(iv) The PD Plan shall demonstrate compliance with the parks and recreation requirements of Sec. Article 14: *Parks, Recreation, Greenways, and Open Space* and Sec. 7.3.1 *Privately-owned Play Lawns* if there is a residential component in the PUD-CZ.

g) *Natural resource and environmental protection.* The PD Plan for PUD-CZ demonstrates compliance with the current regulatory standards of this Ordinance related to natural resource and environmental protection in Sec. 6.1 *Watershed Protection Overlay District*, Sec. 6.2 *Flood Damage Prevention Overlay District*, and Sec. 8.1 *Resource Conservation*.

h) *Storm water management.* The PD Plan shall demonstrate that the post-development rate of on-site storm water discharge from the entire site shall not exceed pre-development levels in accordance with Sec. 6.1.7 of the UDO.

i) *Phasing.* The PD Plan for PUD-CZ shall include a phasing plan for the development. If development of the PUD-CZ is proposed to occur in more than one phase, then guarantees shall be provided that project improvements and amenities that are necessary and desirable for residents of the project, or that are of benefit to the Town, are constructed with the first phase of the project, or, if this is not possible, then as early in the project as is technically feasible.

j) *Consistency with 2045 Land Use Map.* The PD Plan for PUD-CZ demonstrates consistency with the goals and policies established in the Town's 2045 Land Use.

k) *Complies with the UDO.* The PD Plan for PUD-CZ demonstrates compliance with all other relevant portions of the UDO.

Legislative Considerations

The Town Council shall find the PUD-CZ designation demonstrates compliance with the following standards. Sec. 2.3.3.F:

The applicant shall propose site-specific standards and conditions that take into account the following considerations, which are considerations that are relevant to the legislative determination of whether or not the proposed conditional zoning district rezoning request is in the public interest. These considerations do not exclude the legislative consideration of any other factor that is relevant to the public interest.

1) *Consistency with 2045 Land Use Map.* The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and consistency with the purposes, goals, objectives, and policies of the 2045 Land Use Map.

2) *Compatibility.* The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and compatibility with the character of surrounding land uses.

3) *Zoning district supplemental standards.* The proposed Conditional Zoning (CZ) District use's compliance with Sec. 4.4 *Supplemental Standards,* if applicable.

4) *Design minimizes adverse impact.* The design of the proposed Conditional Zoning (CZ) District use's minimization of adverse effects, including visual impact of the proposed use on adjacent lands; and avoidance of significant adverse impacts on surrounding lands regarding trash, traffic, service delivery, parking and loading, odors, noise, glare, and vibration and not create a nuisance.

5) *Design minimizes environmental impact.* The proposed Conditional Zoning District use's minimization of environmental impacts and protection from significant deterioration of water and air resources, wildlife habitat, scenic resources, and other natural resources.

6) *Impact on public facilities.* The proposed Conditional Zoning (CZ) District use's avoidance of having adverse impacts on public facilities and services, including roads, potable water and wastewater facilities, parks, schools, police, fire and EMS facilities.

7) *Health, safety, and welfare.* The proposed Conditional Zoning (CZ) District use's effect on the health, safety, or welfare of the residents of the Town or its ETJ.

8) *Detrimental to adjacent properties.* Whether the proposed Conditional Zoning (CZ) District use is substantially detrimental to adjacent properties.

9) *Not constitute nuisance or hazard.* Whether the proposed Conditional Zoning (CZ) District use constitutes a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use.

10) *Other relevant standards of this Ordinance.* Whether the proposed Conditional Zoning (CZ) District use complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics.

May 20, 2026

Kevin Dean, PE.
Kimley-Horn and Associates
1070 S. Main St, Ste 230
Holly Springs, NC 27540

Subject: Staff summary and comments for Jessie Commons TIA, 3/9/2026

Mr. Dean:

Please review the following summary of my comments and recommendations. You may schedule a meeting with me and your client to discuss at your convenience.

Study Area

The TIA studies the proposed Jessie Commons commercial and industrial development to be located east of NC 55 (E Williams Street), approximately 4,000 feet south of US 1. Access is proposed via five (5) site driveways:

- NC 55 at Site Access A (right-in/right-out)
- Jessie Drive Extension at Site Access B (right-in/right-out)
- Jessie Drive Extension at Site Access C (full movement)
- Jessie Drive Extension at Site Access D (right-out)
- Jessie Drive Extension at Site Access E (full movement)

Additionally, the following four (4) intersections were included for analysis in the TIA study area:

- NC 55 at US 1 Southbound Ramps
- NC 55 at US 1 Northbound Ramps
- NC 55 at Williams Street / Forest Light Way (Reduced Conflict Intersection)
- NC 55 at Jessie Drive Extension

Note that NC 55 and Williams Street / Forest Light Way was only analyzed in future conditions as the intersection is currently impacted by construction related to Veridea and NCDOT STIP project HL-0007.

Trip Generation

The site is proposed to be developed in three pods without interconnectivity. The site is anticipated to consist of the following land uses and intensities:

East Industrial Pod

- 300,000 s.f. of general light industrial

Northeast Retail Pod

- 71,000 s.f. shopping plaza with supermarket
- 3,000 s.f. drive-in bank
- 3,000 s.f. coffee/donut shop with drive-thru
- 16 fueling position gas station with convenience market

Southeast Retail Pod

- 35,000 s.f. strip retail plaza
- 5,000 s.f. tire store
- 6,000 s.f. fast casual restaurant
- 5,000 s.f. fast-food restaurant with drive-thru

The site is projected to generate 455 trips entering and 268 trips exiting during the weekday AM peak hour (723 trips total), and 357 trips entering and 444 trips exiting the site during the weekday PM peak hour (801 trips total). The site is expected to add 10,750 daily trips to the adjacent roadway network.

Background traffic

Background traffic consists of 3% annual non-specific background traffic growth compounded to build out year 2030 based on historical growth trends.

NCDOT Project HL-0007 includes converting the intersection of NC 55 at Williams Street to a reduced conflict intersection (RCI) with signalized U-turn locations north and south of the intersection. For background traffic at this location, the HL-0007 forecasted volumes for 2030 from the *Veridea Phase 1 (East Village) Phasing TIA* were used as a baseline.

Additionally, the traffic generated by the following three (3) approved development plans was included:

- Aquiline
- Veridea East Village
- North Carolina Children's Hospital Phase 1

Trip Distribution and Assignment

The trip distribution for the East Industrial Pod trips is as follows:

- 35% to/from the south on NC 55
- 25% to/from the east on US 1
- 15% to/from the west on US 1
- 10% to/from the north on NC 55
- 10% to/from the southeast on Williams Street
- 5% to/from the west on Forest Light Way

The trip distribution for the Northeast Retail Pod trips is as follows:

- 25% to/from the south on NC 55
- 20% to/from the southeast on Williams Street
- 15% to/from the north on NC 55
- 12% to/from the west on Forest Light Way
- 10% to/from development between the site and the US 1 interchange
- 5% to/from the east on US 1
- 5% to/from the west on US 1
- 5% to/from the Southeast Retail Pod
- 3% to/from East Industrial Pod

The trip distribution for the Southeast Retail Pod trips is as follows:

- 25% to/from the south on NC 55
- 20% to/from the southeast on Williams Street
- 15% to/from the north on NC 55
- 12% to/from the west on Forest Light Way
- 10% to/from development between the site and the US 1 interchange
- 5% to/from the east on US 1
- 5% to/from the west on US 1
- 5% to/from the Northeast Retail Pod
- 3% to/from East Industrial Pod

Traffic Capacity Analysis and Recommendations

Level of Service (LOS) is a grade of A through F assigned to an intersection, approach, or movement to describe how well or how poorly it operates based on the average delay experienced by drivers. LOS A through D is considered acceptable for peak hour operation. LOS E or F describes potentially unacceptable operation and developers may be required to mitigate their anticipated traffic impact to improve LOS based on the Apex Unified Development Ordinance (UDO).

Tables 1 through 9 describe the levels of service (LOS) for the scenarios analyzed in the TIA. "NA" is shown when the scenario does not apply. The scenarios are as follows:

- **2026 Existing** - Existing year (2026) traffic.
- **2030 No Build** - Projected year (2030) with background traffic growth and background developments.
- **2030 Build** - Projected year (2030) with background traffic, site build-out.

NC 55 at US 1 Southbound Ramps

Table 1. AM / PM Peak Hour Levels of Service NC 55 at US 1 Southbound Ramps			
	2026 Existing	**2030 No Build**	**2030 Build (Access Scenario 1 and 2)**
Overall	**D / D**	**C / D**	**D / D**
Westbound (US 1 SB Ramp)	E / E	D / D	D / E
Northbound (NC 55)	C / D	C / C	C / C
Southbound (NC 55)	C / C	D / D	D / D

TIA recommendations:

Background improvements committed by Veridea East Village

- Restripe the US 1 Southbound off-ramp to provide dual exclusive left-turn lanes, a shared through/left-turn lane, and an exclusive right-turn lane
- Modify the existing traffic signal to accommodate the committed laneage

Jessie Commons Improvements

- No additional improvements are recommended

Apex staff recommendations:

Apex staff concur with the recommendations in the TIA. With the committed improvements from Veridea East Village in place, the intersection is expected to operate at LOS D with less delay than existing conditions once the site is built. Site traffic accounts for less than 4% of traffic at this intersection.

NC 55 at US 1 Northbound Ramps

Table 2. AM / PM Peak Hour Levels of Service NC 55 at US 1 Northbound Ramps			
	2026 Existing	**2030 No Build**	**2030 Build (Access Scenario 1 and 2)**
Overall	**C / B**	**C / C**	**C / C**
Eastbound (US 1 NB Ramp)	F / F	E / E	F / E
Northbound (NC 55)	A / A	C / B	C / C
Southbound (NC 55)	C / C	C / B	C / C

TIA recommendations:

Background improvements committed by Veridea East Village

- Extend the storage of the inside northbound right-turn lane on NC 55 through future Pristine Water Drive/Atlas Drive and reconfigure as a free-flow right-turn lane onto US 1 Northbound
- Restripe the southbound approach of NC 55 to provide three southbound through lanes and a single exclusive southbound left-turn lane
- Modify the existing traffic signal to accommodate the recommended laneage

Jessie Commons Improvements

- No additional improvements are recommended

Apex staff recommendations:

Apex staff concur with the recommendations in the TIA. With the committed improvements from Veridea East Village in place, the intersection is expected to operate at an overall LOS C during both AM and PM peak hours. Site traffic accounts for less than 4% of traffic at this intersection.

NC 55 at Williams St / Forest Light Way

Table 3. AM / PM Peak Hour Levels of Service NC 55 at Williams St / Forest Light Way			
	2026 Existing*	**2030 No Build**	**2030 Build (Access Scenario 1 and 2)**
Overall	*NA*	**C / B****	**C / C****
Eastbound (Forest Light Way)	*NA*	C / D	C / D
Westbound (Williams St)	*NA*	D / C	E / C
Northbound (NC 55)	*NA*	B / B	B / B
Northbound Left Turns (NC 55)	*NA*	C / C	C / C
Southbound (NC 55)	*NA*	A / B	A / B
Southbound Left Turns (NC 55)	*NA*	B / C	B / C

*NC 55 and Williams Street / Forest Light Way was not analyzed under existing conditions due to construction impacts in the area and the NCDOT HL-0007 project will change the intersection configuration in background conditions.

**For reporting purposes, the overall LOS was calculated by averaging the overall delay for both signalized portions of the reduced conflict intersection.

Table 3-1. AM / PM Peak Hour Levels of Service				
	2026 Existing	**2030 No Build**	**2030 Build (Scenario 1 – Full Mvmt)**	**2030 Build (Scenario 2 – RCI)**
NC 55 at U-Turn North of Williams St				
Overall	*NA*	**B / B**	**B / C**	**B / C**
Southbound (NC 55)	*NA*	A / B	A / C	B / C
Northbound U-turns	*NA*	C / D	C / D	C / D
NC 55 at U-Turn South of Williams St				
Overall	*NA*	**B / B**	**B / B**	**B / B**
Northbound (NC 55)	*NA*	A / B	A / B	A / B
Southbound U-turns	*NA*	D / C	D / C	D / C

TIA recommendations:

Background improvements committed by NCDOT Project HL-0007

- Convert NC 55 at Williams St to a reduced conflict intersection (RCI) with dual left-turn lanes, three through lanes, and an exclusive right-turn lane on both northbound and southbound NC 55.
- Dual right-turn lanes eastbound on Forest Light Way.
- Triple right-turn lanes on westbound Williams Street.
- U-turn location north of Williams Street with dual U-turn lanes.
- U-turn location south of Williams Street with dual U-turn lanes.

Jessie Commons Improvements

- No additional improvements are recommended

Apex staff recommendations:

With the completion of NCDOT project HL-0007, the intersections are anticipated to operate at acceptable levels of service with or without the Jessie Commons project. The SimTraffic analysis showed moderate queueing for both peak hours under No Build and Build conditions. Apex staff note that the most recent roadway design plans show three northbound through lanes at the U-turn location north of the Williams St intersection. The analysis files have two through lanes, with the third lane terminating as one of the U-turn lanes. This was observed to cause increased queuing and delay in the SimTraffic models; however, these impacts were mitigated when the additional northbound lane was added to the analysis.

No additional improvements are recommended for the developer at this intersection as site trips account for approximately 6% of the overall traffic.

NC 55 at Jessie Drive Extension

Table 4. AM / PM Peak Hour Levels of Service NC 55 at Jessie Drive Extension				
	2026 Existing	**2030 No Build**	**2030 Build (Scenario 1 – Full Mvmt)**	**2030 Build (Scenario 2 – RCI)**
Overall	*NA*	*NA*	**C / F**	**C / C**
Westbound (Jessie Dr Ext)	*NA*	*NA*	D / E	D / D
Northbound (NC 55)	*NA*	*NA*	C / C	B / C
Southbound (NC 55)	*NA*	*NA*	B / F	C / C*
NC 55 at U-turn North of Jessie Drive Extension				
Overall				**C / F**
Northbound U-turns				C / D
Southbound (NC 55)				C / F

*Southbound left-turn Level of Service.

TIA recommendations:

Jessie Commons improvements

All Scenarios:

- Construct Jessie Drive Extension as a four-lane, median divided roadway through the site
- Provide an additional northbound through lane on NC 55 starting 100 feet south of Jessie Drive Extension and extending along the site's frontage, terminating as a right-turn lane at Site Access A

Access Scenario 1 (Full Movement)

- Provide dual westbound left-turn lanes and an exclusive right-turn lane on Jessie Drive Extension, with 350 feet of storage provided for the inside left-turn lane
- Construct an exclusive northbound right-turn lane on NC 55 with 100 feet of storage and appropriate tapers
- Construct dual southbound left-turn lanes on NC 55, each with 250 feet of storage and appropriate tapers
- Install a traffic signal to accommodate the full-movement intersection configuration

Access Scenario 2 (Reduced Conflict Intersection)

- Provide dual westbound right-turn lanes on Jessie Drive Extension
- Construct an exclusive northbound right-turn lane on NC 55 with 100 feet of storage and appropriate tapers
- Construct dual southbound left-turn lanes on NC 55, each with 250 feet of storage and appropriate tapers
- Install a traffic signal to accommodate the RCI configuration

The TIA recommends Access Scenario 1 consisting of a full movement signal at the intersection of NC 55 and Jessie Drive Extension.

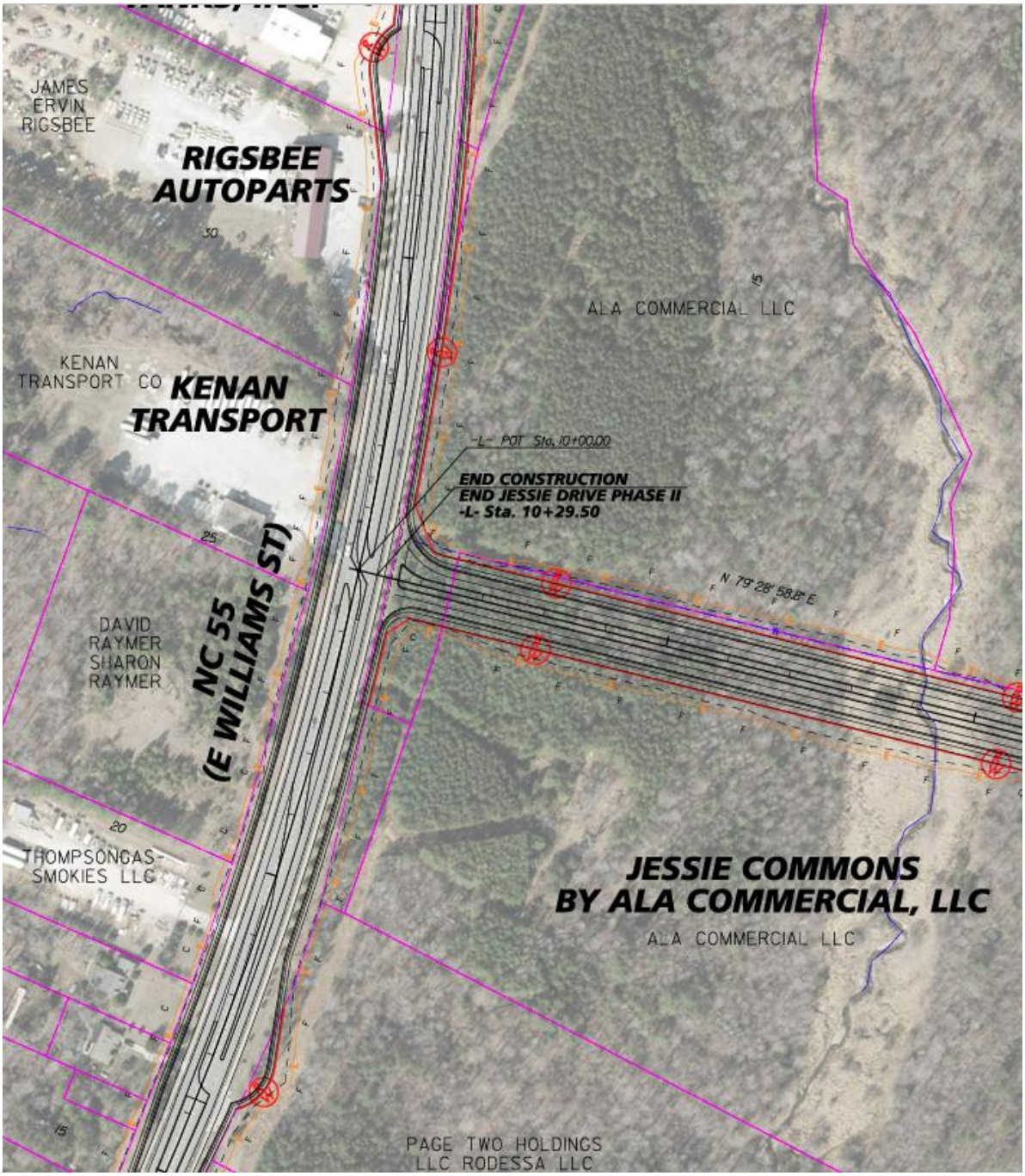
Apex staff recommendations:

Apex staff recommend Access Scenario 2 – Reduced Conflict Intersection (RCI). Jessie Drive Extension will be constructed as a four-lane, median divided thoroughfare following the alignment shown in the Transportation Plan through this development ending as an RCI configuration at NC 55. The RCI configuration is consistent with the Town's Transportation Plan and the Jessie Drive Extension Feasibility Study. The Transportation Plan designates NC 55 in this area as a six-lane, median divided superstreet (reduced conflict intersections). A portion of the functional design for Jessie Drive Extension at NC 55 from the feasibility study is shown in Figure 1 on the following page.

The main intersection is anticipated to operate at an overall LOS C during both the AM and PM peak hours under build conditions. The accompanying northern U-turn signal is expected to operate at an overall LOS C during the AM peak hour and overall LOS F during the PM peak hour. The PM level of service improves to LOS D when three southbound through lanes are analyzed at this intersection, consistent with the ultimate cross section of NC 55. The afternoon peak hour site trips account for approximately 15% of the projected traffic at the NC 55 and Jessie Drive Extension intersection. Staff recommend a third southbound through lane on NC 55 starting approximately 1,200 feet north of Site Access A (where previously approved frontage widening planned for Veridea terminates) and connecting to the approved frontage widening planned for Veridea to the south of the site to mitigate LOS F.

Apex staff also recommend the additional northbound through lane on NC 55 begin at the southern property line, consistent with frontage widening requirements.

Figure 1 – Jessie Drive Extension Functional Design (Jessie Drive Improvements and Extension Feasibility Study, 2020)



NC 55 at Site Access A (Right-in/Right-out)

Table 5. AM / PM Peak Hour Levels of Service NC 55 at Site Access A			
	2026 Existing	**2030 No Build**	**2030 Build (Access Scenario 1 and 2)**
Overall	*NA*	*NA*	*NA*
Westbound (SA A)	*NA*	*NA*	F / F[1]
Northbound (NC 55)	*NA*	*NA*	Free
Southbound (NC 55)	*NA*	*NA*	Free

1. Level of service for stop-controlled minor street approaches.

TIA recommendations:

Jessie Commons improvements

- Construct Site Access A as a right-in/right-out with one ingress lane and one egress lane
- Provide an additional northbound through lane on NC 55 along the site's frontage, terminating as a right-turn lane at Site Access A

Apex staff recommendations:

Apex staff agree with the TIA recommendations. Site Access A should be located to avoid turning movement conflicts with the northern U-turn intersection in the RCI scenario. Synchro and SimTraffic analyses show that this driveway is expected to operate at LOS F and experience significant queueing during both the AM and PM peak hours due to the lack of gaps in traffic along NC 55. However, maintaining this driveway is important for circulation and site access as otherwise all site traffic would be dependent on the Jessie Drive Extension. Queueing on Site Access A should be significantly less during off-peak hours. A minimum Internal Protected Stem (IPS) of 250 feet is recommended for this driveway although peak hour queues are expected to be longer. A longer IPS would likely create more issues for internal access and circulation based on the available land area for development, but should be provided to the extent possible.

Jessie Drive Extension at Site Access B (Right-in/Right-out)

Table 6. AM / PM Peak Hour Levels of Service Jessie Drive Extension at Site Access B			
	2026 Existing	**2030 No Build**	**2030 Build (Access Scenario 1 and 2)**
Overall	*NA*	*NA*	*NA*
Eastbound (Jessie Dr Ext)	*NA*	*NA*	Free
Westbound (Jessie Dr Ext)	*NA*	*NA*	Free
Northbound (SA B)	*NA*	*NA*	B / B[1]
Southbound (SA B)	*NA*	*NA*	A / B[1]

1. Level of service for stop-controlled minor street approaches.

TIA recommendations:

Jessie Commons improvements

- Construct Jessie Drive Extension as a four-lane, median divided roadway through the site
- Construct Site Access B as a right-in/right-out with one ingress lane and one egress lane as both the northbound and southbound approaches on Jessie Drive Extension approximately 400 feet east of NC 55.

Apex staff recommendations:

Apex staff concur with the recommendations in the TIA. The northbound and southbound Site Access B approaches are expected to operate at LOS B or better during both the AM and PM peak hours at build out. The 95th percentile queues are expected to be four vehicles or less. A minimum IPS of 100 feet is recommended for both the northbound and southbound driveway approaches.

Jessie Drive Extension at Site Access C (Proposed Full Movement)

Table 7. AM / PM Peak Hour Levels of Service Jessie Drive Extension at Site Access C			
	2026 Existing	**2030 No Build**	**2030 Build (Access Scenario 1 and 2)**
Overall	*NA*	*NA*	*NA*
Eastbound (Jessie Dr Ext)	*NA*	*NA*	A / A[2]
Westbound (Jessie Dr Ext)	*NA*	*NA*	A / A[2]
Northbound (SA C)	*NA*	*NA*	E / F[1]
Southbound (SA C)	*NA*	*NA*	B / B[1]

1. Level of service for stop-controlled minor street approaches.
2. Level of service for left turn movements on free-flowing major street approaches.

TIA recommendations:

Jessie Commons improvements

- Construct Jessie Drive Extension as a four-lane, median divided roadway through the site
- Construct Site Access C as a full movement with one ingress lane and two egress lanes as both the northbound and southbound approaches on Jessie Drive Extension approximately 700 feet east of NC 55.
- Provide an exclusive left-turn lane and shared through/right-turn lane on each minor street approach (Site Access C)
- Provide an exclusive eastbound left-turn lane with 100 feet of storage on Jessie Drive Extension
- Provide an exclusive westbound left-turn lane with 100 feet of storage on Jessie Drive Extension

Apex staff recommendations:

Apex staff recommend this intersection be constructed as a directional crossover restricting the left-turn movement from both the northbound and southbound (Site Access C) approaches. To meet NCDOT design minimums, Site Access C should be located a minimum of 1,200 feet from NC 55 to retain the median break for a full movement intersection. Roadway design plans for all portions of Jessie Drive including private driveway access are required to be reviewed and approved by both Apex and NCDOT to be eligible for future state maintenance when ultimately accepted by NCDOT as a state route.

The northbound approach was anticipated to operate at LOS E during the AM peak hour and LOS F during the PM peak hour. However, this was largely due to delays for the northbound left-turn movement which would be eliminated with the median crossover restriction. Staff recommend consideration of a right-in/right-out driveway on NC 55 south of Jessie Drive to serve the northbound vehicles from the southeast retail pod that would otherwise be turning left out of Site Access C, subject to review and approval of site and roadway plans.

Apex staff also recommend the eastbound and westbound left-turn lanes on Jessie Drive at Site Access C provide 150 feet of full width storage plus appropriate taper to accommodate longer-term traffic volumes when Jessie Drive is connected and avoid reconstruction of the median.

Jessie Drive Extension at Site Access D (Right-out)

Table 8. AM / PM Peak Hour Levels of Service Jessie Drive Extension at Site Access D			
	2026 Existing	**2030 No Build**	**2030 Build (Access Scenario 1 and 2)**
Overall	*NA*	*NA*	*NA*
Eastbound (Jessie Dr Ext)	*NA*	*NA*	Free
Westbound (Jessie Dr Ext)	*NA*	*NA*	Free
Southbound (SA D)	*NA*	*NA*	A / A[1]

1. Level of service for stop-controlled minor street approaches.

TIA recommendations:

Jessie Commons improvements

- Construct Jessie Drive Extension as a four-lane, median divided roadway through the site
- Construct Site Access D as a right-out only southbound approach on Jessie Drive Extension approximately 1,000 feet east of NC 55

Apex staff recommendations:

Apex staff concur with the recommendations in the TIA. The intersection is anticipated to operate at an overall LOS A during the peak hours under build conditions. The queueing is expected to be one vehicle or less.

Jessie Drive Extension at Site Access E (Full Movement)

Table 9. AM / PM Peak Hour Levels of Service Jessie Drive Extension at Site Access E			
	2026 Existing	**2030 No Build**	**2030 Build (Access Scenario 1 and 2)**
Overall	*NA*	*NA*	*NA*
Eastbound (Jessie Dr Ext)	*NA*	*NA*	A / A[2]
Westbound (Jessie Dr Ext)	*NA*	*NA*	*NA*
Northbound (SA E)	*NA*	*NA*	B / A[1]
Southbound (SA E)	*NA*	*NA*	A / A[1]

1. Level of service for stop-controlled minor street approaches.
2. Level of service for left turn movements on free-flowing major street approaches.

TIA recommendations:

Jessie Commons improvements

- Construct Jessie Drive Extension as a four-lane, median divided roadway through the site
- Construct Site Access E as a full movement northbound and southbound approach on Jessie Drive Extension approximately 1,300 feet east of NC 55
- Provide an exclusive eastbound left-turn lane with 50 feet of storage on Jessie Drive Extension

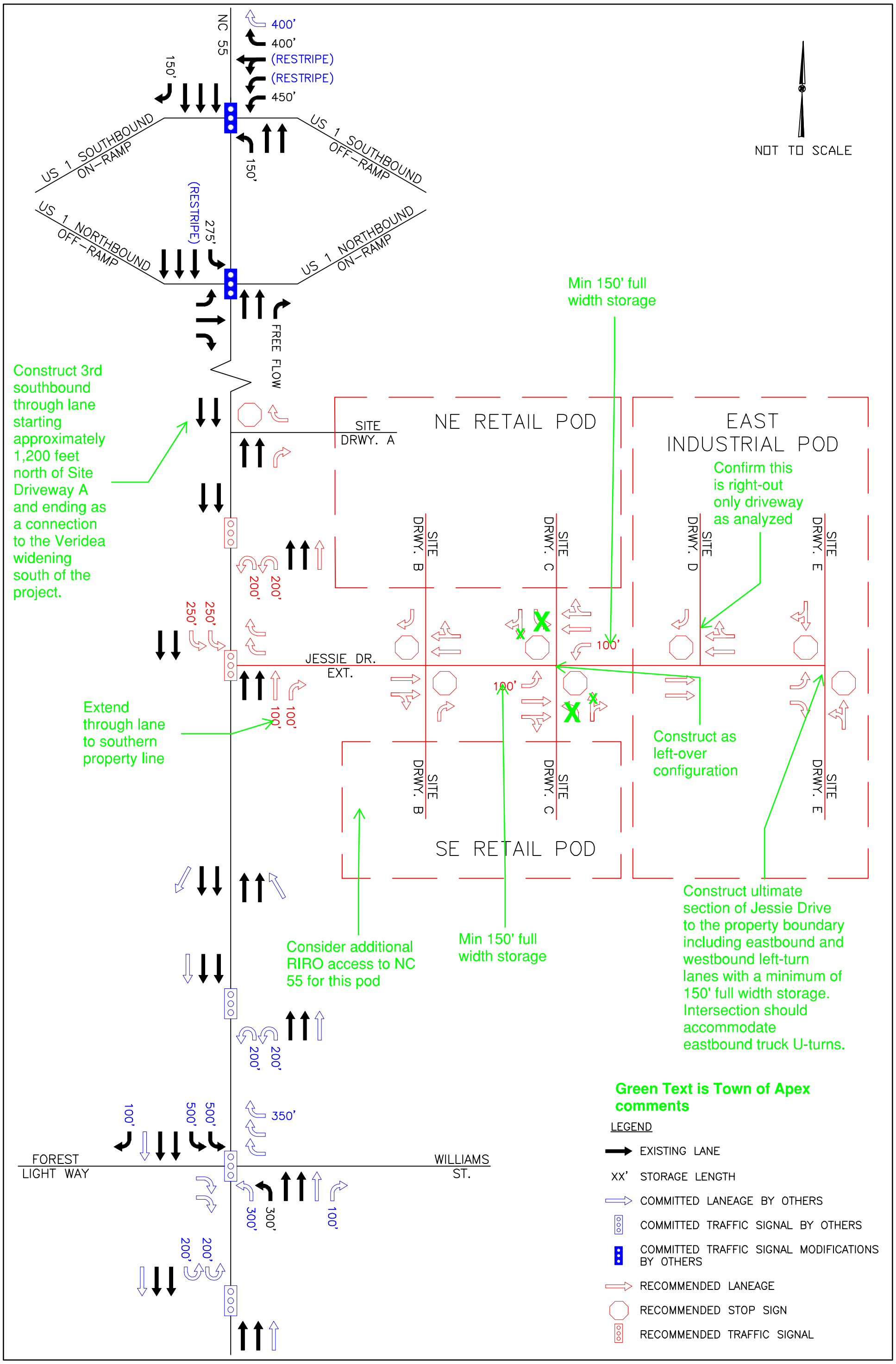
Apex staff recommendations:

Apex staff recommend the eastbound and westbound left-turn lanes provide a minimum of 150 feet of full width storage plus appropriate taper to accommodate the increased U-turn volumes at this intersection because of the left-turn restriction at Site Access C as well as to accommodate longer-term traffic volumes when Jessie Drive is connected and avoid reconstruction of the median. The intersection should be constructed to accommodate the eastbound U-turns per NCDOT design standards. The northbound and southbound approaches (Site Access E) are expected to operate at LOS B or better during the AM and PM peak hours at build out.

Please coordinate with the NCDOT District Engineer's Office concerning any recommendations on NCDOT facilities. Town staff will be available for meetings to discuss recommendations as needed.

Sincerely,

Jessica McClure, PE
Traffic Safety Engineer | 919-372-7448



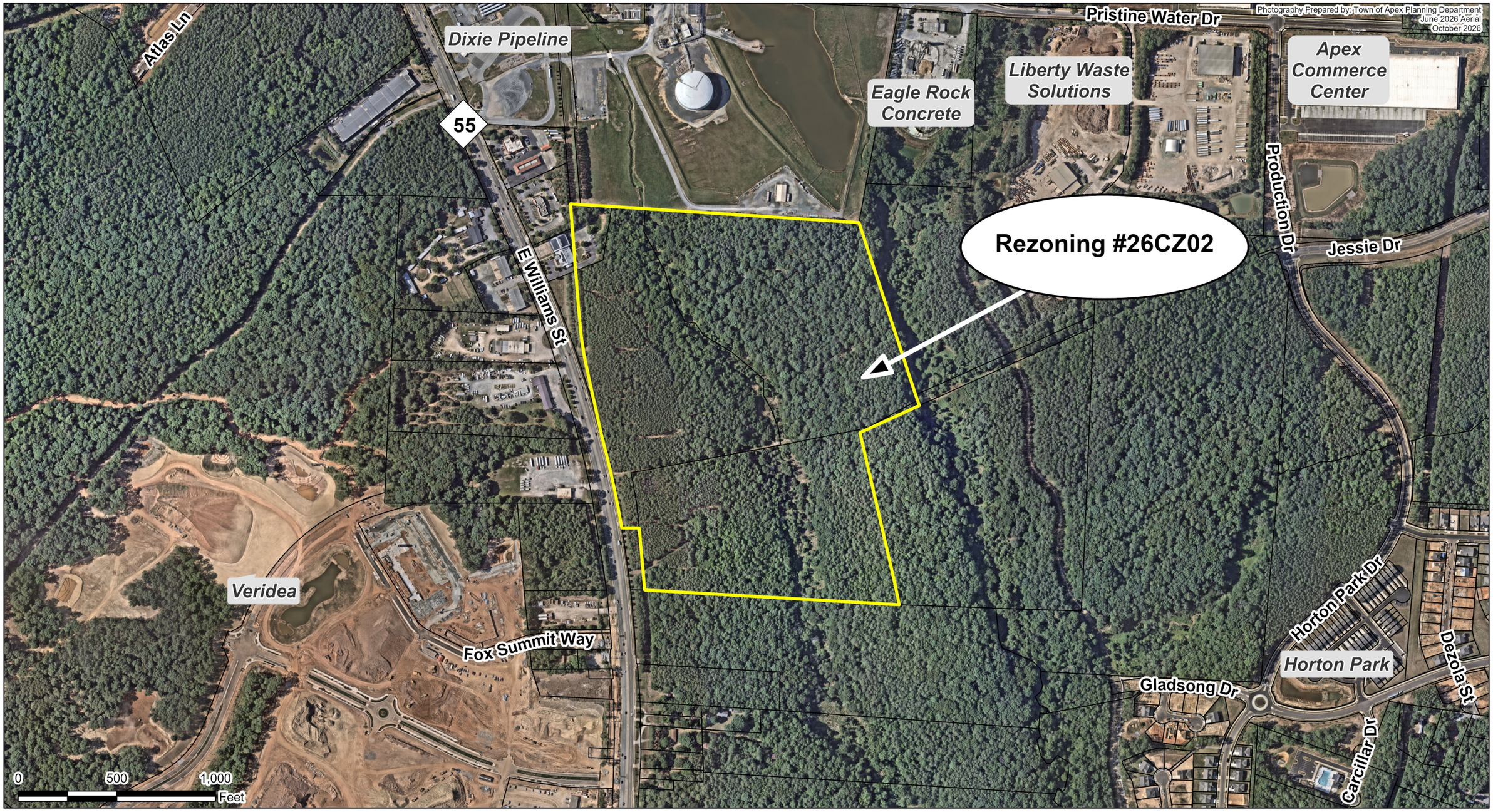
Kimley»Horn

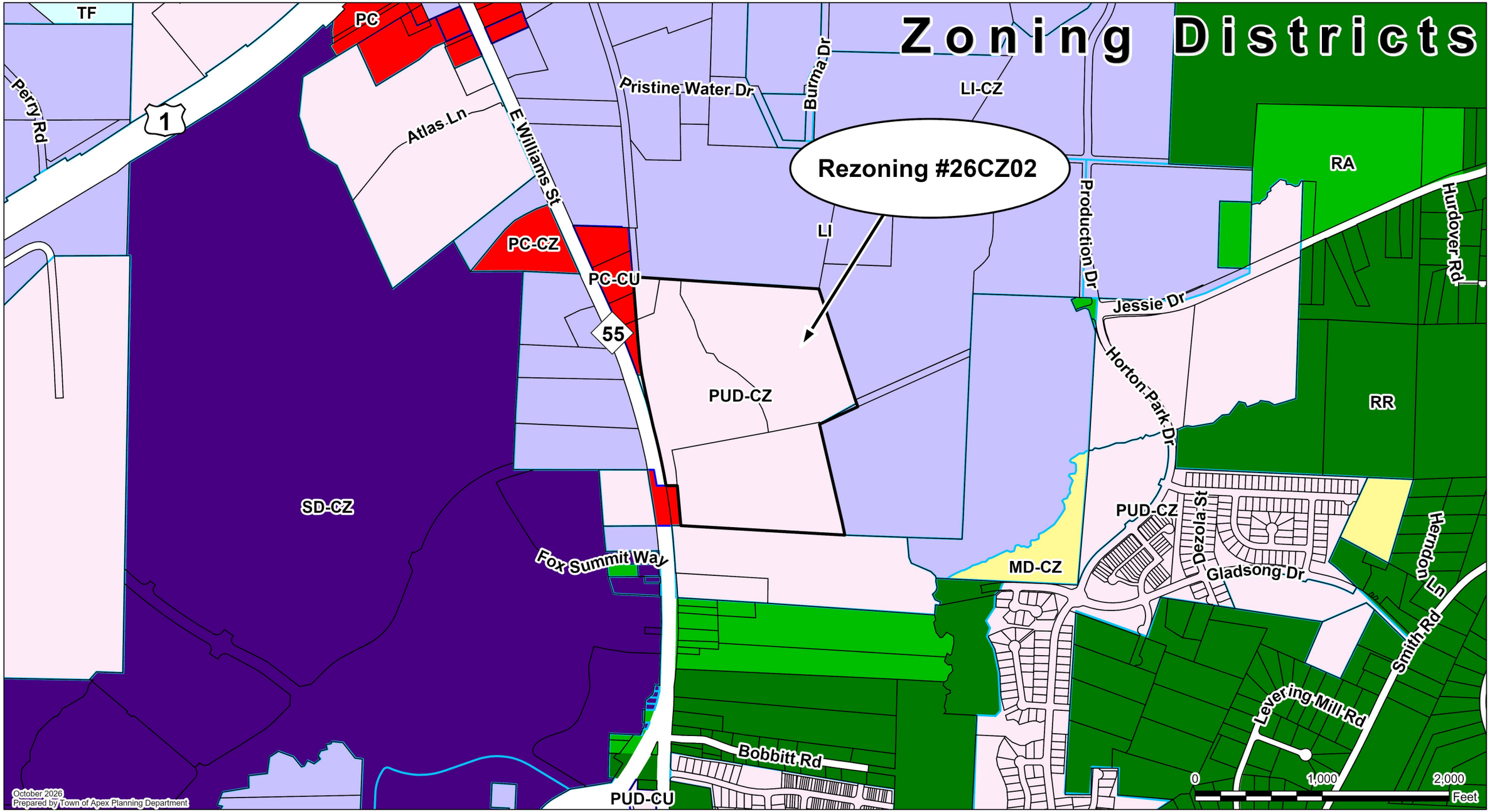
JESSIE COMMONS
APEX, NC
TRAFFIC IMPACT ANALYSIS

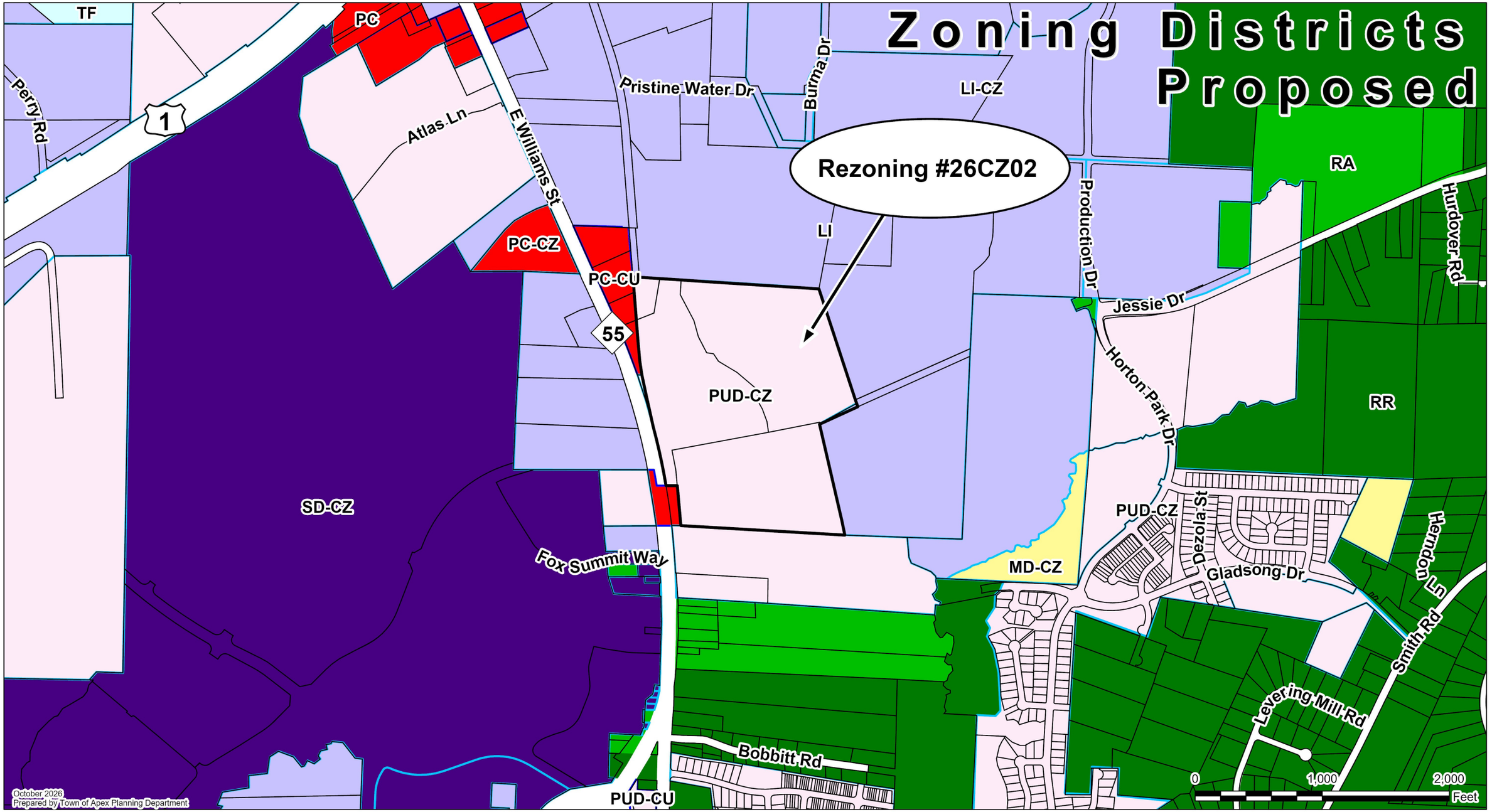
COMMITTED & RECOMMENDED ROADWAY LANEAGE
– ACCESS SCENARIO #2

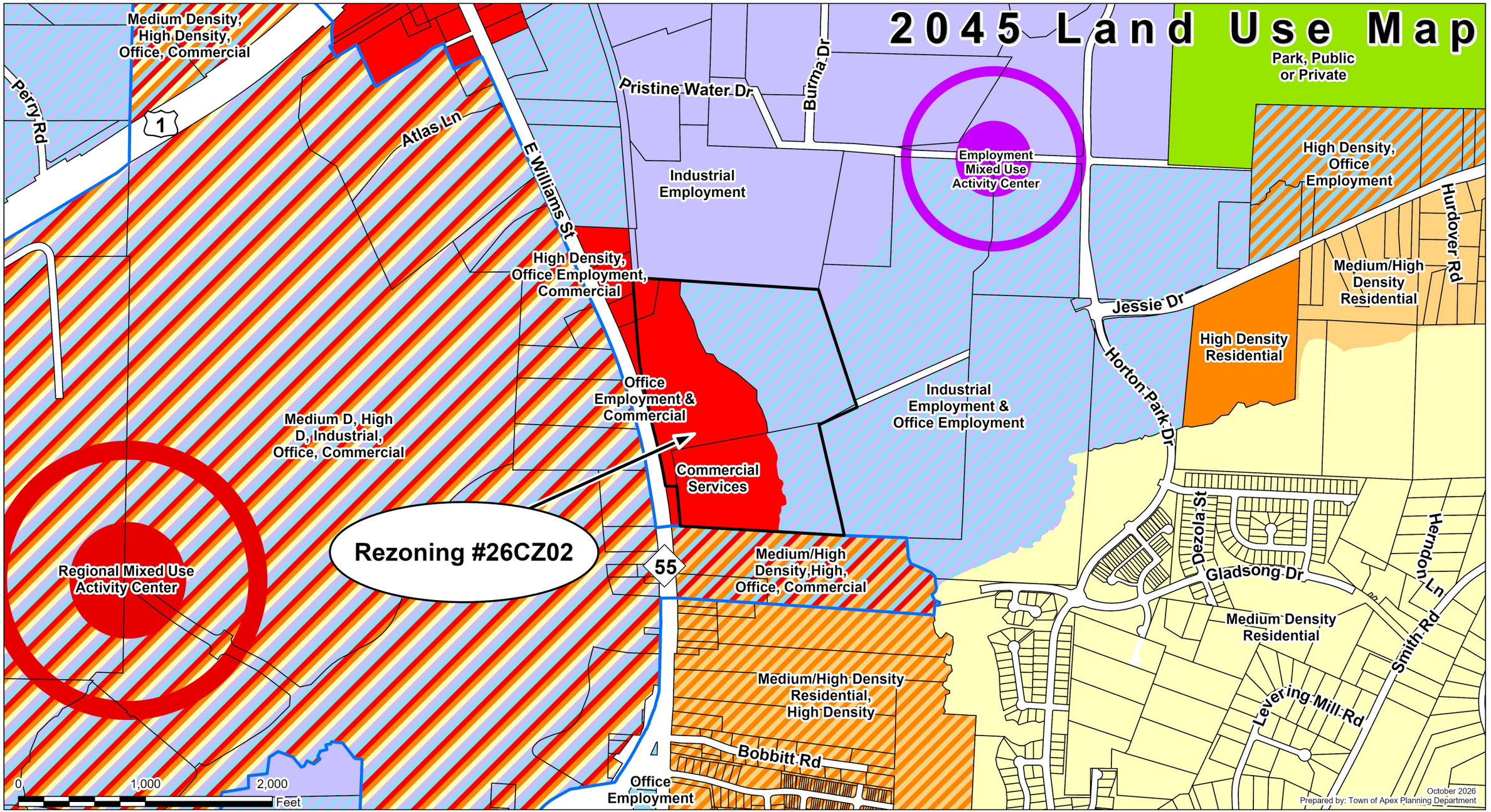
FIGURE
ES–2

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY KIMLEY–HORN AND ASSOCIATES, INC. SHALL BE WITHOUT LIABILITY TO KIMLEY–HORN AND ASSOCIATES, INC.


Photography Prepared by: Town of Apex Planning Department
June 2026 Aerial
October 2026
Rezoning #26CZ02
Atlas Ln
Dixie Pipeline
55
Eagle Rock Concrete
Liberty Waste Solutions
Pristine Water Dr
Apex Commerce Center
Production Dr
Jessie Dr
E Williams St
Veridea
Fox Summit Way
Horton Park Dr
Horton Park
Dezola St
Gladsong Dr
Carcillar Dr
0
500
1,000
Feet


Zoning Districts
Rezoning #26CZ02
TF
PC
PC-CZ
PC-CU
LI
LI-CZ
PUD-CZ
SD-CZ
MD-CZ
RA
RR
PUD-CZ
PUD-CU
Perry Rd
Atlas Ln
E Williams St
Pristine Water Dr
Burma Dr
Production Dr
Jessie Dr
Hurdover Rd
Horton Park Dr
Fox Summit Way
Bobbitt Rd
Dezolia St
Gladsong Dr
Hernon Ln
Smith Rd
Levering Mill Rd
1
55
0
1,000
2,000
Feet
October 2026
Prepared by Town of Apex Planning Department


Zoning Districts Proposed
Rezoning #26CZ02
TF
PC
PC-CZ
PC-CU
LI
LI-CZ
PUD-CZ
SD-CZ
MD-CZ
RA
RR
PUD-CZ
PUD-CU
Perry Rd
1
Atlas Ln
E Williams St
55
Pristine Water Dr
Burma Dr
Production Dr
Jessie Dr
Hurdover Rd
Horton Park Dr
Fox Summit Way
Bobbitt Rd
Gladsong Dr
Dezoto St
Herndon Ln
Smith Rd
Levering Mill Rd
October 2026
Prepared by Town of Apex Planning Department
0
1,000
2,000
Feet


2045 Land Use Map
Rezoning #26CZ02
Medium Density, High Density, Office, Commercial
Perry Rd
1
Atlas Ln
E Williams St
Pristine Water Dr
Burma Dr
Industrial Employment
Employment Mixed Use Activity Center
Park, Public or Private
High Density, Office Employment
Hurdover Rd
Medium/High Density Residential
Jessie Dr
High Density Residential
Horton Park Dr
High Density, Office Employment, Commercial
Office Employment & Commercial
Industrial Employment & Office Employment
Medium D, High D, Industrial, Office, Commercial
Commercial Services
Regional Mixed Use Activity Center
55
Medium/High Density High, Office, Commercial
Dezola St
Gladsong Dr
Herndon Ln
Medium Density Residential
Smith Rd
Levering Mill Rd
Medium/High Density Residential, High Density
Bobbitt Rd
Office Employment
0
1,000
2,000
Feet
October 2026
Prepared by: Town of Apex Planning Department

PLANNED UNIT DEVELOPMENT APPLICATION

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Application #: 26CZ02 Submittal Date: 3/2/2026

Fee Paid $ Check #

PETITION TO AMEND THE OFFICIAL ZONING DISTRICT MAP

Project Name: Jessie Commons PUD Amendment

Address(es): 1701 E. Williams Street; 0 E. Williams Street; 0 East Williams Street; 1615 E. Williams Street

PIN(s) 0751003311; 0751011288; 0741915068 & 0741911743 (portion of)

Acreage: 64.37

Current Zoning: PUD-CZ (06CZ26) Proposed Zoning: PUD-CZ

Current 2045 LUM Designation: Commercial Services, Industrial Employment and Office Employment

Is the proposed rezoning consistent with the 2045 LUM Classification(s)? Yes ☒ No ☐

If any portion of the project is shown as mixed use (3 or more stripes on the 2045 Land Use Map) provide the following:

Area classified as mixed use: Acreage:

Area proposed as non-residential development: Acreage:

Percent of mixed use area proposed as non-residential: Percent:

Applicant Information

Name: Strategic Real Estate Partners c/o Paxton Hollar

Address: 5605 Carnegie Blvd., Suite 375

City: Charlotte State: NC Zip: 28209

Phone: 404-836-4846 E-mail: info@strategicrepartners.com

Owner Information

Name: ALA Commercial LLC (See Application Property List)

Address: 700 Spring Forest Rd. Ste 400

City: Raleigh State: NC Zip: 27609-9124

Phone: E-mail:

Agent Information

Name: Jason Barron - Morningstar Law Group

Address: 434 Fayetteville Street, Suite 2200

City: Raleigh State: NC Zip: 27601

Phone: (919) 590-0371 E-mail: jbarron@morningstarlawgroup.com

Other contacts: Leticia Shapiro - Morningstar Law Group
434 Fayetteville Street, Suite 2200, Raleigh NC 27601
919-590-0366; tshapiro@morningstarlawgroup.com

Agent Information (Continued)

Name: Town of Apex

Address: 73 Hunter Street

City: Apex State: NC Zip: 27502

Phone: (919) 249-3400 E-Mail: dianne.khin@apexnc.org

PLANNED UNIT DEVELOPMENT APPLICATION

Application #: 26CZ02 Submittal Date: 3/2/2026

PLANNED UNIT DEVELOPMENT DISTRICT STANDARDS:

In return for greater flexibility in site design requirements, Planned Development (PD) Districts are expected to deliver exceptional quality community designs that preserve critical environmental resources; provide high quality community amenities; incorporate creative design in the layout of buildings, Resource Conservation Area and circulation; ensure compatibility with surrounding land uses and neighborhood character; provide high quality architecture; and provide greater efficiency in the layout and provision of roads, utilities, and other infrastructure. The Planned Development (PD) Districts shall not be used as a means of circumventing the Town's adopted land development regulations for routine developments. The PD text and plan should demonstrate how the standards of Sec. 2.3.4.F are met be the proposed rezoning.

LEGISLATIVE CONSIDERATIONS - CONDITIONAL ZONING

The applicant shall propose site-specific standards and conditions that take into account the following considerations, which are considerations that are relevant to the legislative determination of whether or not the proposed conditional zoning district rezoning request is in the public interest. These considerations do not exclude the legislative consideration of any other factor that is relevant to the public interest. Use additional pages as needed.

1) *Consistency with 2045 Land Use Map.* The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and consistency with the purposes, goals, objectives, and policies of the 2045 Land Use Map.

The 2045 Land Use Map designation is Commercial Services, Industrial Employment and Office Employment. The existing Jessie Commons PUD is a non-residential development for which final number of outparcels and buildings for all non-residential sites will be determined during the site plan process. The requested amendment will amend the current design controls related to the maximum square footage for the office zones, and maximum building heights for the entire PUD. This section is continued on Exhibit A.

2) *Compatibility.* The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and compatibility with the character of surrounding land uses.

The PUD is located along Hwy 55 between US 1 and Hwy 540. The properties are all currently zoned PUD-CZ. The Town's 2045 Future Land Use Map designates the properties as Commercial Services. The property is located near similarly designated properties and as such, is the appropriate location for the uses as previously approved and as shown on the Town's 2045 Land Use Map.

3) Zoning district supplemental standards. The proposed Conditional Zoning (CZ) District use's compliance with Sec 4.4 *Supplemental Standards*, if applicable.

The amended PUD will comply with all Supplemental Standards in UDO Section 4.4, if applicable.

4) *Design minimizes adverse impact.* The design of the proposed Conditional Zoning (CZ) District use's minimization of adverse effects, including visual impact of the proposed use on adjacent lands; and avoidance of significant adverse impacts on surrounding lands regarding trash, traffic, service delivery, parking and loading, odors, noise, glare, and vibration and not create a nuisance.

The PUD will adhere to the design within the PUD documents as previously approved and as amended, and all UDO standards for trash, traffic, service delivery, parking and loading, odors, noise, glare, and vibration. The adjacent properties - north and east are zoned LI-CZ; to the south and east are PUD-CZ, PC, PC-CU which are compatible with the nature and scale of the previously approved non-residential areas of the PUD.

5) *Design minimizes environmental impact.* The proposed Conditional Zoning District use's minimization of environmental impacts and protection from significant deterioration of water and air resources, wildlife habitat, scenic resources, and other natural resources.

The amended PUD will not have adverse impacts on water and air resources, wildlife habitat, scenic resources and other natural resources.

6) *Impact on public facilities.* The proposed Conditional Zoning (CZ) District use's avoidance of having adverse impacts on public facilities and services, including roads, potable water and wastewater facilities, parks, schools, police, fire and EMS facilities.

To the applicant's knowledge, the amended PUD will not have adverse impacts on public facilities and services to serve the PUD as previously approved. A revised TIA dated March 9, 2026 has been prepared by Kimley-Horn and has been submitted for review as part of this application. The traffic conditions studied include the existing (2026) traffic condition and the projected (2030) background and build-out conditions in the weekday AM and PM peak hours. The TIA included several recommended improvements and conclusions that can be found in the TIA report submitted with this application.

7) *Health, safety, and welfare.* The proposed Conditional Zoning (CZ) District use's effect on the health, safety, or welfare of the residents of the Town or its ETJ.

There will be no adverse impact to health, safety, and welfare related to the amended PUD. The Amendment will amend the design controls specifically regarding area designated O-1 which will increase from 180,000sf to 200,000sf and area designated O-2 will increase from 60,000 sf to 100,000 sf. The maximum building height for areas designated O-1 & O-2 and C-1 and C-2 will increase from 40' and 30' respectively to 48 '. See Exhibit A.

8) *Detrimental to adjacent properties.* Whether the proposed Conditional Zoning (CZ) District use is substantially detrimental to adjacent properties.

The amended PUD is similar in size, scale, and quality of existing nearby uses. Other conditions provided in the approved PUD text, including buffers, setbacks, and other archtectural requirements ensure the project is not detrimental to adjacent properties.

9) *Not constitute nuisance or hazard.* Whether the proposed Conditional Zoning (CZ) District use constitutes a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use.

The amended PUD will not create a nuisance or hazard due to traffic or noise. A revised traffic study will be provided to the Town with this PUD Amendment application that will demonstrate the amendments to the design controls are appropriate. In addition, the amended PUD is similar in size, scale, and quality to existing uses in the area.

10) *Other relevant standards of this Ordinance.* Whether the proposed Conditional Zoning (CZ) District use complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics.

The amended PUD will comply with all standards required by the UDO and additional standards set forth in the previously approved PUD text which either meets or exceeds the base requirements of the UDO.

DEVELOPMENT NAME APPROVAL APPLICATION

Application #: 26CZ02 Submittal Date: 3/2/2026

Fee for Initial Submittal: No Charge Fee for Name Change after Approval: $500*

Purpose

To provide a consistent and clearly stated procedure for the naming of subdivisions and/or developments and entrance roadways (in conjunction with *Town of Apex Address Policy*) so as to allow developers to define and associate the theme or aesthetics of their project(s) while maintaining the Town's commitment to preserving the quality of life and safety for all residents of Apex proper and extraterritorial jurisdiction.

Guidelines

- ✓ The subdivision/development name shall not duplicate, resemble, or present confusion with an existing subdivision/development within Apex corporate limits or extraterritorial jurisdiction except for the extension of an existing subdivision/development of similar or same name that shares a continuous roadway.
- ✓ The subdivision/development name shall not resemble an existing street name within Apex corporate limits or extraterritorial jurisdiction unless the roadway is a part of the subdivision/development or provides access to the main entrance.
- ✓ The entrance roadway of a proposed subdivision/development shall contain the name of the subdivision/development where this name does not conflict with the Town of Apex *Road Name Approval Application* and *Town of Apex Address Policy* guidelines.
- ✓ The name "Apex" shall be excluded from any new subdivision/development name.
- ✓ Descriptive words that are commonly used by existing developments will be scrutinized more seriously in order to limit confusion and encourage distinctiveness. A list of commonly used descriptive words in Apex's jurisdiction is found below.
- ✓ The proposed subdivision/development name must be requested, reviewed and approved during preliminary review by the Town.
- ✓ A $500.00 fee will be assessed to the developer if a subdivision/development name change is requested after official submittal of the project to the Town.*

*The imposed fee offsets the cost of administrative changes required to alleviate any confusion for the applicant, Planning staff, other Town departments, decision-making bodies, concerned utility companies and other interested parties. There is no charge for the initial name submittal.

Existing Development Titles, Recurring

	Residential	Non-Residential
10 or more	Creek, Farm(s), Village(s),	Center/Centre
6 to 9	Crossing(s), Park, Ridge, Wood(s)	Commons, Park
3 to 5	Acres, Estates, Glen(s), Green•, Hills	Crossing(s), Plaza, Station, Village(s)

•excludes names with Green Level

DEVELOPMENT NAME APPROVAL APPLICATION

Application #: 26CZ02 Submittal Date: 3/2/2026

Proposed Subdivision/Development Information

Description of location: Previously approved. See Town of Apex Rezoning Case #06CZ26.

Nearest intersecting roads: _____

Wake County PIN(s): _____

Township: _____

Contact Information (as appropriate)

Contact person: _____

Phone number: _____ Fax number: _____

Address: _____

E-mail address: _____

Owner: _____

Phone number: _____ Fax number: _____

Address: _____

E-mail address: _____

Proposed Subdivision/Development Name

1st Choice: _____

2nd Choice *(Optional)*: _____

Town of Apex Staff Approval:

_____ _____

Town of Apex Planning Department Staff Date

STREET NAME APPROVAL APPLICATION

Application #: 26CZ02 Submittal Date: 3/2/2026

Wake County Approval Date: _____

Guidelines:

- No names duplicating or sounding similar to existing road names
- Avoid difficult to pronounce names
- No individuals' names
- Avoid proper names of a business, e.g. Hannaford Drive
- Limit names to 14 characters in length
- No directionals, e.g. North, South, East, West
- No punctuation marks, e.g. periods, hyphens, apostrophes, etc.
- Avoid using double suffixes, e.g. Deer Path Lane
- All names must have an acceptable suffix, e.g. Street, Court, Lane, Path, etc.
- Use only suffixes which are Town of Apex approved
- Town of Apex has the right to deny any street name that is determined to be inappropriate

Information:

Description of location: Previously approved. See Town of Apex Rezoning Case #06CZ26.

Nearest intersecting roads: _____

Wake County PIN(s): _____

Township: _____

Contact information (as appropriate)

Contact person: _____

Phone number: _____ Fax number: _____

Address: _____

E-mail address: _____

Owner: _____

Phone number: _____ Fax number: _____

Address: _____

E-mail address: _____

STREET NAME APPROVAL APPLICATION

Application #: 26CZ02 Submittal Date: 3/2/2026

# of roads to be named: _____

Please submit twice as many road names as needed, with preferred names listed first. Proposed road names should be written exactly as one would want them to appear. Town of Apex Planning Department staff will send all approved street names to the Wake County GIS Department for county approval. Please allow several weeks for approval. Upon approval Wake County GIS – Street Addressing will inform you of the approved street names.

Example: Road Name Suffix

Hunter Street

1	Previously approved. See Town of Apex	11	
2	Rezoning Case #06CZ26.	12	
3		13	
4		14	
5		15	
6		16	
7		17	
8		18	
9		19	
10		20	

TOWN OF APEX STAFF APPROVAL

Town of Apex Staff Approval Date

WAKE COUNTY STAFF APPROVAL:

GIS certifies that _____ names indicated by checkmark ☑ are approved.
Please disregard all other names.

Comments:

Wake County GIS Staff Approval Date

TOWN OF APEX UTILITIES OFFER AND AGREEMENT

Application #: 26CZ02 Submittal Date: 3/2/2026

Town of Apex
73 Hunter Street
P.O. Box 250 Apex, NC 27502
919-249-3400
WAKE COUNTY, NORTH CAROLINA CUSTOMER SELECTION AGREEMENT

Jessie Commons PUD

(the "Premises")

The Town of Apex offers to provide you with electric utilities on the terms described in this Offer & Agreement. If you accept the Town's offer, please fill in the blanks on this form and sign and we will have an Agreement once signed by the Town.

SDP Charlotte, LLC , the undersigned customer ("Customer") hereby irrevocably chooses and selects the Town of Apex (the "Town") as the permanent electric supplier for the Premises. Permanent service to the Premises will be preceded by temporary service if needed.

The sale, delivery, and use of electric power by Customer at the Premises shall be subject to, and in accordance with, all the terms and conditions of the Town's service regulations, policies, procedures and the Code of Ordinances of the Town.

Customer understands that the Town, based upon this Agreement, will take action and expend funds to provide the requested service. By signing this Agreement the undersigned signifies that he or she has the authority to select the electric service provider, for both permanent and temporary power, for the Premises identified above.

Any additional terms and conditions to this Agreement are attached as Appendix 1. If no appendix is attached this Agreement constitutes the entire agreement of the parties.

Acceptance of this Agreement by the Town constitutes a binding contract to purchase and sell electric power.

Please note that under North Carolina General Statute §160A-332, you may be entitled to choose another electric supplier for the Premises.

Upon acceptance of this Agreement, the Town of Apex Electric Utilities Division will be pleased to provide electric service to the Premises and looks forward to working with you and the owner(s).

ACCEPTED:

CUSTOMER: SDP Charlotte, LLC	TOWN OF APEX
BY: _____ Authorized Agent	BY: _____ Authorized Agent
DATE: 2-26-26	DATE: _____

AGENT AUTHORIZATION FORM

Application #: 26CZ02 **Submittal Date:** 3/2/2026

ALA Commercial LLC is the owner* of the property for which the attached application is being submitted:

- ☑ Rezoning: For Conditional Zoning and Planned Development rezoning applications, this authorization includes express consent to zoning conditions that are agreed to by the Agent which will apply if the application is approved.
- ☐ Site Plan
- ☐ Subdivision
- ☐ Variance
- ☐ Other:

The property address is: 1701 E. Williams Street; 0 E. Williams Street; 0 E. Williams Street

The agent for this project is: Jason Barron and Leticia Shapiro - Morningstar Law Group
Jeff Roach - Peak Engineering and Design

☐ I am the owner of the property and will be acting as my own agent

Agent Name:	Jason Barron and Leticia Shapiro Morningstar Law Group	Jeff Roach Peak Engineering and Design
Address:	434 Fayetteville Street, Suite 2200 Raleigh, NC 27601	1125 Apex Peakway Apex, NC 27502
Telephone Number:	919-590-0371; 919-590-0366	919-439-0100
E-Mail Address:	jbarron@morningstarlawgroup.com tshapiro@morningstarlawgroup.com	jroach@peakengineering.com

Signature(s) of Owner(s)*

JR Thomas

Authorized Person for ALA Commercial LLC — 2-27-26

JR Thomas — Type or print name — Date

Type or print name — Date

Attach additional sheets if there are additional owners.

*Owner of record as shown on the latest equalized assessment rolls of Wake County. An option to purchase does not constitute ownership. If ownership has been recently transferred, a copy of the deed must accompany this authorization.

Pursuant to Article 40 of Chapter 66 of the North Carolina General Statutes (the Uniform Electronic Transactions Act) this application and all documents related hereto containing an electronic or digitized signature are legally binding in the same manner as are hard copy documents executed by hand signature. The parties hereby consent to use electronic or digitized signatures in accordance with the Town's Electronic Signature Policy and intend to be bound by the application and any related documents. If electronic signatures are used the application shall be delivered in an electronic record capable of retention by the recipient at the time of receipt.

AFFIDAVIT OF OWNERSHIP

Application #: 26CZ02 Submittal Date: 3/2/2026

The undersigned, ALA Commercial LLC (the "Affiant") first being duly sworn, hereby swears or affirms as follows:

1. Affiant is over eighteen (18) years of age and authorized to make this Affidavit. The Affiant is the sole owner, or is the authorized agent of all owners, of the property located at 1701 E. Williams Street and legally described in **Exhibit "A"** attached hereto and incorporated herein (the "Property").

2. This Affidavit of Ownership is made for the purpose of filing an application for development approval with the Town of Apex.

3. If Affiant is the owner of the Property, Affiant acquired ownership by deed, dated 10/25/2006, and recorded in the Wake County Register of Deeds Office on 10/26/2006, in Book 012233 Page 02621.

4. If Affiant is the authorized agent of the owner(s) of the Property, Affiant possesses documentation indicating the agency relationship granting the Affiant the authority to apply for development approval on behalf of the owner(s).

5. If Affiant is the owner of the Property, from the time Affiant was deeded the Property on 10/25/2006, Affiant has claimed sole ownership of the Property. Affiant or Affiant's predecessors in interest have been in sole and undisturbed possession and use of the property during the period of ownership. Since taking possession of the Property on 10/25/2006, no one has questioned Affiant's ownership or right to possession nor demanded any rents or profits. To Affiant's knowledge, no claim or action has been brought against Affiant (if Affiant is the owner), or against owner(s) (if Affiant is acting as an authorized agent for owner(s)), which questions title or right to possession of the property, nor is any claim or action pending against Affiant or owner(s) in court regarding possession of the Property.

This the 27 day of Feb, 20 26.

J. Rex Thomas (seal)

J Rex Thomas
Authorized Person for ALA Commercial LLC Type or print name

STATE OF NORTH CAROLINA
COUNTY OF Wake

I, the undersigned, a Notary Public in and for the County of Wake, hereby certify that J Rex Thomas, Affiant, personally known to me or known to me by said Affiant's presentation of said Affiant's NC DL, personally appeared before me this day and acknowledged the due and voluntary execution of the foregoing Affidavit.

Gerald A Byrd
Notary Public
State of North Carolina
My Commission Expires: 11-9-26

GERALD A. BYRD
Notary Public, North Carolina
Lee County
[NOTARY SEAL]
My Commission Expires
11-9-26

AFFIDAVIT OF OWNERSHIP

Application #: 26CZ02 Submittal Date: 3/2/2026

The undersigned, ALA Commercial LLC (the "Affiant") first being duly sworn, hereby swears or affirms as follows:

1. Affiant is over eighteen (18) years of age and authorized to make this Affidavit. The Affiant is the sole owner, or is the authorized agent of all owners, of the property located at 0 E. Williams Street & 0 E. Williams Street and legally described in **Exhibit "A"** attached hereto and incorporated herein (the "Property").

2. This Affidavit of Ownership is made for the purpose of filing an application for development approval with the Town of Apex.

3. If Affiant is the owner of the Property, Affiant acquired ownership by deed, dated 3/14/2007, and recorded in the Wake County Register of Deeds Office on 3/16/2007, in Book 012448 Page 02166.

4. If Affiant is the authorized agent of the owner(s) of the Property, Affiant possesses documentation indicating the agency relationship granting the Affiant the authority to apply for development approval on behalf of the owner(s).

5. If Affiant is the owner of the Property, from the time Affiant was deeded the Property on 3/14/2007, Affiant has claimed sole ownership of the Property. Affiant or Affiant's predecessors in interest have been in sole and undisturbed possession and use of the property during the period of ownership. Since taking possession of the Property on 3/14/2007, no one has questioned Affiant's ownership or right to possession nor demanded any rents or profits. To Affiant's knowledge, no claim or action has been brought against Affiant (if Affiant is the owner), or against owner(s) (if Affiant is acting as an authorized agent for owner(s)), which questions title or right to possession of the property, nor is any claim or action pending against Affiant or owner(s) in court regarding possession of the Property.

This the 25 day of Feb, 20 26.

J. R Thomas (seal)

J. Rex Thomas

Authorized Person for ALA Commercial LLC Type or print name

STATE OF NORTH CAROLINA
COUNTY OF Wake

I, the undersigned, a Notary Public in and for the County of Wake, hereby certify that J Rex Thomas, Affiant, personally known to me or known to me by said Affiant's presentation of said Affiant's NCDL, personally appeared before me this day and acknowledged the due and voluntary execution of the foregoing Affidavit.

GERALD A. BYRD
Notary Public, North Carolina
Lee County
My Commission Expires
11-9-26

[NOTARY SEAL]

Gerald A. Byrd

Notary Public
State of North Carolina
My Commission Expires: 11-9-26

AFFIDAVIT OF OWNERSHIP

Application #: 26CZ02 Submittal Date: _____

The undersigned, Town of Apex (the "Affiant") first being duly sworn, hereby swears or affirms as follows:

1. Affiant is over eighteen (18) years of age and authorized to make this Affidavit. The Affiant is the sole owner, or is the authorized agent of all owners, of the property located at 1615 E. Williams St. and legally described in **Exhibit "A"** attached hereto and incorporated herein (the "Property").

2. This Affidavit of Ownership is made for the purpose of filing an application for development approval with the Town of Apex.

3. If Affiant is the owner of the Property, Affiant acquired ownership by deed, dated 12/20/2006, and recorded in the Wake County Register of Deeds Office on 12/21/2006, in Book 012323 Page 01942.

4. If Affiant is the authorized agent of the owner(s) of the Property, Affiant possesses documentation indicating the agency relationship granting the Affiant the authority to apply for development approval on behalf of the owner(s).

5. If Affiant is the owner of the Property, from the time Affiant was deeded the Property on 12/20/2006, Affiant has claimed sole ownership of the Property. Affiant or Affiant's predecessors in interest have been in sole and undisturbed possession and use of the property during the period of ownership. Since taking possession of the Property on 12/20/2006, no one has questioned Affiant's ownership or right to possession nor demanded any rents or profits. To Affiant's knowledge, no claim or action has been brought against Affiant (if Affiant is the owner), or against owner(s) (if Affiant is acting as an authorized agent for owner(s)), which questions title or right to possession of the property, nor is any claim or action pending against Affiant or owner(s) in court regarding possession of the Property.

This the 29th day of September, 2026.

Randy Vosburg (seal)

Randy Vosburg
Type or print name

STATE OF NORTH CAROLINA
COUNTY OF Wake

I, the undersigned, a Notary Public in and for the County of Wake, hereby certify that Randy Vosburg, Affiant, personally known to me or known to me by said Affiant's presentation of said Affiant's _____, personally appeared before me this day and acknowledged the due and voluntary execution of the foregoing Affidavit.

SANDRA S BURKE NOTARY PUBLIC WAKE COUNTY NC
[NOTARY SEAL]

Sandra S. Burke
Notary Public
State of North Carolina
My Commission Expires: 9/9/203

AGENT AUTHORIZATION FORM

Application #: 26CZ02 Submittal Date: _____

Town of Apex is the owner* of the property for which the attached application is being submitted:

- ☒ Rezoning: For Conditional Zoning and Planned Development rezoning applications, this authorization includes express consent to zoning conditions that are agreed to by the Agent which will apply if the application is approved.
- ☐ Site Plan
- ☐ Subdivision
- ☐ Variance
- ☐ Other: _____

The property address is: 1615 E. William St.

The agent for this project is: _____

☒ I am the owner of the property and will be acting as my own agent

Agent Name: _____

Address: _____

Telephone Number: _____

E-Mail Address: _____

Signature(s) of Owner(s)*

Randy Vosburg

Randy Vosburg 9/29/26

Type or print name Date

_____

_____ _____

Type or print name Date

Attach additional sheets if there are additional owners.

*Owner of record as shown on the latest equalized assessment rolls of Wake County. An option to purchase does not constitute ownership. If ownership has been recently transferred, a copy of the deed must accompany this authorization.

Pursuant to Article 40 of Chapter 66 of the North Carolina General Statutes (the Uniform Electronic Transactions Act) this application and all documents related hereto containing an electronic or digitized signature are legally binding in the same manner as are hard copy documents executed by hand signature. The parties hereby consent to use electronic or digitized signatures in accordance with the Town's Electronic Signature Policy and intend to be bound by the application and any related documents. If electronic signatures are used the application shall be delivered in an electronic record capable of retention by the recipient at the time of receipt.

AFFIDAVIT OF OWNERSHIP: EXHIBIT A – LEGAL DESCRIPTION

Application #: 26CZ02 Submittal Date:

Insert legal description below.

Being a 64.37 acre tract of land located in the White Oak Township, Wake County, North Carolina comprised of contiguous land parcels identified as Wake Co. PIN numbers 0751-00-3311, 0741-91-2010, 0741-91-6041, and 0751-01-1288 with the perimeter described as follows:

Beginning at a *iron pipe* having NC Grid (NAD 83) coordinates of **N: 710285.84, E: 2049460.39**; thence along the northern *property line of the David L. Raymer Property* following a bearing of **N 89°56'09" W** a distance of **88.62** feet to a *iron pipe on the eastern right of way of NC Hwy 55*; thence along the *eastern right of way of NC Hwy 55* in a northerly direction with a non tangent curve turning to the left with a radius of 5495.40 feet, having a chord bearing of **N 12°16'32" W** and a chord distance of **475.12**, having a interior angle of 04°57'19" and an arc length of 475.27 to a *iron pipe*; thence along the *eastern right of way of NC Hwy 55 in* a northerly direction with a non tangent curve turning to the left with a radius of 5495.40 feet, having a chord bearing of **N 16°58'36" W** and a chord distance of **426.38**, having a interior angle of 04°26'48" and an arc length of 426.49 to a *iron pipe*; thence leaving the *eastern right of way of NC Hwy 55* along the southern property line of the Edwards Investment Group following a bearing of **S 86°19'55" E** a distance of **35.78** feet to a *iron pipe*; thence along the western property line of the Edwards Investment Group following a bearing of **N 08°39'56" W** a distance of **111.05** feet to a *iron pipe*; a bearing of **N 05°09'13" W** a distance of **159.93** feet to a *iron*; a bearing of **N 04°27'18" W** a distance of **505.30** feet to a *iron pipe in the southern property line of the Dixie Pipeline Company Property*; thence with the *southern property line of the Dixie Pipeline Company Property following* a bearing of **S 86°19'34" E** a distance of **1165.34** feet to a *iron pipe and* a bearing of **S 86°16'37" E** a distance of **302.09** feet to a *iron pipe in the western property line of the Louis C. Smith Property;* thence with *the western property line of the Louis C. Smith Property following a* bearing of **S 18°12'55" E** a distance of **978.58** feet to a *point*; thence with the *property line of the Louis C. Smith Property* a bearing of **S 65°46'45" W** a distance of **329.17** feet to a *point*; thence with the *property line of the Louis C. Smith Property* a bearing of **S 79°31'14" W** a distance of **0.87** feet to a *iron pipe*; thence with *the western property line of the Louis C. Smith Property* following a bearing of **S 12°28'44" E** a distance of **894.01** feet to a *iron pipe in the northern property line of the Daylene Page Property*; thence with *the northern property line of the Daylene Page Property following a* bearing of **N 86°39'53" W** a distance of **1286.16** feet to a *iron pipe in the western property line of the David L. Raymer Property*; thence with *the western property line of the David L. Raymer Property following* a bearing of **N 05°23'23" W** a distance of **315.78** feet to a *iron pipe the point and place of beginning and containing 2804093 sq. ft./ 64.37 ac. more or less*;

LESS AND EXCEPT the following:

26CZ02

ALA Commercial LLC
"SLIVER" Property Legal Description

A certain parcel of land, situated in White Oak Township, Wake County, North Carolina, being known and designated as PIN: 0741-91-2010 REID 0342514 Wake County Records, and being more particularly described as follows:

At an Existing Iron Pipe along the eastern right-of-way line of NC Highway 55 (E. Williams Street) being at the northwest corner of the subject parcel and the common southwest corner of the N/F ALA Commercial LLC Property described as PIN 0741-91-1400 REID 0367740, said point described by Smith & Smith Surveyors in an "Exempt Subdivision Plat for Highway 55 Properties, LLC" recorded with the Wake County Register's office on August 5, 2005 at Book of Maps 2005 Page 1584, said point being the POINT OF BEGINNING;

thence N86°19'55"E, 35.78' to an Iron Pipe Set being the Common Property Corner with PINs 0741911400, 0741915068, and 0741912010;

thence S08°39'56"E, 18.83' to an Iron Pipe Set along the common property boundary with PIN 0741915068;

thence S11°50'08"E, 129.38' to an Iron Pipe Set along the common property boundary with PIN 0741915068;

thence S12°51'38"E, 266.95' to an Iron Pipe Set along the southern corner described as IPS "A" within the plat recorded in BM2005 PG1584;

thence with a curve to the west with a chord bearing of N16°58'36"W, 426.38' with a radius of 5,495.40' and a curve length of 426.49' to a point, said point by the POINT OF BEGINNING; with the parcel containing 5,401 square foot or 0.124 acres more or less as described in BM2005 PG1574.

26CZ02

JESSIE COMMONS PUD AMENDMENT - APPLICATION PROPERTY LIST							
Address	REID	PIN	Owner	Mailing Address 1	Mailing Address 2	Deed Book	Deed Page
1701 E WILLIAMS ST	0013416	0751003311	ALA COMMERCIAL LLC	700 SPRING FOREST RD STE 400	RALEIGH NC 27609-9124	012233	02621
0 E WILLIAMS ST	0012272	0751011288	ALA COMMERCIAL LLC	PO BOX 98028	RALEIGH NC 27624-8028	012448	02163
0 E WILLIAMS ST	0342515	0741915068	ALA COMMERCIAL LLC	PO BOX 98028	RALEIGH NC 27624-8028	012448	02163
1615 E. WILLAMS ST	0352879	0741911743	APEX TOWN OF	PO BOX 250	APEX, NC 27502-0250	012323	01942

26CZ02

WAKE COUNTY PUBLIC SCHOOL SYSTEM

Wake County Residential Development Notification

Developer Company *Information*	
Company *Name*	Strategic Real Estate Partners
Company Phone *Number*	404-836-4846
Developer Representative *Name*	Paxton Hollar
Developer Representative *Phone Number*	704-287-7778
Developer Representative *Email*	phollar@strategicrepartners.com

New Residential Subdivision *Information*	
Date of Application for Subdivision	
City, Town or Wake County Jurisdiction	
Name of Subdivision	Jessie Commons PUD
Address of Subdivision (if unknown enter nearest cross streets)	
REID(s)	0013416; 0012272; 0342515
PIN(s)	075003311; 0751011288; 0741915068

Please complete each section of this form and submit with your application.

Please complete each section of this form and submit with your application.

Please send any questions about this form to: studentassignment-gis-group@wcpss.net.

Projected Dates *Information*	
Subdivision *Completion Date*	
Subdivision *Projected First Occupancy Date*	

Lot by Lot Development *Information*

Unit Type	Total # of Units	Senior Living	Studio	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom	Square Foot Range		Price Range		Anticipated Completion Units & Dates					
								Min	Max	Low	High	Year	# Units	Year	# Units	Year	# Units
Single Family																	
Townhomes																	
Condos																	
Apartments																	
Other	non-residential																

Revised 08/10/2018

Instruction Packet and Affidavit for
Neighborhood Meetings

Town of Apex
Planning Dept
PO Box 250
Apex, NC 27502

T: 919-249-3426
F: 919-267-4987

This packet consists of instructions and templates for conducting a required Neighborhood Meeting. Planning staff are available to advise you in the preparation of these materials. Call the Planning Department at (919) 249-3426 for more information.

WHAT IS THE PURPOSE OF A NEIGHBORHOOD MEETING?

A neighborhood meeting is a required form of community outreach to receive initial feedback regarding certain project types and any long range plan amendments directly associated with such projects prior to submittal to the Planning Department per the standards found in UDO Sec. 2.2.7.B. The intent of the meeting is to initiate neighbor communication and identify issues and concerns early on and provide the applicant an opportunity to address neighbor concerns about the potential impacts of the project prior to submitting an application.

A pre-application neighborhood meeting is valid for six (6) months prior to the submission of an application; a delay in submission requires a new neighborhood meeting.

WHEN IS A NEIGHBORHOOD MEETING REQUIRED?

- Rezonings (including Planned Unit Developments);
- Major Site Plans;
- Minor Site Plans for the uses “Day care facility”, “Government service”, “School, public or private”, “Restaurant, drive-through”, and “Convenience store with gas sales”;
- Residential Master Subdivision Plans (excluding exempt subdivisions); or
- Special Use Permits

INSTRUCTIONS

Prior to submitting an application for a Rezoning; Major Site Plan; Minor Site Plans for the uses “Day care facility”, “Government service”, “School, public or private”, “Restaurant, drive-through”, or “Convenience store with gas sales”; residential Master Subdivision Plan (excluding exempt subdivisions); or Special Use Permit, the applicant must conduct at least one (1) Neighborhood Meeting. **The notices for this Neighborhood Meeting shall not be mailed until after the pre-application meeting with the Technical Review Committee has been held.** This meeting may be held in-person or virtually. Virtual meetings shall provide a dial-in option in addition to a link to participate by internet. The applicant shall submit all forms included in this packet with the initial application submittal.

A second Neighborhood Meeting is required for all Rezonings (including Planned Unit Developments). This meeting shall be held in the month preceding the anticipated public hearing date.

The Neighborhood Meeting must be held in accordance with the following rules:

These groups and individuals must be invited to the meeting:

- The applicant is required to notify the Planning Department, all property owners and tenants abutting and within 500 feet of the subject property, and any neighborhood association that

represents citizens in the notification area via first class mail a minimum of 14 days in advance of the neighborhood meeting, not including the day of mailing. **The applicant shall send an email to addressing.team@apexnc.org to request the notification list as early as possible in order to receive the list in time for the mailing. The list will be provided within 5-10 business days of the initial request.** The applicant shall use their own return address on the envelopes as the meeting is a private meeting between the applicant and the neighbors. An updated list shall be provided by Planning staff prior to the required 2nd meeting for Rezoning applications.

- The applicant shall include with the meeting notice a vicinity map in addition to the materials listed under "Mailing and handout requirements" below.

The meeting must be held within specific timeframes and meet certain requirements:

- For all applications except Rezonings, the meeting must be held for a minimum of two (2) hours, Monday through Thursday, during the 5:00 p.m. - 9:00 p.m. time period.
- For Rezonings, two (2) meetings are required. The first meeting must be held prior to submittal of the application and the second meeting must be held in the month preceding the anticipated public hearing date. The meetings must be held for a minimum of one (1) hour each, Monday through Thursday, during the 5:00 p.m. - 9:00 p.m. time period.
- Meetings cannot be held on Town recognized holidays (http://www.apexnc.org/calendar.aspx).
- In-person meetings:
    - Meeting shall be held at a place that is generally accessible to neighbors that reside in close proximity to the land subject to the application.
    - A sign-in sheet must be used in order to verify attendance. Ensure each attendee signs in. Please note if any person(s) refuses to sign in. Note if no one attended.
- Virtual meetings:
    - Meeting shall be held via an interactive online video conferencing software such as Microsoft Teams, Zoom, WebEx, or any similar platform of the applicant's choice. A dial-in option shall be provided.
    - An attendance sheet must be used to log known attendees at the virtual meeting. Note if no one attended.
- Mailings and handouts must include the following to help facilitate discussion:
    - For rezonings (excluding rezonings to PUD-CZ, TND-CZ and MEC-CZ):
        - A vicinity map and existing zoning map of the area; and
        - An exhibit(s) showing any proposed long range plan amendment(s), if applicable.
    - For rezonings to PUD-CZ, TND-CZ and MEC-CZ; Major Site Plans; Minor Site Plans for the uses "Day care facility", "Government service", "School, public or private", "Restaurant, drive-through", and "Convenience store with gas sales"; residential Master Subdivision Plans; and Special Use Permits:
        - A vicinity map and preliminary plans of the proposed development. Neighbors may request emailed/mailed copies of the maps or plans from the applicant by checking the "send plans" box on the sign-in sheet; applicant shall provide reduced copies upon request. For virtual meetings, the applicant must ask meeting participants if they would like any materials emailed/mailed to them; and
        - An exhibit showing any proposed long range plan amendment(s), if applicable.
    - Printed copies (handouts) must equal the number of notices required to be sent.
    - Contact information for the applicant's representative and Town Staff must be provided on the attached "Project Contact Information" form.
    - "Common Construction Issues & Who to Call" sheet (attached) must be included as part of the mailing/handout.
    - A copy of the handout must be included as part of the Neighborhood Meeting report.

- The agenda of the meeting shall include:
    - Explanation of all processes the meeting is being held for (rezoning, subdivision, etc.).
    - Explanation of future meetings (additional neighborhood meetings, Planning Board, Town Council, etc.).
    - Explanation of development proposal – uses and conditions for rezonings, layout for subdivision and site plans, and builder/end user if known/public knowledge.
- Questions or concerns by attendees, and responses by the applicant, if any, must be noted. For in-person meetings, provide blank comment sheets or notecards for neighbors to submit written comments. For virtual meetings, copy all questions and answers entered into the meeting's chat feature before closing the meeting and save them into a document. The applicant shall also include any questions and concerns received via written correspondence (such as email) or phone call along with responses provided by the applicant.
- The applicant shall be responsible for notifying any neighbors who check the "Send Plans & Updates" box on the sign-in sheet or who otherwise request to be updated of any additional neighborhood meetings and the actual submittal date to the Town with a link to the Town of Apex's Interactive Development Map.

For accountability purposes, please submit the following with your application:

- A copy of the letter mailed to the Planning Department, neighbors, and neighborhood organizations (use attached invitation template);
- A list of those persons and neighborhood organizations invited to the meeting;
- A copy of the sign-in sheet (use attached sign-in sheet template);
- A summary of the meeting and a list of any changes made to the project as a result of the neighborhood comments (use attached meeting summary template);
- The affidavit, signed, dated, and notarized (use attached affidavit template); and
- One (1) reduced copy of the maps and/or plans included in the invitation and presented to the neighbors at the Neighborhood Meeting.

NOTICE OF NEIGHBORHOOD MEETING

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

January 28, 2026

Date

Dear Neighbor:

You are invited to a neighborhood meeting to review and discuss the development proposal at

Address(es)	PIN(s)
0 E Williams Street; 1701 E Williams Street;	0751011288; 0751003311;
0 E Williams Street; 1615 E Williams Street	0741915068; 0741911743

in accordance with the Town of Apex Neighborhood Meeting procedures. This meeting is intended to be a way for the applicant to discuss the project and review the proposed plans with adjacent neighbors and neighborhood organizations before the submittal of an application to the Town. This provides neighbors an opportunity to raise questions and discuss any concerns about the impacts of the project before it is officially submitted. If you are unable to attend, please refer to the Project Contact Information page for ways to contact the applicant. Notified neighbors may request that the applicant provide updates and send plans via email or mail. Once an application has been submitted to the Town, it may be tracked using the Interactive Development Map or the Apex Development Report located on the Town of Apex website at http://www.apexnc.org/180. Applications for Rezoning must hold a second Neighborhood Meeting in the month prior to the anticipated public hearing date.

A Neighborhood Meeting is required because this project includes (check all that apply):

	Application Type	Approving Authority
☑	Rezoning (including Planned Unit Development)	Town Council
☐	Major Site Plan	Technical Review Committee (staff)
☐	Minor Site Plan for the uses "Day care facility", "Government service", "School, public or private", "Restaurant, drive-through", or "Convenience store with gas sales"	Technical Review Committee (staff)
☐	Special Use Permit	Board of Adjustment (QJPH*)
☑	Residential Master Subdivision Plan (excludes exempt subdivisions)	Technical Review Committee (staff)

*Quasi-Judicial Public Hearing: The Board of Adjustment cannot discuss the project prior to the public hearing.

The following is a description of the proposal including any proposed long range plan amendments (also see attached map(s) and/or plan sheet(s)):

Rezone for the purpose of amending the Jessie Commons Planned Unit Development Design Controls related to building height and square footage maximums.

Estimated submittal date: March 2, 2026

MEETING INFORMATION:

Property Owner(s) name(s):	Town of Apex and ALA Commercial LLC
Applicant(s):	Strategic Real Estate Partners
Contact information (email/phone):	Jason Barron Morningstar Law Group-(919) 590-0371-jbarron@morningstarlawgroup.com
Meeting Address:	Virtual - Zoom Platform https://morningstarlaw.group/02112026
Date/Time of meeting**:	February 11, 2026 - 5:30pm-6:30pm

Welcome: 5:30pm-5:35pm Project Presentation: 5:35pm-5:45pm Question & Answer: 5:45pm-6:30pm

**Meetings shall occur between 5:00 p.m.-9:00 p.m. on a Monday through Thursday (excluding Town recognized holidays). If you have questions about the general process for this application, please contact the Planning Department at 919-249-3426. You may also find information about the Apex Planning Department and on-going planning efforts at http://www.apexnc.org/180.

PROJECT CONTACT INFORMATION

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Development Contacts:

Project Name: Jessie Commons PUD Amendment Zoning: PUD-CZ

Location: See Attached Property List

Property PIN(s): See Attached Property List Acreage/Square Feet: See Attached Property List

Property Owner: See Attached Property List

Address:

City: State: Zip:

Phone: Email:

Developer: N/A

Address:

City: State: Zip:

Phone: Fax: Email:

Engineer: Jeff Roach, Peak Engineering & Design PLLC

Address: 1125 Apex Peakway

City: Apex State: NC Zip: 27502

Phone: (919) 439-0100 Fax: Email: jroach@peakengineering.com

Builder (if known): N/A

Address:

City: State: Zip:

Phone: Fax: Email:

Please note that Town staff will not have complete information about a proposed development until the application is submitted for review. If you have a question about Town development standards and how they relate to the proposed development, please contact the appropriate staff person listed below.

Town of Apex Department Contacts	
Planning Department Main Number (Provide development name or location to be routed to correct planner)	(919) 249-3426
Parks, Recreation & Cultural Resources Department Angela Reincke, Parks Planning Manager	(919) 372-7468
Transportation & Infrastructure Development Russell Dalton, Traffic Engineering Manager	(919) 249-3358
Water Resources Department Jessica Bolin, Environmental Engineering Manager (Stormwater, Sedimentation & Erosion Control) Matt Reker, Utility Engineer/FOG Program Manager (Water & Sewer)	(919) 249-3537 (919) 946-4394
Electric Utilities Division Jared Harris, Electric Technical Services Manager	(919) 372-7466

Providing Input to Town Council:

Each Town Council meeting agenda includes a Public Forum time when anyone is permitted to speak for three (3) minutes on any topic with the exception of items listed as Public Hearings for that meeting. The Town Council meets on the 2nd and 4th Tuesdays of each month at 6:00 p.m. (except for holidays, see schedule of meetings at http://www.apexnc.org/838/Agendas-Minutes). You may also contact Town Council by e-mail at AllCouncil@apexnc.org.

Private Agreements and Easement Negotiation:

The Town of Apex cannot enforce private agreements between developers and neighbors and is not a party to the easement and right-of-way negotiation that occurs between developers and neighboring property owners for easements or rights-of-way that are necessary to build the project.

It is recommended that all private agreements be made in writing and that if a property owner feels it necessary, they should obtain private legal counsel in order to protect their interests in both private agreements and during easement negotiations. The only conditions that the Town of Apex can enforce are those conditions that are made a part of the conditional zoning of the property by agreement of the developer and the Town.

As an example, if a developer offers to build a fence for a neighbor to mitigate some impact, the Town can only enforce the construction of the fence if the fence becomes a condition of the rezoning. This would occur by the developer offering the condition as part of their conditional zoning application package or at the Town Council public hearing on the conditional zoning and the Town accepting it as a condition. Private agreements regarding a fence being constructed will not be enforced by the Town.

To request that any agreement with a developer is made a part of the conditional zoning at the time of approval, you may ask at the Town Council public hearing if the agreement is included in the conditions. If it is not, you may request that the Town Council not approve the rezoning without the agreement being included in the conditions (note that it is up to Town Council whether to approve or deny the rezoning but they cannot impose conditions that the applicant does not agree to add). The developer's proposed conditions can be viewed any time after a rezoning is submitted on the Interactive Development Map at: http://apexnc.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=fa9ba2017b784030b15ef4da27d9e795

Documentation:

Neighbors to a requested new development and/or rezoning are strongly encouraged to fully document (such as through dated photographs) the condition of their property before any work is initiated for the new development. Stormwater controls installed on developed property are not designed to and will likely not remove 100% of the soil particles transported by stormwater runoff. As a result, creeks and ponds could become cloudy for a period of time after rain events.

COMMON CONSTRUCTION ISSUES & WHO TO CALL

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Noise & Hours of Construction:	**Non-Emergency Police**	**919-362-8661**

Noise from tree removal, grading, excavating, paving, and building structures is a routine part of the construction process. The Town generally limits construction hours from 7:00 am to 8:30 pm so that there are quiet times even during the construction process. Note that construction outside of these hours is allowed with special permission from the Town when it makes more sense to have the construction occur at night, often to avoid traffic issues. In addition, the Town limits hours of blasting rock to Monday-Friday from 8:00 am to 5:00 pm. Report violations of construction hours and other noise complaints to the Non-Emergency Police phone number at 919-362-8661.

Construction Traffic:	**Infrastructure Inspections**	**919-249-3386**

Construction truck traffic will be heavy throughout the development process, including but not limited to removal of trees from site, loads of dirt coming in and/or out of the site, construction materials such as brick and wood brought to the site, asphalt and concrete trucks come in to pave, etc. The Town requires a construction entrance that is graveled to try to prevent as much dirt from leaving the site as possible. If dirt does get into the road, the Town can require they clean the street (see "Dirt in the Road" below).

Road Damage & Traffic Control:	**Infrastructure Inspections**	**919-249-3386**

There can be issues with roadway damage, roadway improvements, and traffic control. Potholes, rutting, inadequate lanes/signing/striping, poor traffic control, blocked sidewalks/paths are all common issues that should be reported to Transportation & Infrastructure Development – Infrastructure Inspections at 919-249-1109. The Town will get NCDOT involved if needed.

Parking Violations:	**Non-Emergency Police**	**919-362-8661**

Unless a neighbor gives permission, there should be no construction parking in neighbors' driveways or on their property. Note that parking in the right-of-way is allowed, but Town regulations prohibit parking within 15 feet of driveways so as not to block sight triangles. Trespassing and parking complaints should be reported to the Non-Emergency Police phone number at 919-362-8661.

Dirt in the Road:	**Water Resources**	**919-362-8166**

Sediment (dirt) and mud gets into the existing roads due to rain events and/or vehicle traffic. These incidents should be reported by visiting the Report a Concern page at https://www.apexnc.org/1173/ or by calling the number listed. Staff will coordinate the cleaning of the roadways with the developer.

Dirt on Properties or in Streams:	**Water Resources**	**919-362-8166**

Sediment (dirt) can leave the site and get onto adjacent properties or into streams and stream buffers; it is typically transported off-site by rain events. These incidents should be reported by visiting the Report a Concern page at https://www.apexnc.org/1173/ or by calling the number listed so that staff can coordinate the appropriate repairs with the developer.

Dust:	**Water Resources**	**919-362-8166**

During dry weather dust often becomes a problem blowing into existing neighborhoods or roadways. These incidents should be reported by visiting the Report a Concern page at https://www.apexnc.org/1173/ or by calling the number listed so that staff can coordinate the use of water trucks onsite with the grading contractor to help control the dust.

Trash:	**Water Resources**	**919-362-8166**

Excessive garbage and construction debris can blow around on a site or even off of the site. These incidents should be reported by visiting the Report a Concern page at https://www.apexnc.org/1173/ or by calling the number listed. Staff will coordinate the cleanup and trash collection with the developer/home builder.

Temporary Sediment Basins:	**Water Resources**	**919-362-8166**

Temporary sediment basins during construction (prior to the conversion to the final stormwater pond) are often quite unattractive. Concerns should be reported by visiting the Report a Concern page at https://www.apexnc.org/1173/ or by calling the number listed so that he can coordinate the cleaning and/or mowing of the slopes and bottom of the pond with the developer.

Stormwater Control Measures:	**Water Resources**	**919-362-8166**

Post-construction concerns related to Stormwater Control Measures (typically a stormwater pond) such as conversion and long-term maintenance should be reported by visiting the Report a Concern page at https://www.apexnc.org/1173/ or by calling the number listed.

Electric Utility Installation:	**Electric Utilities**	**919-249-3531**

Concerns with electric utility installation can be addressed by the Apex Electric Utilities Department.

Neighborhood Meeting Property List

ATTACHMENT A

PIN	Site Address	Owner Name and Address	Acreage
0751003311	1701 E WILLIAMS ST	ALA COMMERCIAL LLC, 700 Spring Forest Rd, Ste 400, Raleigh NC 27609-9124	22.24
0751011288	0 E WILLIAMS ST	ALA COMMERCIAL LLC, 700 Spring Forest Rd, Ste 400, Raleigh NC 27609-9124	23.66
0741915068	0 E WILLIAMS ST	ALA COMMERCIAL LLC, 700 Spring Forest Rd, Ste 400, Raleigh NC 27609-9124	18.53
0741911743	1615 E WILLIAMS ST	APEX TOWN OF, PO Box 250, Apex, NC 27502-0250	2.09
			66.52

HOW TO PARTICIPATE IN THE FEBRUARY 11, 2026, NEIGHBORHOOD MEETING

To participate by PC, Mac, or iPad devise, go to https://morningstarlaw.group/02112026 to register for the meeting. (Registration is necessary as we are required by the Town of Apex to have a record of attendance.) You may also scan the registration QR Code to register.

- Upon Registration, you Will receive a confirmation email with instructions on how to Access the meeting
- To attend the meeting via phone,
- Dial one of the following numbers:

REGISTRATION QR CODE

Dial one of the following numbers:

- +1 301 715 8592
- +1 305 224 1968
- +1 309 205 3325
- +1 312 626 6799
- +1 646 931 3860
- +1 929 436 2866
- +1 253 205 0468
- +1 253 215 8782

Webinar ID: 847 0062 4720
Passcode: 959595

- For attendance purposes as required by the Town of Apex, individuals participating via telephone will be unmuted and asked to identify themselves including their name and address.

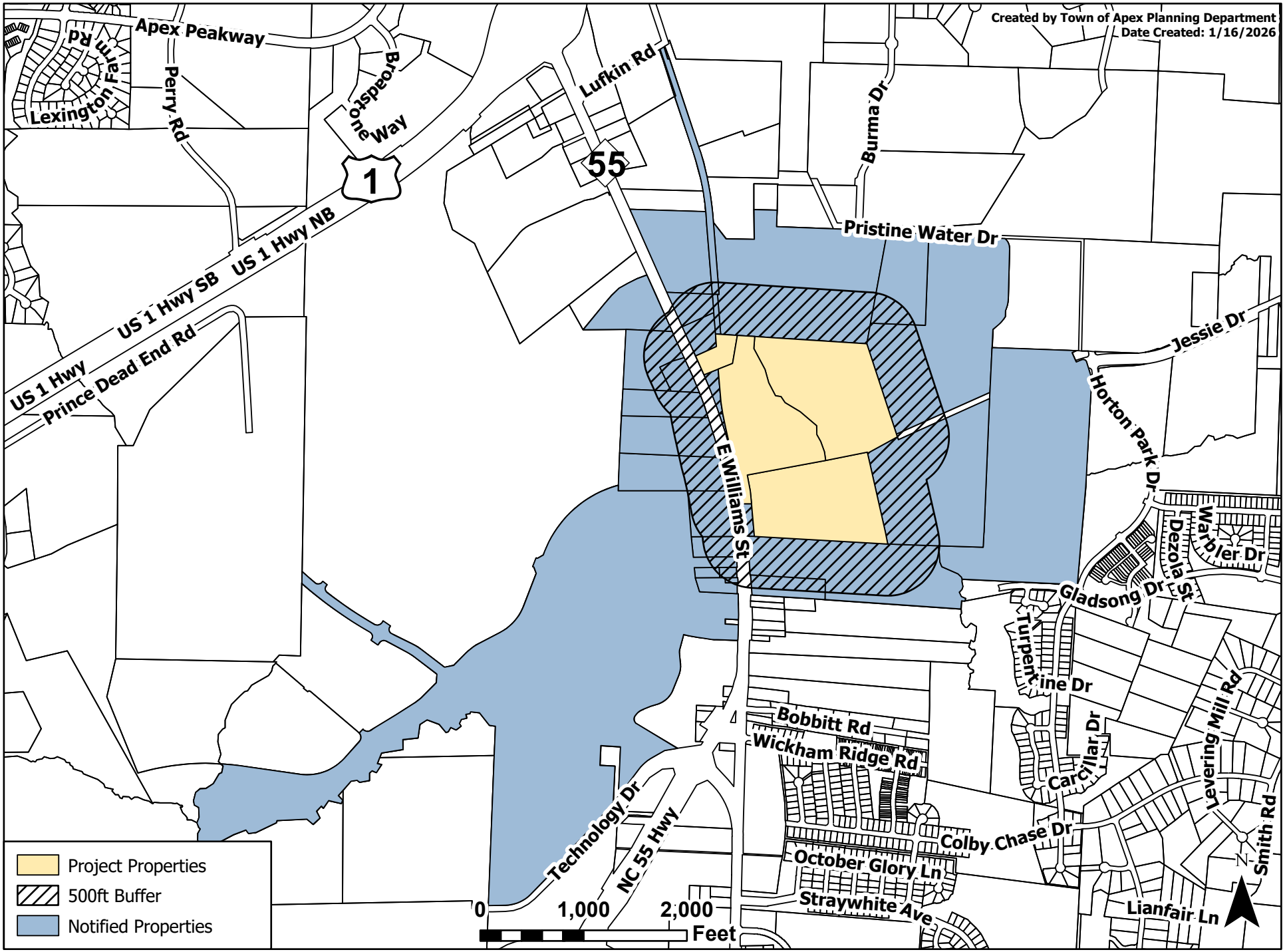
If you have difficulty registering, you can call Leticia Shapiro at **(919) 590-0362** or email tshapiro@morningstarlawgroup.com prior to the meeting for assistance. If you have difficulty connecting during the meeting, please email tshapiro@morningstarlawgroup.com and the meeting link will be sent to help assist.

During the meeting, participants will be muted by default. Also, participants' video will be off by default, i.e. only the presenters will be visible.

If you are participating via your computer, iPhone or Android device, you can submit questions/comments by using the Raise Hand and/or the Q&A features. We will not use the Chat feature. If you use Raise Hand, a panelist will either unmute you to allow you to speak to solicit your questions/comments.

If you are participating via telephone, you can submit questions/comments prior to and during the meeting via email at tshapiro@morningstarlawgroup.com.

Notified Properties within 500ft of the Project Properties



NEIGHBORHOOD MEETING SIGN-IN SHEET

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Meeting Address: Virtual - Zoom Platform

Date of meeting: February 11, 2026 Time of meeting: 5:30pm to 6:30pm

Property Owner(s) name(s): ALA Commercial LLC

Applicant(s): Strategic Real Estate Partners

Please print your name below, state your address and/or affiliation with a neighborhood group, and provide your phone number and email address. Providing your name below does not represent support or opposition to the project; it is for documentation purposes only. For virtual meetings, applicants must include all known participants and request the information below.

	NAME/ORGANIZATION	ADDRESS	PHONE #	EMAIL	SEND PLANS & UPDATES
1.	No Attendees				☐
2.					☐
3.					☐
4.					☐
5.					☐
6.					☐
7.					☐
8.					☐
9.					☐
10.					☐
11.					☐
12.					☐
13.					☐
14.					☐

Use additional sheets, if necessary.

SUMMARY OF DISCUSSION FROM THE NEIGHBORHOOD MEETING

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Property Owner(s) name(s): ALA Commercial LLC

Applicant(s): Strategic Real Estate Partners

Contact information (email/phone): tshapiro@morningstarlawgroup.com; 919-590-0366

Meeting Address: Virtual - Zoom Platform

Date of meeting: February 11, 2026 Time of meeting: 5:30pm to 6:30pm

Please summarize the questions/comments and your responses from the Neighborhood Meeting or emails/phone calls received in the spaces below (attach additional sheets, if necessary). Please state if/how the project has been modified in response to any concerns. The response should not be "Noted" or "No Response". There has to be documentation of what consideration the neighbor's concern was given and justification for why no change was deemed warranted.

Question/Concern #1: No Attendees

Applicant's Response:

Question/Concern #2:

Applicant's Response:

Question/Concern #3:

Applicant's Response:

Question/Concern #4:

Applicant's Response:

AFFIDAVIT OF CONDUCTING A NEIGHBORHOOD MEETING, SIGN-IN SHEET AND ISSUES/RESPONSES SUBMITTAL

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

I, Leticia L. Shapiro, do hereby declare as follows:
Print Name

1. I have conducted a Neighborhood Meeting for the proposed Rezoning, Major Site Plan, Minor Site Plan, Residential Master Subdivision Plan, or Special Use Permit in accordance with UDO Sec. 2.2.7.B *Neighborhood Meeting*.

2. The meeting invitations were mailed to the Apex Planning Department, all property owners and tenants abutting and within 500 feet of the subject property and any neighborhood association that represents citizens in the notification area via first class mail a minimum of 14 days in advance of the Neighborhood Meeting.

3. The meeting was conducted at Virtual - Zoom Platform (location/address) on February 11, 2026 (date) from 5:30pm (start time) to 6:30pm (end time).

4. I have included the mailing list, meeting invitation, sign-in sheet, issue/response summary, and zoning map/reduced plans with the application.

5. I have prepared these materials in good faith and to the best of my ability.

2/17/2026
Date

By: Leticia L. Shapiro

STATE OF NORTH CAROLINA
COUNTY OF WAKE

Sworn and subscribed before me, Julia Ogden, a Notary Public for the above State and County, on this the 17th day of February, 2026.

SEAL

Notary Public

Julia Ogden
Print Name

My Commission Expires: June 23, 2029

JULIA OGDEN
NOTARY PUBLIC
WAKE COUNTY, N.C.

APEX ENVIRONMENTAL ADVISORY BOARD
Suggested Zoning Conditions

The Town of Apex Environmental Advisory Board (EAB) offers this general list of suggested rezoning conditions for rezoning applicants to consider before filing a rezoning petition. The purpose of this list is to encourage and recommend implementation of exceptional environmental practices for future development that exceeds Town requirements. The Board will review each rezoning application and expand on suggested conditions by offering specific recommendations on a case-by-case basis.

The decision to include any of the recommendations below is voluntary by the applicant and the Board does not expect applicants to add all of the suggested conditions. Planning staff will include all zoning conditions suggested by this Board and will note which conditions have been added by the applicant in the staff reports to the Planning Board and Town Council. Applicants should review this list before meeting with the Board.

NOTE: Text in green indicates suggested zoning condition language from Planning Staff. Underlined text indicates text or numbers that may be changed based on the specific project. Additional conditions may be suggested by the EAB at the meeting.

Residential and Non-Residential Development Categories and Coverage

Part I applies to all developments; Part II applies exclusively to residential developments, and Part III exclusively to non-residential developments. Your development may include elements of each part.

- **Part I** – Includes suggestions for BOTH residential and non-residential developments (see definitions below).

- **Part II – Residential** applies to single-family dwellings and townhome subdivisions, but does not include the parking lots, exterior building lights or exterior architecture.

  Part III – Non-Residential includes condominiums, apartments, and multi-family, common areas in residential developments (e.g. amenity areas, parking lots, exterior building lights, and exterior architecture), commercial, office, and industrial areas

Please be sure to read and complete the entire document. Please select "Yes" to each zoning condition you are proposing to add to your rezoning application. Any proposed modifications to the green zoning language should be listed in the section at the end of the document.

Part I – Residential AND Non-Residential

The following apply to both Residential **and** Non-Residential developments:

	STORMWATER AND WATER CONSERVATION – WATER QUALITY	YES
1.	The project shall increase the riparian buffer width by at least ____ feet above the minimum required by the Unified Development Ordinance. The additional buffer width shall be measured from the top of bank on each side of the stream.	☐
2.	No clearing or land disturbance shall be permitted within the riparian buffer, except the minimum necessary to install required greenway and sewer infrastructure and SCM outlets. The SCM water storage and treatment area shall not be permitted within the riparian buffer. The infrastructure shall be designed to minimize impacts to the riparian buffer.	☐
3	No buffer averaging shall be allowed for Zone 3 of the riparian buffers.	☐
4.	The project shall install one (1) sign per SCM to reduce pet waste and prohibit fertilizer, in locations that are publicly accessible, such as adjacent to amenity centers, sidewalks, greenways, or side paths.	☐
5.	The project shall install a minimum of _____Low Impact Development Technique as defined and approved by the NC Department of Environmental Quality. The specific type of LID technique shall be reviewed and approved by the Water Resources Department at site or subdivision plan review.	☐
6.	At least ___SCM shall be designed and constructed to provide irrigation to the surrounding landscaping on site. The design shall be reviewed and approved by the Water Resources Department at site plan.	☐
7.	A ___-foot buffer shall be provided along existing, delineated wetlands that are to be preserved.	☐
8.	**Each option below is intended to be used as an improvement to the minimum UDO requirements. If an area is already required to mitigate the 25-year storm, option 7.b should not be selected.** a. Post-development peak runoff shall not exceed pre-development peak runoff for the 24-hour, 1-year, 10-year, 25-year and 100-year storm events in accordance with the Unified Development Ordinance. **OR** b. Post-development peak runoff shall not exceed pre-development peak runoff for the 24-hour, 1-year, 10-year, and 25-year storm events in accordance with the Unified Development Ordinance.	☐ ☐
	PLANTING AND LANDSCAPING Note: Invasive species are prohibited. Please see the Town's Design and Development Manual for a link to the list of prohibited species and for a list of suggested native species..	**YES**
9.	Preserve existing trees (percentage-based). Numbers shown may be changed based on project**.** The EAB's preference is for a minimum of 50%. The project shall preserve a minimum of _____% of the existing tree canopy. Where the project abuts adjacent developments, special effort shall be taken to locate the preserved trees adjacent to areas of existing preserved open space, including but not limited to, RCA, perimeter landscape buffers, riparian buffers, and/or HOA maintained open spaces.	☐

10.	Replace canopy (percentage- or DBH size-based) The project shall replace any large type trees, that measure 18-inches in caliper size or larger, and small type trees, that measure 8-inches in caliper size or larger, that are removed as a part of the development. The ratio of replacement shall be 1 large tree to 1 replacement tree. The UDO's required landscaping may be used to satisfy this requirement. To determine the number of trees that must be replaced, a tree survey for the full property shall be provided to the Planning Department. The survey shall be independently verified by a third-party licensed arborist. No further clearing shall be conducted for replacement planting if there is insufficient space.	☐
11.	To improve energy efficiency by providing shading, a combination of large and small deciduous shade trees shall be planted on the southern side of any buildings.	☐
12.	To improve energy efficiency, the project shall plant evergreen trees on the northern side of all buildings to act as a windbreak.	☐
13.	The project shall ensure that _____% of the landscaping shall be native species, which shall provide diverse and abundant pollinator and bird food sources. Special attention shall be paid to providing diverse and abundant pollinator and bird food sources, including plants that bloom in succession from spring to fall. Landscaping shall be coordinated with and approved by the Planning Department at site or subdivision review.	☐
14.	The project shall increase biodiversity within perimeter buffers, common owned open space, and other landscape areas by providing a variety of native and adaptive species for canopy, understory and shrub levels. A minimum of _____% of the species selected shall be native to the eastern United States or a native of North Carolina.	☐
15.	No single species of native or adaptive vegetation shall constitute more than 20% of the plant material of its type within a single development site.	☐
16.	HOA covenants, conditions, and restrictions shall not prohibit clover or native grass mixed species lawns.	☐
17.	In order to support nesting and overwintering wildlife and pollinators, HOA covenants shall not require that fallen leaves or dormant plants be removed during the winter on areas without turf grass, including individual homes and HOA owned common areas.	☐
18.	To preserve and protect existing species, existing ponds shall be preserved if structurally sound.	☐
19.	Implements xeriscaping in design, which will use landscaping that requires less irrigation and chemical use. Contact Planning for assistance, if needed. The project commits to planting ___% drought tolerant plants, of which ___% of the plants selected shall be native. Landscaping shall be coordinated with and approved by the Planning Department at site or subdivision review.	☐
20.	To reduce irrigation requirements, the project shall select and plant only warm season grasses.	☐

21.	Improve soil quality for a variety of native and non-invasive plantings, reduce fertilizers, and reduce stormwater runoff, topsoil shall be retained on site and a minimum of 4 inches of topsoil shall be placed on each lot and within disturbed common areas.	☐
22.	Increase perimeter buffer requirements, especially in transitional areas (non-residential to residential areas), the project shall provide ____ additional feet of buffer width to that required by the UDO along the perimeter of the property.	☐
23.	Reduce impacts to Resource Conservation Areas (RCAs). a. The project shall install signage adjacent to wooded or natural condition Resource Conservation Area. The signage shall indicate that the area is RCA and is to be preserved in perpetuity and not disturbed. A sign shall be installed every 100 linear feet along the boundary of the Resource Conservation Area, with each sign measuring at least 6 inches by 6 inches and mounted at a height of 4 feet above the ground. **OR** b. A farm-style split rail fence shall be installed where wooded or natural condition Resource Conservation Area (RCA) abuts individual residential lots.	☐ ☐
SUSTAINABLE BUILDINGS		**YES**
24.	The project shall be designed to meet the requirements for one of the green building certifications listed above. A third-party consultant shall be hired to evaluate the project and certify to the Town of Apex that the project meets the standards for the certification. The applicant shall forward a copy of the certification application to the Town of Apex Planning Department to verify that the application has been submitted.	☐

Part II – Residential

Residential applies to single-family dwellings and townhome subdivisions, but does not include the parking lots, exterior building lights, or exterior architecture.

	STORMWATER AND WATER CONSERVATION – WATER QUALITY The Transportation & Infrastructure Development Department does not currently support these options within the right-of-way (ROW). These may be done on private sites, but not within the public ROW.	YES
25.	The project shall utilize pervious pavement when constructing the parking spaces for parking lot-style townhomes. The specific type of pervious pavement system shall be reviewed and approved by the Water Resources Department at site or subdivision plan review. The selected system shall be maintained by the developer and/or owner's association.	☐
26.	The project shall utilize pervious pavement when constructing the driveways for residential units. The specific type of pervious pavement system shall be reviewed and approved by the Water Resources Department at site or subdivision plan review. The selected system shall be maintained by the developer and/or homeowner's association.	☐
	WASTE MANAGEMENT	**YES**
27.	If single family, the project shall install at least one (1) pet waste station per 25 residential units/townhomes and at least two (2) pet waste stations per apartment building throughout the community in locations that are publicly accessible, such as adjacent to amenity centers, SCMs, sidewalks, greenways or side paths. If there are fewer than 25 homes, at least one (1) pet waste station shall be installed.	☐
	CLEAN ENERGY	**YES**
28.	A solar PV system of at least 3.5kW shall be installed on at least _____homes within the development. All solar installation required by this condition shall be completed or under construction prior to 90% of the building permits being issued for the development. The lot(s) on which this home/these homes is/are located shall be identified on the Master Subdivision Plat, which may be amended from time to time.	☐
29.	A solar PV system shall be installed on a minimum of _____model home. All solar installation required by this condition shall be completed or under construction prior to _____% of the building permits being issued for the development. The lot(s) on which this home/these homes is/are located shall be identified on the Master Subdivision Plat, which may be amended from time to time.	☐
30.	Wire all garages with 220-volt outlets at the exterior to provide for EV charging stations in SF and Townhomes.	☐

Part III – Non- Residential

Non-residential includes condominiums, apartments, and multi-family, common areas in residential developments (e.g. amenity areas, parking lots, exterior building lights, and exterior architecture), commercial, office, and industrial areas. Your development may include elements of each part.

	STORMWATER AND WATER CONSERVATION – WATER QUALITY The Transportation & Infrastructure Development Department does not currently support these options within the ROW. These may be done on private sites, but not within the public ROW. Note that number 36 is an exception that can be done in the public ROW.	**YES**
31.	The project shall utilize pervious pavement when constructing parking spaces that are in excess of the minimum parking requirement. The specific type of pervious pavement system shall be reviewed and approved by the Water Resources Department at site or subdivision plan review.	☐
32.	The project shall utilize pervious pavement for all of the parking spaces provided. The specific type of pervious pavement system shall be reviewed and approved by the Water Resources Department at site or subdivision plan review.	☐
33.	To increase stormwater infiltration and evaporation, the project shall use modified curb and gutter designs to direct driveway runoff to one or more stormwater device, such as, but not limited to, bioswales, Silva cells, or rain gardens. The specific type and design shall be selected at site or subdivision plan review. The proposal shall be reviewed and approved by the Water Resources Department and Department of Public Works and Transportation.	☐
34.	May be done within the public ROW if it's in the form of a bioretention cell within a landscaped median or large roundabout. Will require approval by the Department of Public Works and Transportation. The project shall design and install one or more bioretention cells within the landscape median or roundabout along the primary road. The specific type and design shall be determined at site or subdivision plan review. The proposal shall be reviewed and approved by the Water Resources Department and Transportation and Infrastructure Development Department.	☐
	WASTE MANAGEMENT	**YES**
35.	The project shall install at least _____ pet waste stations throughout the community, in locations that are publicly accessible, such as adjacent to amenity centers, SCMs, sidewalks, greenways or side paths.	☐

	CLEAN ENERGY	YES
36.	a. A solar PV system shall be incorporated into buildings to be constructed on the property. Such PV systems shall have a capacity of not less than 2 kW/1,000 heated square feet of building floor area. **OR** b. A solar PV system of at least 3.5kW shall be installed on at least _____% of or _____ buildings within the development. All solar installation required by this condition shall be completed or under construction prior to _____% of the building permits being issued for the development. The buildings on which these PV systems are located shall be identified on the Site Plan, which may be amended from time to time.	☐ ☐
37.	The developer shall provide ____% or ____more EV charging spaces than required by the UDO.	☐
38.	The amenity center for the project shall include a rooftop solar PV system with a capacity of at least 3.5kW.	☐
39.	The project shall install conduits for solar energy systems for all non-residential buildings	☐
	LIGHTING EFFICIENCY	**YES**
40.	On the lighting plan, the average footcandle measurement for parking, building lighting and driveways shall be at least 0.5 footcandles lower than the UDO requires.	☐
41.	The project shall use full cutoff LED fixtures that have a maximum color temperature of 3,000K for all exterior lighting, including, but not limited to, parking lot and building mounted fixtures.	☐

Applicant Clarification/Additional Language:

This is a previously approved PUD that is exempt from the Environmental Advisory Board pursuant to UDO Section 2.1.9 (A)(2)(a). See Town of Apex Rezoning Case #06CZ26.

2.1.9 Apex Environmental Advisory Board

A) ***Powers and Duties***
The Environmental Advisory Board shall have the following powers and duties under the provisions of this Ordinance:

1) Advise the Planning Committee of the Apex Town Council regarding suggested changes to the Unified Development Ordinance related to the impacts of development upon the natural environment.

2) Review, with applicants, during the staff review phase of a proposal, certain requests for conditional rezoning and recommend zoning conditions to the applicant and Town Council that will mitigate anticipated impact to the natural environment as a result of the project under consideration. The following conditional rezoning requests shall be exempt from review by this Board:

a) Rezonings to amend zoning conditions which have no environmental impact on a site including but not limited to revisions to architectural standards, building height, setbacks, and uses;

b) Rezonings to resolve nonconformities;

c) Rezonings of 10 acres or less; and

d) Rezonings within the Small Town Character Overlay District.

Additional Board Recommendations:

NOTICE OF NEIGHBORHOOD MEETING

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

June 29, 2026

Date

Dear Neighbor:

You are invited to a neighborhood meeting to review and discuss the development proposal at

Address(es)	PIN(s)
0 E Williams Street; 1701 E Williams Street;	0751011288; 0751003311;
0 E Williams Street; 1615 E Williams Street;	0741915068; 0741911743

in accordance with the Town of Apex Neighborhood Meeting procedures. This meeting is intended to be a way for the applicant to discuss the project and review the proposed plans with adjacent neighbors and neighborhood organizations before the submittal of an application to the Town. This provides neighbors an opportunity to raise questions and discuss any concerns about the impacts of the project before it is officially submitted. If you are unable to attend, please refer to the Project Contact Information page for ways to contact the applicant. Notified neighbors may request that the applicant provide updates and send plans via email or mail. Once an application has been submitted to the Town, it may be tracked using the Interactive Development Map or the Apex Development Report located on the Town of Apex website at http://www.apexnc.org/180. Applications for Rezoning must hold a second Neighborhood Meeting in the month prior to the anticipated public hearing date.

A Neighborhood Meeting is required because this project includes (check all that apply):

	Application Type	Approving Authority
☑	Rezoning (including Planned Unit Development)	Town Council
☐	Major Site Plan	Technical Review Committee (staff)
☐	Minor Site Plan for the uses "Day care facility", "Government service", "School, public or private", "Restaurant, drive-through", or "Convenience store with gas sales"	Technical Review Committee (staff)
☐	Special Use Permit	Board of Adjustment (QJPH*)
☐	Residential Master Subdivision Plan (excludes exempt subdivisions)	Technical Review Committee (staff)

*Quasi-Judicial Public Hearing: The Board of Adjustment cannot discuss the project prior to the public hearing.

The following is a description of the proposal (also see attached map(s) and/or plan sheet(s)):

Rezone for the purpose of amending the Jessie Commons Planned Unit Development Design Controls related to building height and square footage maximums.

Estimated submittal date: _____

MEETING INFORMATION:

Property Owner(s) name(s):	Town of Apex and ALA Commercial LLC
Applicant(s):	Strategic Real Estate Partners
Contact information (email/phone):	Jason Barron Morningstar Law Group-(919) 590-0371-jbarron@morningstarlawgroup.com
Meeting Address:	Virtual - Zoom Platform / https://morningstarlaw.group/07132026
Date/Time of meeting**:	July 13, 2026 / 5:30 pm - 6:30 pm

Welcome: 5:30pm-5:35pm Project Presentation: 5:35pm-5:45pm Question & Answer: 5:45pm-6:30pm

**Meetings shall occur between 5:00 p.m.-9:00 p.m. on a Monday through Thursday (excluding Town recognized holidays). If you have questions about the general process for this application, please contact the Planning Department at 919-249-3426. You may also find information about the Apex Planning Department and on-going planning efforts at http://www.apexnc.org/180.

PROJECT CONTACT INFORMATION

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Development Contacts:

Project Name: Jessie Commons PUD Amendment Zoning: PUD-CZ

Location: See Attached Property List

Property PIN(s): See Attached Property List Acreage/Square Feet: See Attached Property List

Property Owner: See Attached Property List

Address:

City: State: Zip:

Phone: Email:

Developer: N/A

Address:

City: State: Zip:

Phone: Fax: Email:

Engineer: Jeff Roach, Peak Engineering & Design PLLC

Address: 1125 Apex Peakway

City: Apex State: NC Zip: 27502

Phone: (919) 439-0100 Fax: Email: jroach@peakengineering.com

Builder (if known): N/A

Address:

City: State: Zip:

Phone: Fax: Email:

Please note that Town staff will not have complete information about a proposed development until the application is submitted for review. If you have a question about Town development standards and how they relate to the proposed development, please contact the appropriate staff person listed below.

Town of Apex Department Contacts	
Planning Department Main Number (Provide development name or location to be routed to correct planner)	(919) 249-3426
Parks, Recreation & Cultural Resources Department Angela Reincke, Parks Planning Project Manager	(919) 372-7468
Transportation & Infrastructure Development Russell Dalton, Traffic Engineering Manager	(919) 249-3358
Water Resources Department Jessica Bolin, Environmental Engineering Manager (Stormwater, Sedimentation & Erosion Control) Matt Reker, Utility Engineer/FOG Program Manager (Water & Sewer)	(919) 249-3537 (919) 946-4394
Electric Utilities Division Rodney Smith, Electric Technical Services Manager	(919) 249-3342

Providing Input to Town Council:

Each Town Council meeting agenda includes a Public Forum time when anyone is permitted to speak for three (3) minutes on any topic with the exception of items listed as Public Hearings for that meeting. The Town Council meets on the 2nd and 4th Tuesdays of each month at 6:00 p.m. (except for holidays, see schedule of meetings at http://www.apexnc.org/838/Agendas-Minutes). You may also contact Town Council by e-mail at AllCouncil@apexnc.org.

Private Agreements and Easement Negotiation:

The Town of Apex cannot enforce private agreements between developers and neighbors and is not a party to the easement and right-of-way negotiation that occurs between developers and neighboring property owners for easements or rights-of-way that are necessary to build the project.

It is recommended that all private agreements be made in writing and that if a property owner feels it necessary, they should obtain private legal counsel in order to protect their interests in both private agreements and during easement negotiations. The only conditions that the Town of Apex can enforce are those conditions that are made a part of the conditional zoning of the property by agreement of the developer and the Town.

As an example, if a developer offers to build a fence for a neighbor to mitigate some impact, the Town can only enforce the construction of the fence if the fence becomes a condition of the rezoning. This would occur by the developer offering the condition as part of their conditional zoning application package or at the Town Council public hearing on the conditional zoning and the Town accepting it as a condition. Private agreements regarding a fence being constructed will not be enforced by the Town.

To request that any agreement with a developer is made a part of the conditional zoning at the time of approval, you may ask at the Town Council public hearing if the agreement is included in the conditions. If it is not, you may request that the Town Council not approve the rezoning without the agreement being included in the conditions (note that it is up to Town Council whether to approve or deny the rezoning but they cannot impose conditions that the applicant does not agree to add). The developer's proposed conditions can be viewed any time after a rezoning is submitted on the Interactive Development Map at: http://apexnc.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=fa9ba2017b784030b15ef4da27d9e795

Documentation:

Neighbors to a requested new development and/or rezoning are strongly encouraged to fully document (such as through dated photographs) the condition of their property before any work is initiated for the new development. Stormwater controls installed on developed property are not designed to and will likely not remove 100% of the soil particles transported by stormwater runoff. As a result, creeks and ponds could become cloudy for a period of time after rain events.

COMMON CONSTRUCTION ISSUES & WHO TO CALL

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Noise & Hours of Construction:	Non-Emergency Police	919-362-8661

Noise from tree removal, grading, excavating, paving, and building structures is a routine part of the construction process. The Town generally limits construction hours from 7:00 am to 8:30 pm so that there are quiet times even during the construction process. Note that construction outside of these hours is allowed with special permission from the Town when it makes more sense to have the construction occur at night, often to avoid traffic issues. In addition, the Town limits hours of blasting rock to Monday-Friday from 8:00 am to 5:00 pm. Report violations of construction hours and other noise complaints to the Non-Emergency Police phone number at 919-362-8661.

Construction Traffic:	Infrastructure Inspections	919-249-3386

Construction truck traffic will be heavy throughout the development process, including but not limited to removal of trees from site, loads of dirt coming in and/or out of the site, construction materials such as brick and wood brought to the site, asphalt and concrete trucks come in to pave, etc. The Town requires a construction entrance that is graveled to try to prevent as much dirt from leaving the site as possible. If dirt does get into the road, the Town can require they clean the street (see "Dirt in the Road" below).

Road Damage & Traffic Control:	Infrastructure Inspections	919-249-3386

There can be issues with roadway damage, roadway improvements, and traffic control. Potholes, rutting, inadequate lanes/signing/striping, poor traffic control, blocked sidewalks/paths are all common issues that should be reported to Transportation & Infrastructure Development – Infrastructure Inspections at 919-249-1109. The Town will get NCDOT involved if needed.

Parking Violations:	Non-Emergency Police	919-362-8661

Unless a neighbor gives permission, there should be no construction parking in neighbors' driveways or on their property. Note that parking in the right-of-way is allowed, but Town regulations prohibit parking within 15 feet of driveways so as not to block sight triangles. Trespassing and parking complaints should be reported to the Non-Emergency Police phone number at 919-362-8661.

Dirt in the Road:	Water Resources	919-362-8166

Sediment (dirt) and mud gets into the existing roads due to rain events and/or vehicle traffic. These incidents should be reported by visiting the Report a Concern page at https://www.apexnc.org/1173/ or by calling the number listed. Staff will coordinate the cleaning of the roadways with the developer.

Dirt on Properties or in Streams:	Water Resources	919-362-8166

Sediment (dirt) can leave the site and get onto adjacent properties or into streams and stream buffers; it is typically transported off-site by rain events. These incidents should be reported by visiting the Report a Concern page at https://www.apexnc.org/1173/ or by calling the number listed so that staff can coordinate the appropriate repairs with the developer.

Dust:	Water Resources	919-362-8166

During dry weather dust often becomes a problem blowing into existing neighborhoods or roadways. These incidents should be reported by visiting the Report a Concern page at https://www.apexnc.org/1173/ or by calling the number listed so that staff can coordinate the use of water trucks onsite with the grading contractor to help control the dust.

Trash:	Water Resources	919-362-8166

Excessive garbage and construction debris can blow around on a site or even off of the site. These incidents should be reported by visiting the Report a Concern page at https://www.apexnc.org/1173/ or by calling the number listed. Staff will coordinate the cleanup and trash collection with the developer/home builder.

Temporary Sediment Basins:	Water Resources	919-362-8166

Temporary sediment basins during construction (prior to the conversion to the final stormwater pond) are often quite unattractive. Concerns should be reported by visiting the Report a Concern page at https://www.apexnc.org/1173/ or by calling the number listed so that he can coordinate the cleaning and/or mowing of the slopes and bottom of the pond with the developer.

Stormwater Control Measures:	Water Resources	919-362-8166

Post-construction concerns related to Stormwater Control Measures (typically a stormwater pond) such as conversion and long-term maintenance should be reported by visiting the Report a Concern page at https://www.apexnc.org/1173/ or by calling the number listed.

Electric Utility Installation:	Rodney Smith	919-249-3342

Concerns with electric utility installation can be addressed by the Apex Electric Utilities Department. Contact Rodney Smith at 919-249-3342.

ATTACHMENT A

PIN	Site Address	Owner Name and Address	Acreage
0751003311	1701 E WILLIAMS ST	ALA COMMERCIAL LLC, 700 Spring Forest Rd, Ste 400, Raleigh NC 27609-9124	22.24
0751011288	0 E WILLIAMS ST	ALA COMMERCIAL LLC, 700 Spring Forest Rd, Ste 400, Raleigh NC 27609-9124	23.66
0741915068	0 E WILLIAMS ST	ALA COMMERCIAL LLC, 700 Spring Forest Rd, Ste 400, Raleigh NC 27609-9124	18.53
0741911743	1615 E WILLIAMS ST	APEX TOWN OF, PO Box 250, Apex, NC 27502-0250	2.09
			66.52

HOW TO PARTICIPATE IN THE JULY 13, 2026, NEIGHBORHOOD MEETING

To participate by PC, Mac, or iPad devise, go to https://morningstarlaw.group/07132026 to register for the meeting. (Registration is necessary as we are required by the Town of Apex to have a record of attendance.) You may also scan the registration QR Code to register.

- Upon Registration, you Will receive a confirmation email with instructions on how to Access the meeting
- To attend the meeting via phone,
- Dial one of the following numbers:

REGISTRATION QR CODE

Dial one of the following numbers:

- +1 301 715 8592
- +1 305 224 1968
- +1 309 205 3325
- +1 312 626 6799
- +1 646 931 3860
- +1 929 436 2866
- +1 253 205 0468
- +1 253 215 8782

Webinar ID: 895 8567 0164
Passcode: 340907

- For attendance purposes as required by the Town of Apex, individuals participating via telephone will be unmuted and asked to identify themselves including their name and address.

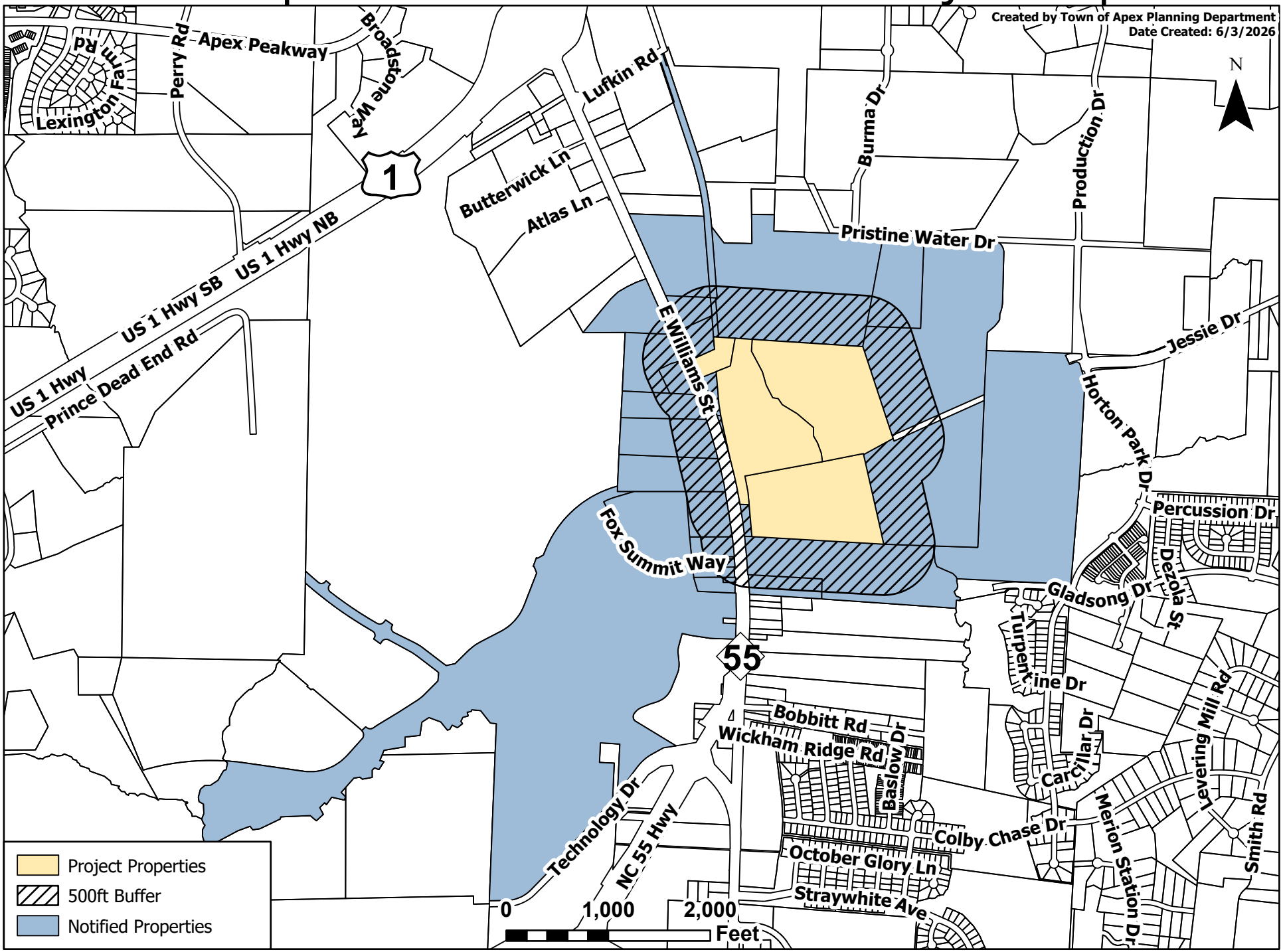
If you have difficulty registering, you can call Leticia Shapiro at **(919) 590-0366** or email tshapiro@morningstarlawgroup.com prior to the meeting for assistance. If you have difficulty connecting during the meeting, please email tshapiro@morningstarlawgroup.com and the meeting link will be sent to help assist.

During the meeting, participants will be muted by default. Also, participants' video will be off by default, i.e. only the presenters will be visible.

If you are participating via your computer, iPhone or Android device, you can submit questions/comments by using the Raise Hand and/or the Q&A features. We will not use the Chat feature. If you use Raise Hand, a panelist will either unmute you to allow you to speak to solicit your questions/comments.

If you are participating via telephone, you can submit questions/comments prior to and during the meeting via email at tshapiro@morningstarlawgroup.com.

Notified Properties within 500ft of of the Project Properties



SITE ADDRESS	PIN NUMBER	OWNER	MAILING ADDRESS		
0 E WILLIAMS ST	0741912010	ALA COMMERCIAL LLC	PO BOX 98028	RALEIGH NC 27624-8028	
1701 E WILLIAMS ST	0751003311	ALA COMMERCIAL LLC	700 SPRING FOREST RD STE 400	RALEIGH NC 27609-9124	
1600 E WILLIAMS ST	0741815609	APEX RENT ACCOUNT LLC	1765 TOWN HOME DR	APEX NC 27502-6690	
0 E WILLIAMS ST	0741921122	APEX TOWN OF	PO BOX 250	APEX NC 27502-0250	
1610 E WILLIAMS ST	0741817563	CLARK INVESTORS LLC	1266 BENSON RD	GARNER NC 27529-4648	
0 E WILLIAMS ST	0741929413	DIXIE PIPE LINE COMPANY	PO BOX 4018	HOUSTON TX 77210-4018	
1709 E WILLIAMS ST	0740998418	KAM GROUP INC	413 CHIME CT	CARY NC 27519-5581	
1690 E WILLIAMS ST	0741807518	KENAN TRANSPORT CO	C/O CHRIS PRATO	4366 MOUNT PLEASANT ST NW	NORTH CANTON OH 44720-5446
0 E WILLIAMS ST	0750095624	PAGE TWO HOLDINGS LLC RODESSA LLC	1501 HIGHWOODS BLVD STE 302	GREENSBORO NC 27410-2052	
1714 E WILLIAMS ST	0740990631	PAGE, DAVID E HEIRS	ERIN WADE	751 GATEWAY PARK DR APT 310	RALEIGH NC 27601-2160
1650 E WILLIAMS ST	0741816234	PPTAPEX LLC	11009 DUNHAM LN	RALEIGH NC 27613-6866	
1700 E WILLIAMS ST	0741900198	RAYMER, DAVID F RAYMER, SHARON L	4617 FRIENDSHIP RD	APEX NC 27539-8763	
1680 E WILLIAMS ST	0741807913	RIGSBEE, ERNESTINE	PO BOX 275	KNIGHTDALE NC 27545-0275	
0 E WILLIAMS ST	0740992565	RXR LEN APEX OWNER LLC	GENERAL COUNSEL	625 RXR PLZ	UNIONDALE NY 11556-3815
1712 E WILLIAMS ST	0740992632	RXR LEN APEX OWNER LLC	625 RXR PLZ	UNIONDALE NY 11556-3815	
1561 E WILLIAMS ST	0741828189	SAMPSON BLADEN OIL CO INC	PO BOX 469	CLINTON NC 28329-0469	
1548 E WILLIAMS ST	0741824172	SHELKE, SUNIL SHELKE, SUDARSHINI	314 FARROW GLEN LOOP	CARY NC 27519-6941	
500 PRISTINE WATER DR	0751029412	SILVI CONCRETE SOUTH LLC	355 NEWBOLD RD	FAIRLESS HILLS PA 19030-4313	
5228 JESSIE DR	0751102449	SMITH, MARTHA M HEIRS CLEMENT, MARTHA S	PO BOX 457	APEX NC 27502-0457	
1708 E WILLIAMS ST	0740990896	THOMPSONGAS - SMOKIES LLC	5260 WESTVIEW DR STE 200	FREDERICK MD 21703-8512	
1581 E WILLIAMS ST	0741819972	TRI ARC FOOD SYSTEMS INC	4905 WATERS EDGE DR	RALEIGH NC 27606-2405	
520 PRISTINE WATER DR	0751113934	WALL RECYCLING LLC	2310 GARNER RD	RALEIGH NC 27610-4612	
0 E WILLIAMS ST	0751201670	WOMBLE, CHARLES H WOMBLE, GLEN A	802 BELLAMY RD	NORTH MYRTLE BEACH SC 29582-2828	
		Current Tenant	500 Pristine Water DR	APEX NC 27539	
		Current Tenant	520 Pristine Water DR	APEX NC 27539	
		Current Tenant	1521 E Williams ST	APEX NC 27539	
		Current Tenant	1561 E Williams ST	APEX NC 27539	
		Current Tenant	1565 E Williams ST	APEX NC 27539	
		Current Tenant	1581 E Williams ST	APEX NC 27539	
		Current Tenant	1600 E Williams ST	APEX NC 27539	
		Current Tenant	1608 E Williams ST	APEX NC 27539	
		Current Tenant	1610 E Williams ST	APEX NC 27539	
		Current Tenant	1650 E Williams ST	APEX NC 27539	
		Current Tenant	1670 E Williams ST	APEX NC 27539	
		Current Tenant	1690 E Williams ST	APEX NC 27539	
		Current Tenant	1709 E Williams ST	APEX NC 27539	
		Current Tenant	1710 E Williams ST	APEX NC 27539	
		Current Tenant	1712 E Williams ST	APEX NC 27539	

Created by Town of Apex Planning Department
Date Created: 6/3/2026

NEIGHBORHOOD MEETING SIGN-IN SHEET

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Meeting Address: https://morningstarlaw.group/07132026

Date of meeting: July 13, 2026 Time of meeting: 5:30 pm - 6:30 pm

Property Owner(s) name(s): Town of Apex and ALA Commercial LLC

Applicant(s): Strategic Real Estate Partners

Please print your name below, state your address and/or affiliation with a neighborhood group, and provide your phone number and email address. Providing your name below does not represent support or opposition to the project; it is for documentation purposes only. For virtual meetings, applicants must include all known participants and request the information below.

	NAME/ORGANIZATION	ADDRESS	PHONE #	EMAIL	SEND PLANS & UPDATES
1.	No attendees				☐
2.					☐
3.					☐
4.					☐
5.					☐
6.					☐
7.					☐
8.					☐
9.					☐
10.					☐
11.					☐
12.					☐
13.					☐
14.					☐

Use additional sheets, if necessary.

SUMMARY OF DISCUSSION FROM THE NEIGHBORHOOD MEETING

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Property Owner(s) name(s): Town of Apex and ALA Commercial LLC

Applicant(s): Strategic Real Estate Partners

Contact information (email/phone): Jason Barron Morningstar Law Group-(919) 590-0371-jbarron@morningstarlawgroup.com

Meeting Address: https://morningstarlaw.group/07132026

Date of meeting: July 13, 2026 Time of meeting: 5:30 pm - 6:30 pm

Please summarize the questions/comments and your responses from the Neighborhood Meeting or emails/phone calls received in the spaces below (attach additional sheets, if necessary). Please state if/how the project has been modified in response to any concerns. The response should not be "Noted" or "No Response". There has to be documentation of what consideration the neighbor's concern was given and justification for why no change was deemed warranted.

Question/Concern #1:
N/A

Applicant's Response:
N/A

Question/Concern #2:
N/A

Applicant's Response:
N/A

Question/Concern #3:
N/A

Applicant's Response:
N/A

Question/Concern #4:
N/A

Applicant's Response:
N/A

AFFIDAVIT OF CONDUCTING A NEIGHBORHOOD MEETING, SIGN-IN SHEET AND ISSUES/RESPONSES SUBMITTAL

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

I, Leticia Shapiro, do hereby declare as follows:
Print Name

1. I have conducted a Neighborhood Meeting for the proposed Rezoning, Major Site Plan, Minor Site Plan, Residential Master Subdivision Plan, or Special Use Permit in accordance with UDO Sec. 2.2.7.B *Neighborhood Meeting*.

2. The meeting invitations were mailed to the Apex Planning Department, all property owners and tenants abutting and within 500 feet of the subject property and any neighborhood association that represents citizens in the notification area via first class mail a minimum of 14 days in advance of the Neighborhood Meeting.

3. The meeting was conducted at Zoom Virtual Meeting/https://morningstarlaw.group/07132026 (location/address) on July 13, 2026 (date) from 5:30pm (start time) to 6:30pm (end time).

4. I have included the mailing list, meeting invitation, sign-in sheet, issue/response summary, and zoning map/reduced plans with the application.

5. I have prepared these materials in good faith and to the best of my ability.

7/14/26
Date

By: _____

STATE OF NORTH CAROLINA
COUNTY OF WAKE

Sworn and subscribed before me, Paula H. Zorio, a Notary Public for the above State and County, on this the 14th day of July, 2026.

SEAL

PAULA H. ZORIO
NOTARY PUBLIC
WAKE COUNTY, N.C.

Paula H. Zorio
Notary Public

Paula H. Zorio
Print Name

My Commission Expires: 3/26/29

Leticia Shapiro | Attorney
434 Fayetteville Street, Suite 2200
Raleigh, NC 27601

919-590-0366
tshapiro@morningstarlawgroup.com
www.morningstarlawgroup.com

Resubmittal

October 16, 2026

Via Town of Apex IDT
Town of Apex
Planning Department
322 N. Mason Street
Apex, NC 27502

RE: Jessie Commons PUD Amendment
(See Exhibit B – List of Properties)

To Whom it May Concern,

This letter is submitted to notify you of a proposed amendment to the Jessie Commons Planned Unit Development Conditional Zoning (PUD-CZ) to revise certain specific design controls of the Jessie Commons PUD-CZ.

The Jessie Commons PUD was originally approved on March 6, 2007, under Case No. 06CZ26, and encompasses approximately 64.25 acres. A copy of the approved PUD-CZ is attached as Exhibit C.

The development includes designated commercial and office areas identified as C-1, C-2, O-1, and O-2, as illustrated below.

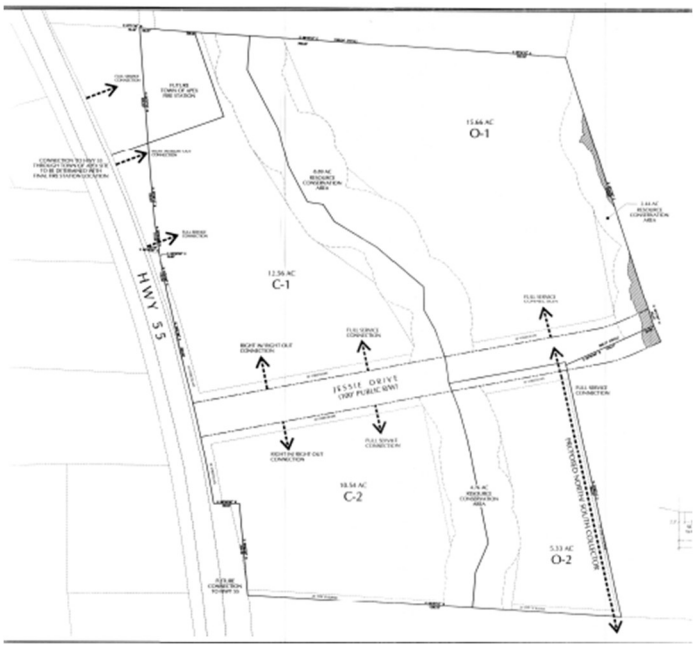


Exhibit A proposes an amendment to modify specific design controls within the PUD. The maximum permitted square footage in the Office O-1 district will increase from 180,000 square feet to 240,000 square feet.

The maximum building height will also be revised from 40 feet in the commercial area and 30 feet in the office area, to a uniform maximum height of 48 feet across the C-1, C-2, O-1, and O-2 areas.

The requested increase in square footage and building height is appropriate and justified based on the site's location, underlying land use designation, and the intent of the Planned Unit Development (PUD) process to allow flexible, high-quality design solutions.

The Commercial Services, Industrial Employment, and Office Employment designations together with the site's location along a major transportation corridor between US 1 and NC 540, supports more intensive non-residential development, including larger building footprints and increased building heights as part of a coordinated commercial center. The proposed increase in square footage along with a uniform increase in building height allow the site to more efficiently accommodate modern office and commercial users while remaining consistent with the scale of development anticipated for this corridor.

Importantly, the additional square footage and height do not expand the overall footprint of the PUD, instead, they provide flexibility to consolidate development, promote cohesive site planning, and support higher-quality architectural design. The requested increases in square footage and building height are consistent with the Comprehensive Plan, compatible with surrounding development, and advance the purpose of the PUD district by enabling a more efficient, coordinated, and higher-quality commercial development without creating adverse impacts.

A corresponding PUD-CZ rezoning application and revised Traffic Impact Analysis prepared by Kimley-Horn have been submitted through the Town's development portal. The PUD will be consistent with the Town of Apex Transportation Plan.

Please feel free to contact me with any questions.

Respectfully submitted,

Leticia L. Shapiro

JESSIE COMMONS PUD AMENDMENT

Proposed Rezoning Changes

6.0 DESIGN CONTROLS

	C-1	C-2	O-1	O-2
Maximum non-residential SF	110,000	85,000	~~180,000~~ 240,000	60,000
Maximum building height	~~40'~~ 48'	~~40'~~ 48'	~~30'~~ 48'	~~30'~~ 48'
Minimum building setback to interior property line	10'	10'	0'	0'
Minimum parking/drive setback to interior property line	0'	0'	0'	0'
Minimum building setback to Hwy 55 / Jessie Drive	30'	30'	30'	30'
Minimum building setback to perimeter property line	30'	30'	30'	30'
Minimum building setback to RCA*	10'	10'	10'	10'
Minimum parking/drive setback to RCA*	5'	5'	5'	5'
Maximum impervious surface	70%	70%	70%	70%

* If no vegetation exists in RCA areas adjacent to building /drive area no setback shall be required.

13.0 PUBLIC FACILITIES

All public facilities and infrastructure shall be designated per the current Town of Apex standards and specifications and shall be consistent with the Town of Apex Transportation Plan and the Master Plan. Public facilities requirements established in UDO Sec. 2.3.4(F)(1)(f) are met as follows:

~~i) The on-site circulation system is determined by the Town of Apex Thoroughfare and Collector Street Plan for the most part with frontage on NC 55 and the construction of Jessie Drive on 100' public right-of-way from NC 55 to the eastern boundary of the site. The commercial site C-1 will connect to Jessie Drive and NC 55 by private drives shown on the site layout plan. The commercial site C-2 will connect to Jessie Drive by private drives shown on the site layout plan and include a stub to the west for future connection to NC 55 by others. The office/flex site O-1 will connect to Jessie Drive by a public Collector Street on 60' public right-of-way shown on the site layout plan. Jessie Drive shall be constructed as a four-lane divided roadway with landscaped median from NC 55 to the intersection of the full-service private driveways serving C-1 and C-2 in the first phase of this project. An~~

~~additional northbound lane shall be constructed along the property frontage on NC 55 with the first phase of parcel development. The traffic signal at the intersection of NC 55 and Jessie Drive shall be constructed in the first phase of this project when permitted by North Carolina Department on Transportation. The extension of Jessie Drive to the eastern boundary of the site as an interim two-lane roadway with the left turn bays on 100' public right-of-way with grading for the ultimate four lane median-divided roadway shall be constructed in the second phase of this project. The Collector Street on 60' Construction of the private site driveways shall be completed with development of the parcel it abuts. Construction of the private site driveways shall be completed in accordance with the recommendation in the Traffic Impact Analysis.~~

i) *Recommended Improvements*:

The following conditions regarding transportation improvements apply and shall be phased consistent with the Traffic Impact Analysis that has been performed for this rezoning, which is on file with the Town of Apex. All proposed driveway access and improvements on state-maintained roadways are subject to both Apex and NCDOT review and approval. Except as set forth herein, all proposed roadway infrastructure and right-of-way dedications will be consistent with the Town of Apex Comprehensive Transportation Plan, as amended with this rezoning.

The Developer shall construct the following, consistent with the Thoroughfare and Collector Street Plan Map and the Bicycle and Pedestrian Plan Map, subject to Town of Apex and NCDOT review and approval at the time of site and subdivision plans.

Transit Easement

The Developer shall construct concrete flatwork to the Town's Standard Specifications for bus stops (see sheets 300.32 1, 2, 3) for pair of future bus stops along Jessie Drive close to the proposed grocery store entrance. Such bus stops may be permitted within the right-of-way, provided the Developer shall provide Permanent Transit Easement(s) if needed for areas outside the ROW. No bus stop amenities or signage shall be required to be purchased or installed by the applicant. Exact locations will be determined at site plan approval. It is desirable to Town staff to locate them in proximity to a pedestrian crosswalk across Jessie Drive if possible.

Jessie Drive Extension:

Developer shall construct Jessie Drive as a 76-foot back-to-back 4-lane median divided thoroughfare typical section including a 10-foot wide side path on both

sides for the length of the project property from the eastern property line to NC 55 within an 110-foot typical section right-of-way. Such right-of-way construction shall be subject to NCDOT approval, including the ability to modify the section as needed through design.

NC 55:

Developer shall widen NC 55 and dedicate public right-of-way for the extent of the project frontage for the eastern half of a minimum 94-foot back-to-back 6-lane thoroughfare typical section including a 10-foot side path on the east side within an 150-foot typical section right-of-way. Additional road widening beyond the minimum typical section to accommodate the Transportation Improvements may require additional right of way dedication beyond the 150-foot typical section. Such right-of-way construction shall be subject to NCDOT approval, including the ability to modify the section as needed through design.

NC 55 at Site Access A:

Construct the northernmost driveway on NC 55 (Site Access A) as a right-in/right- and provide 250 feet of Internal Protected Storage (IPS).

Jessie Drive Extension at Site Access B:

Construct the westernmost driveway on the north and south side (Site Access B) of Jessie Drive as right-in / right-out approximately 400 feet from NC 55 and provide 100 feet of IPS.

Jessie Drive Extension at Site Access C:

- **Construct Site Access C approximately 700 feet east of NC 55 with full-movement access accommodations to both parcels subject to NCDOT approval.**
    - **Construct the northern and southern legs of the intersection with one ingress lane and two egress lanes (exclusive left-turn lane and a shared through/right lane).**
    - **Provide 100 feet of IPS on both approaches.**

- **Provide an exclusive eastbound left-turn lane with 150 feet of storage and appropriate tapers, subject to NCDOT approval on Jessie Drive Extension.**

- **Provide an exclusive westbound left-turn lane with 150 feet of storage and appropriate tapers, subject to NCDOT approval on Jessie Drive Extension.**

Jessie Drive Extension at Site Access D:

Construct Site Access D as a southbound right-out only or right-in/right-out approximately 1,000 feet from NC 55

Jessie Drive Extension at Site Access E:

- **Construct the easternmost site driveway on the north and south side of Jessie Drive (Site Access E), approximately 1,300 feet east of NC 55, as a full movement intersection with 100 feet of IPS.**

- **Provide an exclusive eastbound left-turn lane on Jessie Drive with 100 feet of full width storage plus 50 feet of deceleration and 100 feet of taper.**

- **Provide a westbound left-turn lane on Jessie Drive to the extent possible until Jessie Drive terminates in advance of the property boundary.**

NC 55 at Site Access F:

Construct Site Access F as a right-in/right-out on NC 55 approximately 400 feet south of Jessie Drive. Provide 100 feet of IPS.

The following improvements were identified at the intersection of NC 55 at Jessie Drive Extension:

NC 55 at Jessie Drive Extension:

- **Construct the new intersection as a full-movement configuration and designed to allow for future conversion of this intersection (by others) to RCI.**

- **Terminate one of the westbound lanes of Jessie Drive Extension as a right-turn lane and the other westbound lane as a left-turn lane. Construct a second westbound left-turn lane with 350 feet of full width storage and appropriate tapers, subject to NCDOT approval**

- **Construct an exclusive northbound right-turn lane on NC 55 with 100 feet of full width storage, 50 feet of deceleration, and 100 feet of taper.**

- **Construct dual southbound left-turn lanes on NC 55, each with 250 feet of full width storage, 50 feet of deceleration, and 100 feet of taper.**

- **Install a traffic signal for the full-movement intersection configuration.**

ii) A proposed water and wastewater system is provided on the accompanying utilities plan. The final proposed sanitary sewer system specifics shall be coordinated with the **Water Resources** group. Gravity line sizes shall also be coordinated with the Town as part of the non-residential subdivision plan and construction drawings. If oversizing is required by Apex to accommodate offsite development, the Developer shall be eligible for reimbursement in accordance with Apex policy. Details associated with the existing 16" watermain and construction of Jessie Drive shall also be coordinated with **Water Resources** to ensure water service interruption is minimized;

EXHIBIT B

JESSIE COMMONS PUD AMENDMENT - APPLICATION PROPERTY LIST							
Address	REID	PIN	Owner	Mailing Address 1	Mailing Address 2	Deed Book	Deed Page
1701 E WILLIAMS ST	0013416	0751003311	ALA COMMERCIAL LLC	700 SPRING FOREST RD STE 400	RALEIGH NC 27609-9124	012233	02621
0 E WILLIAMS ST	0012272	0751011288	ALA COMMERCIAL LLC	PO BOX 98028	RALEIGH NC 27624-8028	012448	02163
0 E WILLIAMS ST	0342515	0741915068	ALA COMMERCIAL LLC	PO BOX 98028	RALEIGH NC 27624-8028	012448	02163
1615 E. WILLAMS ST	0352879	0741911743	APEX TOWN OF	PO BOX 250	APEX, NC 27502-0250	012323	01942

EXHIBIT C

Property Description

Being a 64.37 acre tract of land located in the White Oak Township, Wake County, North Carolina comprised of contiguous land parcels identified as Wake Co. PIN numbers 0751-00-3311, 0741-91-2010, 0741-91-6041, and 0751-01-1288 with the perimeter described as follows:

Beginning at a *iron pipe* having NC Grid (NAD 83) coordinates of **N:710285.84, E:2049460.39**; thence along the northern *property line of the David L. Raymer Property* following a bearing of **N 89°56'09" W** a distance of **88.62** feet to a *iron pipe on the eastern right of way of NC Hwy 55*; thence along the *eastern right of way of NC Hwy 55* in a northerly direction with a non tangent curve turning to the left with a radius of 5495.40 feet, having a chord bearing of **N 12°16'32" W** and a chord distance of **475.12**, having a interior angle of 04°57'19" and an arc length of 475.27 to a *iron pipe*; thence along the *eastern right of way of NC Hwy 55 i*n a northerly direction with a non tangent curve turning to the left with a radius of 5495.40 feet, having a chord bearing of **N 16°58'36" W** and a chord distance of **426.38**, having a interior angle of 04°26'48" and an arc length of 426.49 to a *iron pipe*; thence leaving the *eastern right of way of NC Hwy 55* along the southern property line of the Edwards Investment Group following a bearing of **S 86°19'55" E** a distance of **35.78** feet to a *iron pipe*; thence along the western property line of the Edwards Investment Group following a bearing of **N 08°39'56" W** a distance of **111.05** feet to a *iron pipe*; a bearing of **N 05°09'13" W** a distance of **159.93** feet to a *iron*; a bearing of **N 04°27'18" W** a distance of **505.30** feet to a *iron pipe in the southern property line of the Dixie Pipeline Company Property*; thence with the *southern property line of the Dixie Pipeline Company Property following* a bearing of **S 86°19'34" E** a distance of **1165.34** feet to a *iron pipe and* a bearing of **S 86°16'37" E** a distance of **302.09** feet to a *iron pipe in the western property line of the Louis C. Smith Property;* thence with *the western property line of the Louis C. Smith Property following a* bearing of **S 18°12'55" E** a distance of **978.58** feet to a *point*; thence with the *property line of the Louis C. Smith Property* a bearing of **S 65°46'45" W** a distance of **329.17** feet to a *point*; thence with the *property line of the Louis C. Smith Property* a bearing of **S 79°31'14" W** a distance of **0.87** feet to a *iron pipe*; thence with *the western property line of the Louis C. Smith Property* following a bearing of **S 12°28'44" E** a distance of **894.01** feet to a *iron pipe in the northern property line of the Daylene Page Property*; thence with *the northern property line of the Daylene Page Property following a b*earing of **N 86°39'53" W** a distance of **1286.16** feet to a *iron pipe in the western property line of the David L. Raymer Property*; thence with *the western property line of the David L. Raymer Property following* a bearing of **N 05°23'23" W** a distance of **315.78** feet to a *iron pipe the point and place of beginning and containing 2804093 sq. ft./ 64.37 ac. more or less*;

Jessie Commons
Planned Unit Development
Apex, North Carolina

JESSIE COMMONS
PLANNED UNIT DEVELOPMENT
APEX, NORTH CAROLINA

Prepared For:

ALA COMMERCIAL, LLC
February 2007

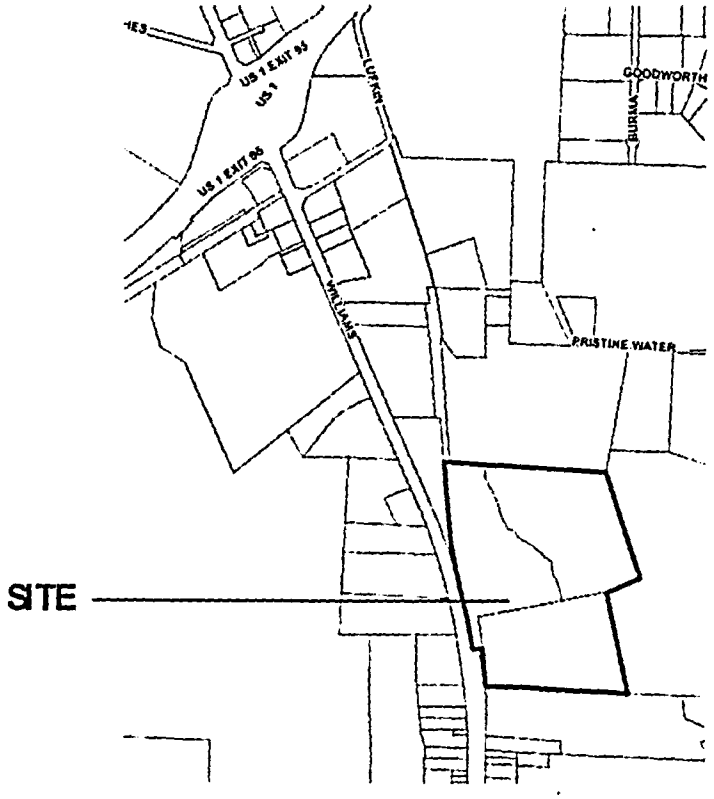
Prepared By:

WITHERS & RAVENEL, INC.
Land Planning, Civil Engineering, Landscape Architecture
Environmental Design, Surveying

1.0 TABLE OF CONTENTS

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2.0 VICINITY MAP



3.0 PROJECT DATA

Name of project:	Jessie Commons
Preparer's Name:	Withers & Ravenel, Inc. Charles R. Smith, ASLA 111 MacKenan Dr., Cary, NC 27511 Fax: (919) 467-6008; Phone (919) 469-3340
Owner's Name:	ALA Commercial, LLC Medical Mutual, Mark Davidson 700 Spring Forest Rd., Raleigh, NC 27624 Fax: (919) 878-7606; Phone (919) 878-7601
Contract Purchaser's Name:	Same
Current Zoning:	PC-CU; LI; RA
Proposed Zoning:	PUD-CZ
Area of Tract:	64.25 AC

4.0 PURPOSE STATEMENT

The project meets the development parameters listed in Sec. 2.3.4(F)(1)(iv-vi) as follows:

i. While the proposed PUD is entirely non-residential, all required sidewalks, bikeways, greenways and pedestrian connectivity will be provided to meet Town of Apex Standards;

ii. Land use patterns have been provided that are connected primarily by roadways shown on the Town of Apex Thoroughfare Plan with no stream crossings proposed other than Jessie Drive's extension. No cul-de-sacs are proposed with street/driveway stubs where appropriate; and

iii. The proposed character of the project is consistent with the vision proposed in the Highway 55 Corridor Plan previously adopted by the Town.

5.0 PERMITTED USES

Sites C-1 & C-2

Art Studio
Automotive Parts
Barber & Beauty Shop
Bookstore
Car Wash
Convenience Store w/Gas Sales
Copying Service, Printing
Day Care Facility
Entertainment, Indoor
Dry Cleaners
Farmers Market
Financial Institution
Florist
Government Service
Greenhouse or Nursery
Grocery, General
Grocery, Specialty
Health/Fitness Center or Spa
Hotel or Motel
Indoor Entertainment
Indoor Kennel
Laundromat
Medical or Dental Office
Newsstand
Office, Business or Professional
Personal Service
Pharmacy
Real Estate Sales
Restaurant, Drive-Thru
Restaurant, General
Retail Sales, general
Tailor Shop
Theater
Utility, Minor
Veterinary Clinic/Hospital

Sites O-1 & O-2

~~Assembly Hall, Nonprofit~~
Assembly Hall, for Profit
Auditorium – S
Auto Detailing
Automotive Parts
Automotive Shop (paint or body)
Building Supplies
~~Church~~
Contractor's Office & Storage Yard
Day Care Facility – %
Funeral Home
Government Service
Kennel, Indoor & Outdoor
Laboratory, Industrial Research
Landscape Maintenance Service
Machine Shop
Medical and Dental Laboratory
~~Medical and Dental Office~~
Monument Sales
Office, Business or Professional
Parking Lot, Commercial
~~Personal Service~~
~~Printing & Copying Service~~
~~Publishing Office~~
Real Estate Sales
Repair Services
Research Facility
Retail Sales, General-%
~~School~~
Self-Service Storage
Towing Service
Upholstery Shop
Utility, Minor
Veterinary Clinic/Hospital
Warehousing
Wholesaling
Woodworking

6.0 DESIGN CONTROLS

	C-1	C-2	O-1	O-2
Maximum non-residential SF	110,000	85,000	180,000	60,000
Maximum building height	40′	40′	30′	30′
Minimum building setback to interior property line	10′	10′	0′	0′
Minimum parking/drive setback to interior property line	0′	0′	0′	0′
Minimum building setback to Hwy 55 / Jessie Drive	30′	30′	30′	30′
Minimum building setback to perimeter property line	30′	30′	30′	30′
Minimum building setback to RCA*	10′	10′	10′	10′
Minimum parking/drive setback to RCA*	5′	5′	5′	5′
Maximum impervious surface	70%	70%	70%	70%

* If no vegetation exists in RCA areas adjacent to building /drive area no setback shall be required.

6.1 LAND USE NOTES

- All acreages are preliminary until final surveying takes place during the construction drawing phase of development. Exact easement locations, street alignments, etc. may cause acreages to vary.
- All building setbacks shall be as specified in this PUD document and shall not be subject to any code changes.
- All setbacks may be reduced a maximum of 10% by Town of Apex staff.
- Final tree surveys, final lot and open space surveys, final acreages, etc. will be provided during the subdivision plan process.
- Non-residential parcels provide a maximum floor area allowed for the site. Should the parcel acreage vary, the allowed maximum floor area shall be enlarged or reduced proportionally.
- The final number of outparcels and buildings for all non-residential sites will be determined during the subdivision plan process.

7.0 ARCHITECTURAL STANDARDS

7.1 Exterior Materials

All elevations visible from public streets and public parking areas will predominantly utilize brick and precast concrete, CMU, various storefront materials such as aluminum, wood and vinyl (trim and windows but not cladding), canvas awnings, metal canopies, decorative metal work in the guardrails, window storm type shutters and roofing materials.

7.2 Architectural Features

The project will typically use canopies, signage color, hardscape pattern and materials as unifying elements throughout the project. These will be applied to all of the buildings. The buildings will utilize either a pitched or flat parapeted roof. All windows and storefronts will have a mullion pattern that is a single pane on the bottom with multiple panes above.

7.3 Compatibility of Design Elements: Landscape, Building Setbacks, Building Heights, Amenities

Landscape and Pedestrian Circulation (Hardscape):
Plant materials will be used for consistency with a pattern of alternating street trees and flowering trees used along major roadways. Along internal streets, tightly regimented street trees in combination with evergreen trees and shrubs define and separate the street from adjacent parking.

Building Heights:
The buildings will typically be one story structures but could possibly incorporate two story, exaggerated single story.

Lighting:
Pedestrian scale light poles are used along all store/office fronts to encourage exploration and movement outside of parking fields; these will also serve as a unifying element throughout the site. Area lighting is consistent throughout the development and is intended to highlight pedestrian spaces while downplaying parking fields.

8.0 PARKING & LOADING

The requirements of UDO Sec. 8.3 as they relate to off-street parking will be met in the development of this project.

9.0 SIGNS

All site signage will comply with UDO Sec. 8.7 Signs.

10.0 NATURAL RESOURCE AND ENVIRONMENTAL DATA

- The site is in the Secondary Watershed Protection Overlay District.
- A small portion of the site adjacent to Middle Creek along the eastern property line contains FEMA designated 100 year floodplain.
- RCA requirements within a PUD are variable and determined on a case by case basis. The location of the site typically requires 25% of the site area to be preserved as Resource Conservation Area. This site has a total area of 64 acres and, therefore, typically would have a 16 acre requirement.
- Sixteen acres of the site have been provided for RCA.
- No historic structures are located on site.

11.0 STORMWATER MANAGEMENT

This development is within the upper reaches of the Middle Creek drainage basin of the Neuse River Basin. The project lies within the Town of Apex's secondary watershed protection overlay district. The project is subject and will adhere to stormwater requirements of Federal, State and Local agencies. These requirements include:

US Army Corps of Engineers
- Wetlands Protection

NCDENR – Division of Water Quality
- Wetlands Protection
- 401 Water Quality Certification

Town of Apex
- Secondary Watershed Protection Overlay District
- Peak attenuation requirements
- Sediment & Erosion Control
- Riparian Buffer Protection

Review of both the USGS quad map and the Wake County soil survey indicate features subject to NCDENR and Town of Apex riparian buffer protection as shown on the figure.

The proposed development will be planned and constructed in a manner emphasizing the protection of existing drainage ways. Disturbance of wetland and riparian areas shall be prohibited except where required to construct road crossings, utilities, greenways, best management practices and other items specifically allowable by the US Army Corps of Engineers, NCDENR and the Town of Apex. All required disturbance permits shall be obtained prior to final approval of any specific development plan.

This site proposes to utilize several best management practices to provide compliance with the Town of Apex's watershed protection and peak attenuation requirements. The best management practices may include: wet detention basins, constructed wetlands, bio-retention areas, alternative level spreaders and other innovative practices as approved by NCDENR and the Town of Apex. All best management practices shall be provided in accordance with NCDENR rules and regulations.

12.0 PARKS & RECREATION

Since no residential uses are proposed, no recreation dedication is required.

13.0 PUBLIC FACILITIES

Public facilities requirements established in UDO Sec. 2.3.4(F)(1)(f) are met as follows:

i) The on-site circulation system is determined by the Town of Apex Thoroughfare and Collector Street Plan for the most part with frontage on NC 55 and the construction of Jessie Drive on 100' public right-of-way from NC 55 to the eastern boundary of the site. The commercial site C-1 will connect to Jessie Drive and NC 55 by private drives shown on the site layout plan. The commercial site C-2 will connect to Jessie Drive by private drives shown on the site layout plan and include a stub to the west for future connection to NC 55 by others. The office/flex site O-1 will connect to Jessie Drive by a public Collector Street on 60' public right-of-way shown on the site layout plan. Jessie Drive shall be constructed as a four-lane divided roadway with landscaped median from NC 55 to the intersection of the full-service private driveways serving C-1 and C-2 in the first phase of this project. An additional northbound lane shall be constructed along the property frontage on NC 55 with the first phase of parcel development. The traffic signal at the intersection of NC 55 and Jessie Drive shall be constructed in the first phase of this project when permitted by North Carolina Department on Transportation. The extension of Jessie Drive to the eastern boundary of the site as an interim two-lane roadway with the left turn bays on 100' public right-of-way with grading for the ultimate four lane median-divided roadway shall be constructed in the second phase of this project. The Collector Street on 60' Construction of the private site driveways shall be completed with development of the parcel it abuts. Construction of the private site driveways shall be completed in accordance with the recommendation in the Traffic Impact Analysis.

ii) A proposed water and wastewater system is provided on the accompanying utilities plan. The final proposed sanitary sewer system specifics shall be coordinated with the Public Works group. Gravity line sizes shall also be coordinated with the Town as part of the non-residential subdivision plan and construction drawings. If oversizing is required by Apex to accommodate offsite development, the Developer shall be eligible for reimbursement in accordance with Apex policy. Details associated with the existing 16" watermain and construction of Jessie Drive shall also be coordinated with Public Works to ensure water service interruption is minimized;

iii) All required utilities including water, sewer, solid waste disposal, electrical supply, public gas, etc. are provided within the site. Negotiations are underway to provide a fire station site as part of this submittal; and

iv) Since there is no residential component proposed, no park facilities have been provided.

14.0 PHASING PLAN

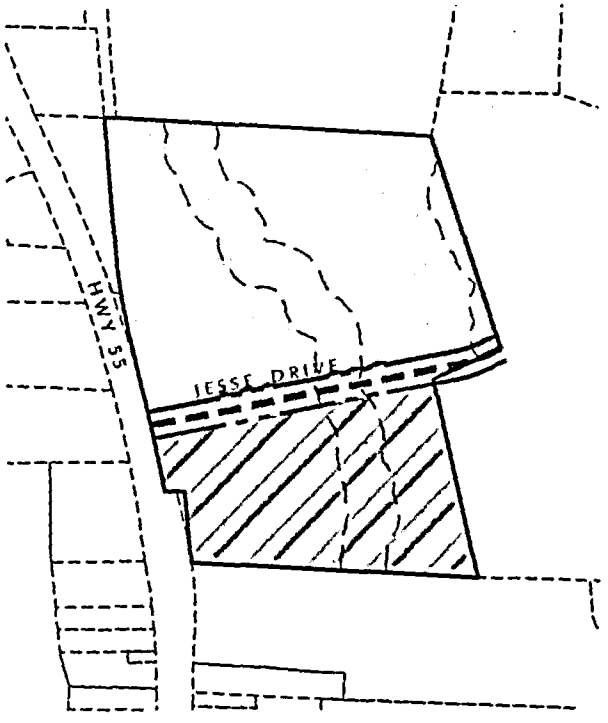
A Phasing Plan has been provided.

15.0 CONSISTENCY WITH THE LAND USE PLAN

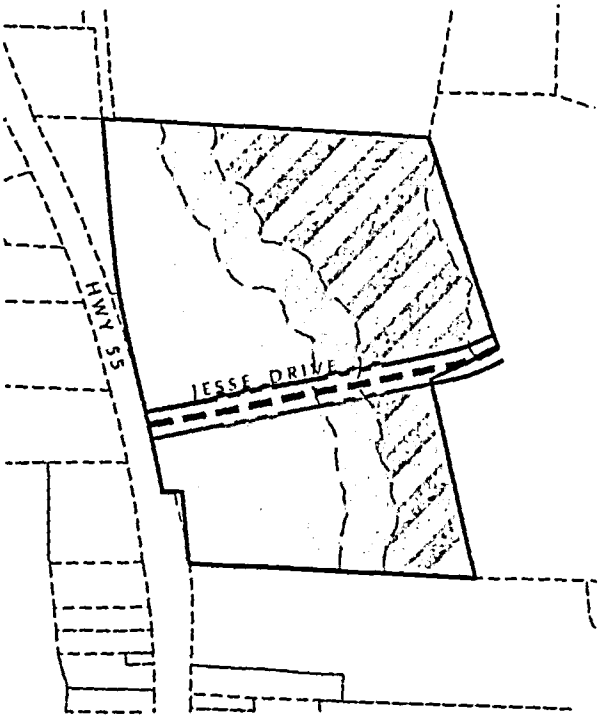
The uses proposed in this request currently exist on the 2025 Land Use Plan but are slightly redistributed within the site (the following graphic shows the proposed changes). Commercial uses are indicated on the 43 acres north of Jessie Drive's extension with a mix of medium and high density residential uses on the 21 acres south of Jessie Drive. Changes are proposed as follows:

1) Commercial will be moved from the northeast quadrant of the site to the parcel south of Jessie Drive along Highway 55. With frontage on two major roadways and, ultimately, a major intersection, a commercial use is more appropriate for this parcel.
2) Since the northeast quadrant is adjacent to industrial uses to the north and an office/industrial mix to the east, an office/industrial mix is proposed with stream buffers and Jessie Drive providing a logical cut-off for this use; and
3) The final parcel to be changed lies to the south of Jessie Drive and east of the stream dividing the site. Non-residential uses surround it on three sides with the office/industrial mix directly adjacent to the east. A combination of this use is proposed.

We believe the proposed changes are subtle in nature and appropriate given their context.



CURRENT LAND USE PLAN



PROPOSED LAND USE PLAN

LEGEND

- COMMERCIAL
- MEDIUM DENSITY RESIDENTIAL
- HIGH DENSITY RESIDENTIAL

LEGEND

- COMMERCIAL
- RESOURCE CONSERVATION
- INDUSTRIAL
- OFFICE & INSTITUTIONAL

MASTER LAND USE PLAN

JESSIE COMMONS

APEX NORTH CAROLINA

SCALE: 1" = 800' NOVEMBER 2006

WITHERS & RAVENEL

ENGINEERS | PLANNERS | SURVEYORS

16.0 COMPLIANCE WITH THE UDO

One of the intentions of this proposal is to be consistent with the requirements presented in the UDO. Whenever we do slightly deviate from a requirement, it is done so because of unique factors that exist within the site or that exist because of our particular location within the Town. We do believe, however, that we comply completely with UDO regulations.

06CZ24

ATTACHMENT "A"

LEGAL DESCRIPTION DECEMBER 08, 2006

Lying and being in White Oak Township, Wake County, North Carolina and described as follows more fully to wit:

Beginning at an existing iron pipe, the common corner of Dixie Pipeline Company and Clyde E. Sorrell, Heirs; thence with the southern line of Dixie Pipeline Company, South 86°19'34" East, 379.51 feet to an existing iron pipe on the east bank a branch; thence the following twelve (12) courses and distances along the east bank of a branch, South 03°32'00' West, 116.14 feet to an existing iron pipe, South 27°53'09" East, 230.12 feet to an existing iron pipe, South 15°41'28" East, 133.55 feet to an existing iron pipe, South 27°25'52" East, 140.99 feet to an existing iron pipe, South 81°22'47" East, 54.32 feet to an existing iron pipe, South 33°28'54' East, 70.90 feet to an existing iron pipe, South 59°05'47" East, 170.21 feet to an existing iron pipe, South 49°36'48" East, 209.48 feet to an existing iron pipe, South 01°17'08" East, 85.19 feet to an existing iron pipe, South 29°36'43" East, 76.48 feet to an existing iron pipe, South 20°03'14" East, 105.92 feet to an existing iron pipe, South 08°04'04" East, 85.19 feet to an existing iron pipe on the east bank of branch and being in the southern right-of-way of an existing 50 Foot Waterline Easement (Deed Book 3290, Page 516); thence the following six (6) courses and distances with aforesaid branch, South 08°23'09' East, 158.27 feet to a point, South 10°30'31" East, 225.57 feet to a point, South 19°14'12" East, 66.89 feet to a point, South 28°40'53" East, 107.15 feet to a point, South 16°42'17" West, 184.02 feet to a point, South 05°07'48" West, 67.00 to a point in aforesaid branch in the northern line of Daylene Page, Et Al; thence with the northern line of Daylene Page, Et Al, North 86°39'53" West, 768.32 feet to a point, a corner of Daylene Page, Et Al; thence North 05°23'23" West, 315.78 feet to an existing iron pipe; thence North 89°56'09" West, 88.63 feet to an existing iron pipe on the eastern right-of-way of N.C. Highway No. 55; thence the eastern right-of-way of N.C. Highway No. 55, a curve in a counter-clockwise direction having a radius of 5495.40 feet, a length of 475.27 feet an a chord bearing and distance of North 12°16'32" West, 475.12 feet to an existing iron pipe on the eastern right-of-way of N.C. Highway No. 55; thence the following six (6) courses and distances, North 12°51'38" West, 266.95 feet to an existing iron pipe, North 11°50'08' West, 129.38 feet to an existing iron pipe, North 08° 39'56" West, 18.83 feet to an existing iron pipe, North 08°39'56" West, 111.04 feet to an existing iron pipe, North 05°09'13" West, 159.93 feet to an existing iron pipe, and North 04°27'18" West, 505.30 feet to the point and place of beginning and containing 32.260 acres more or less. The above described tract of land is all of Wake County PIN 0741.04-91-6041 and a portion of Wake County PIN 0751.03-00-3311.

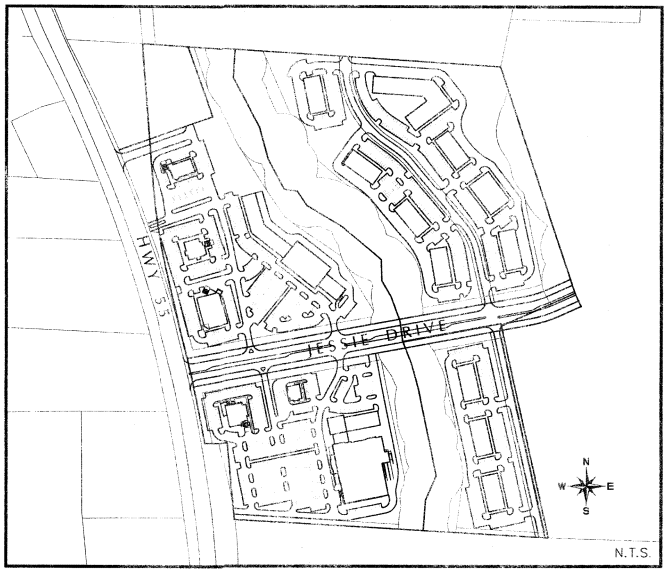
PLANNED UNIT DEVELOPMENT FOR

JESSIE COMMONS

APEX, NORTH CAROLINA



VICINITY MAP
SCALE: 1" = 2000'



INDEX OF SHEETS

EXISTING CONDITIONS	SHT 1
PRELIMINARY WETLANDS MAP	SHT 1A
PRELIMINARY LAND USE PLAN	SHT 2
PRELIMINARY INFRASTRUCTURE PLAN	SHT 3

LEGEND

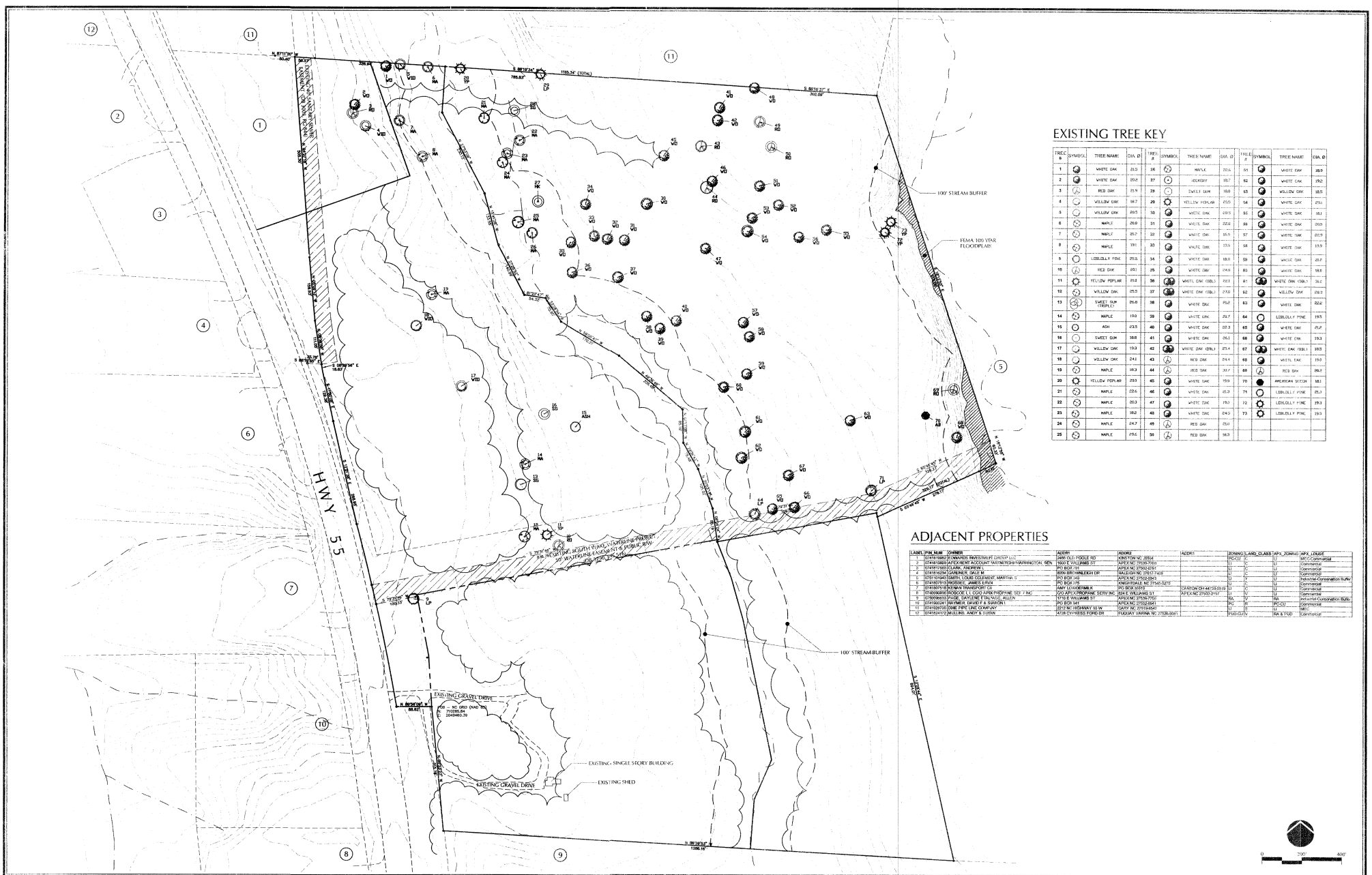
DESCRIPTION	EXISTING	PROPOSED
1' CONTOUR INTERVAL		
5' CONTOUR INTERVAL		
PROPERTY LINE		
ROADWAY CENTERLINE		
RIGHT OF WAY LIMITS		
EASEMENT LINE		
CURB & GUTTER		
SANITARY SEWER FACILITIES		
STORM SEWER FACILITIES		
WATERLINE		
FIRE HYDRANT ASSEMBLY		
FENCING STRUCTURE		
WOODSLINE		N/A
WATERWAYS		N/A
TREE PROTECTION FENCE	N/A	-TF-TF-

PREPARED BY:

WITHERS & RAVENEL
ENGINEERS I PLANNERS I SURVEYORS
111 MacKenan Drive Cary, North Carolina 27511 tel: 919-469-3340 fax: 919-467-6008 www.withersravenel.com

DEVELOPER/OWNER

ALA COMMERCIAL, LLC
C/O MEDICAL MUTUAL, MARK DAVIDSON
700 SPRING FOREST ROAD
RALEIGH, NC, 27642
PHONE: (919) 878-7601 FAX: (919) 878-7606



EXISTING TREE KEY

TREE #	SYMBOL	TREE NAME	DIA. Ø	TREE #	SYMBOL	TREE NAME	DIA. Ø	TREE #	SYMBOL	TREE NAME	DIA. Ø
1		WHITE OAK	21.3	36		MAPLE	20.6	51		WHITE OAK	18.9
2		WHITE OAK	20.2	37		HICKORY	18.7	52		WHITE OAK	19.2
3		RED OAK	21.9	38		SWEET GUM	18.0	53		WILLOW OAK	18.5
4		WILLOW OAK	19.7	39		YELLOW POPLAR	23.5	54		WHITE OAK	29.4
5		WILLOW OAK	29.5	30		WHITE OAK	23.5	55		WHITE OAK	18.1
6		MAPLE	26.0	31		WHITE OAK	22.8	56		WHITE OAK	20.5
7		MAPLE	25.2	32		WHITE OAK	25.5	57		WHITE OAK	22.9
8		MAPLE	19.1	33		WHITE OAK	23.5	58		WHITE OAK	19.9
9		LOBLOLLY PINE	25.5	34		WHITE OAK	18.0	59		WHITE OAK	23.2
10		RED OAK	20.1	25		WHITE OAK	24.9	60		WHITE OAK	18.8
11		YELLOW POPLAR	21.2	36		WHITE OAK (DBL)	22.1	61		WHITE OAK (DBL)	31.2
12		WILLOW OAK	25.5	37		WHITE OAK (DBL)	27.0	62		WILLOW OAK	28.3
13		SWEET GUM (TRIPLE)	26.8	38		WHITE OAK	25.2	63		WHITE OAK	22.6
14		MAPLE	19.0	39		WHITE OAK	23.7	64		LOBLOLLY PINE	19.5
15		ASH	23.5	40		WHITE OAK	22.3	65		WHITE OAK	21.9
16		SWEET GUM	18.8	41		WHITE OAK	26.1	66		WHITE OAK	19.3
17		WILLOW OAK	19.3	42		WHITE OAK (DBL)	27.4	67		WHITE OAK (DBL)	18.8
18		WILLOW OAK	24.2	43		RED OAK	24.4	68		WHITE OAK	19.0
19		MAPLE	18.3	44		RED OAK	30.7	69		RED OAK	28.2
20		YELLOW POPLAR	23.0	45		WHITE OAK	19.9	70		AMERICAN BEECH	18.1
21		MAPLE	22.6	46		WHITE OAK	21.3	71		LOBLOLLY PINE	21.3
22		MAPLE	20.3	47		WHITE OAK	19.0	72		LOBLOLLY PINE	19.3
23		MAPLE	18.2	48		WHITE OAK	24.0	73		LOBLOLLY PINE	19.9
24		MAPLE	24.7	49		RED OAK	23.0				
25		MAPLE	29.6	50		RED OAK	18.3				

ADJACENT PROPERTIES

LABEL	PIN_NUM	OWNER	ADDR1	ADDR2	ADDR3	ZONING	LAND_CLASS	APX_ZONING	APX_LDUSE
1	0749418982	EDWARDS INVESTMENT GROUP LLC	2486 OLD FIDDLE RD	KINSTON NC 28504		PID-CU	C	LI	MFG Commercial
2	0749418869	APEX RENT ACCOUNT YARBOROUGH/HARRINGTON, REN	1602 E WILLIAMS ST	APEX NC 27539-7769		LI	C	LI	Commercial
3	0749717663	CLARK, ANDREW L	PO BOX 191	APEX NC 27502-0191		LI	C	LI	Commercial
4	0749816234	GARDNER, DALE M	8009 BROWNLEIGH DR	RALEIGH NC 27617-7408		LI	C	LI	Commercial
5	0751619445	SMITH, LOUIE CLEMENT, MARTHA S	PO BOX 143	APEX NC 27502-0143		LI	Y	LI	Industrial-Conservation Buffer
6	0749817915	ROSSBEE, JAMES ERVIN	PO BOX 375	KNIGHTDALE NC 27545-0275		LI	C	LI	Commercial
7	0749819718	KENAN TRANSPORT CO	AMY LOWDERMILK	PO BOX 32610	CHARLOTTE NC 28232-0610	LI	C	LI	Commercial
8	0749938860	ROSCOE, L L C/O APEX PROPANE SERV INC	C/O APEX PROPANE SERV INC	824 E WILLIAMS ST	APEX NC 27502-2157	LI	Y	LI	Commercial
9	0749938933	PAGE, DAYLENE E TALYAGE, ALLEN	1716 E WILLIAMS ST	APEX NC 27539-7750		RA	Y	RA	Industrial-Conservation Buffe
10	0749930241	RAYMER, DAVID F & SHARON I	PO BOX 941	APEX NC 27502-0941		PID	R	PID-CU	Commercial
11	0749939705	DOKE PIPE LINE COMPANY	2212 NC HIGHWAY 93 W	GARY NC 27519-8545		LI	C	LI	MFG
12	0749524122	MULLINS, ANDY & SUSAN	4728 CYPRESS FORD DR	FUQUAY VARINA NC 27526-8961		PUD-CU	Y	RA & PUD	Commercial

No.	Revision	Date	By

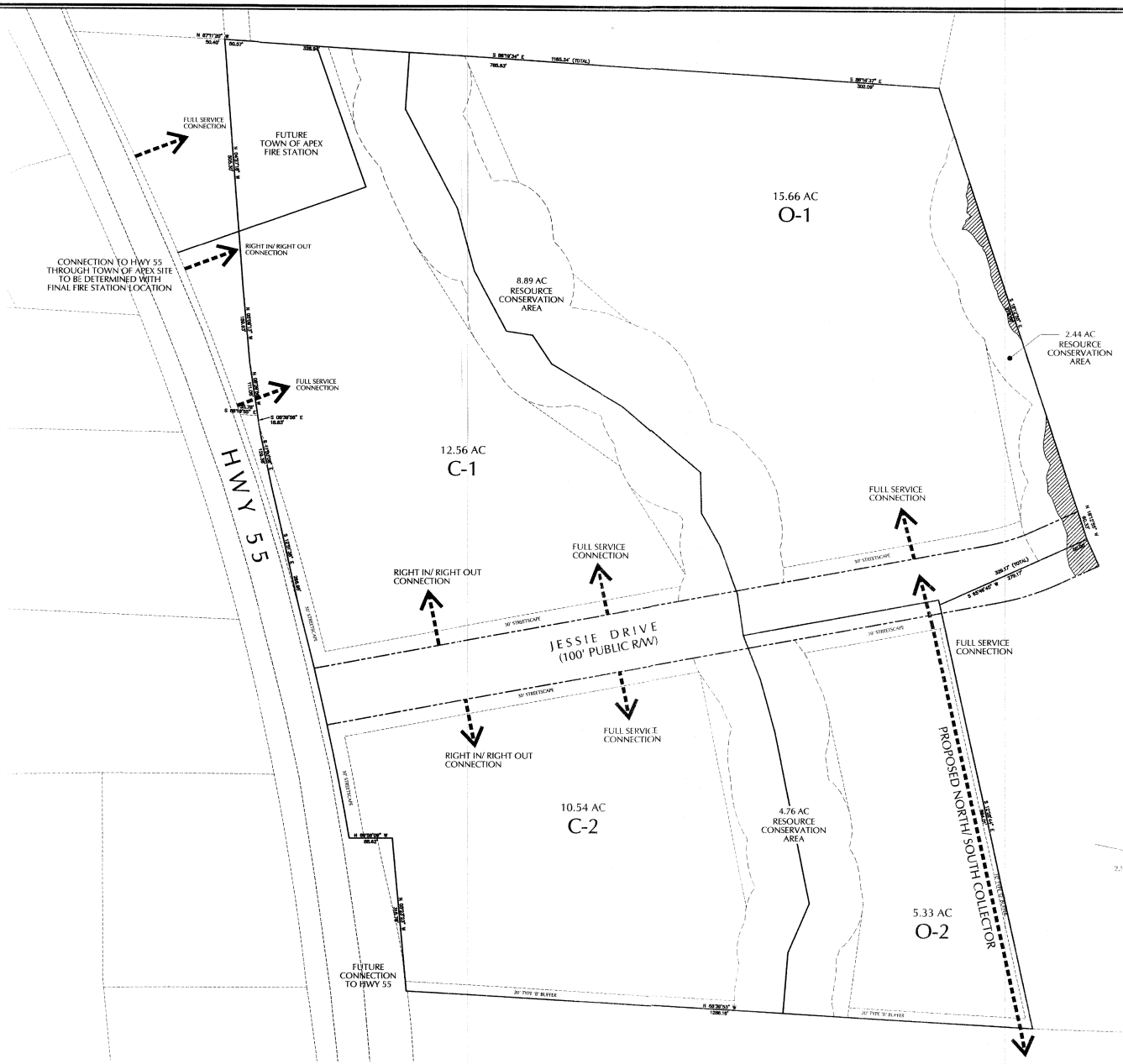
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Job No.	2061388

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EXISTING CONDITIONS

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Sheet No.
1



UTILITY NOTES

A. WATER NOTES

1. Water sizes are preliminary and shall be verified prior to construction drawings.
2. All stubs shall be 8" and subject to relocation as required by final site plans.
3. Fire hydrants shall be located in accordance with Town of Apex Standards.
4. All water mains shall be located within a 20' Town of Apex public water easement.
5. All future construction shall be completed in accordance with the Town of Apex Standards and Specifications.

B. SANITARY SEWER NOTES

1. Sanitary sewer lines and sizes are preliminary and shall be verified with the Town of Apex prior to construction drawings.
2. The actual location of sewer lines, manholes, services, and cleanouts shall be contingent upon actual site plans.
3. All 8" sanitary sewer mains shall be located within a 20' Town of Apex sanitary sewer easement.
4. Final pump station and force main routing shall be coordinated with the Town of Apex Public Works Department.
5. All future construction shall be completed in accordance with the Town of Apex Standards and Specifications.
6. Projected Average Daily Sewer Flow = 195,000 sf * .13 gpd/sf = 23,350 gpd
   + 20.99ac * 890 gpd/ac = 18,472 gpd
   Average Daily Flow = 43,822 gpd
   Peak Flow = 109,555 gpd = 76 gpm

STORMWATER NOTES

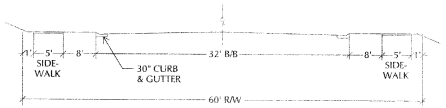
1. BMPS SHALL BE SIZED IN ACCORDANCE WITH TOWN OF APEX REQUIREMENTS.

3. DETAILED BMP DESIGNS INCLUDING CALCULATIONS SHALL BE SUBMITTED AS PART OF SITE PLANS FOR EACH PARCEL.

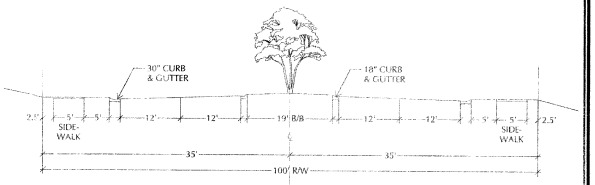
4. TOTAL STORAGE REQUIRED FOR 10 YEAR PEAK ATTENUATION PURPOSES IS +/- 12.7 AC-FT. BASED ON CONCEPTUAL SITE PLAN.

5. BMPS SHALL BE WET PONDS OR CONSTRUCTED WETLANDS AS REQUIRED BY TOWN OF APEX AND NCDENR-DWQ.

STREET SECTIONS



NORTH/ SOUTH COLLECTOR STREET



JESSIE DRIVE

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Drawn By: ---	Date: 06NOV2006
Checked By: ---	Job No.: 2061388

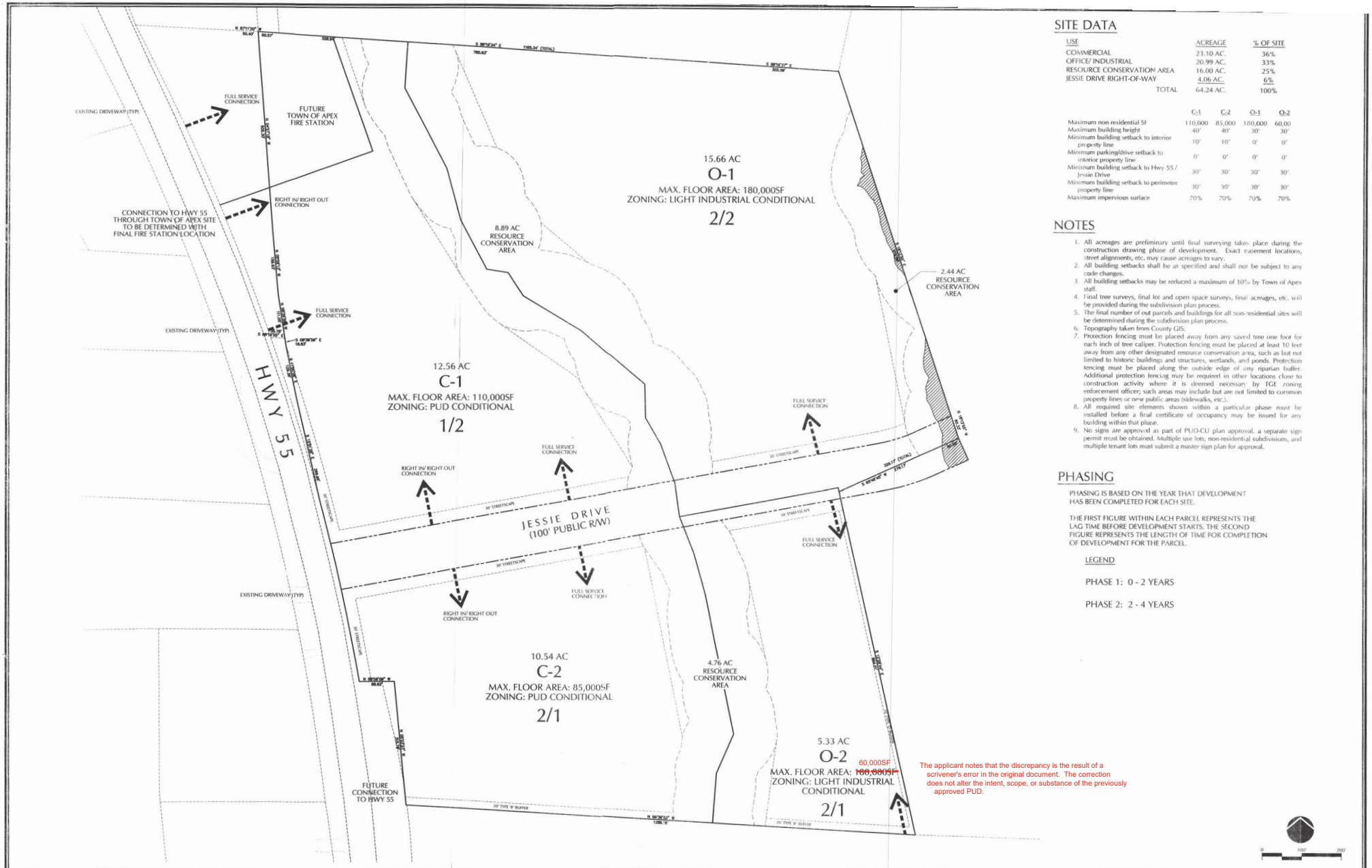
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PRELIMINARY INFRASTRUCTURE PLAN

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Sheet No. 3

Notation of Scrivener's Error



SITE DATA

USE	ACREAGE	% OF SITE
COMMERCIAL	23.10 AC.	36%
OFFICE/ INDUSTRIAL	20.99 AC.	33%
RESOURCE CONSERVATION AREA	16.00 AC.	25%
JESSIE DRIVE RIGHT-OF-WAY	4.06 AC.	6%
TOTAL	64.24 AC.	100%

	C-1	C-2	O-1	O-2
Maximum non-residential SF	110,000	85,000	180,000	60,00
Maximum building height	40'	40'	30'	30'
Minimum building setback to interior property line	10'	10'	0'	0'
Minimum parking/drive setback to interior property line	0'	0'	0'	0'
Minimum building setback to Hwy 55 / Jessie Drive	30'	30'	30'	30'
Minimum building setback to perimeter property line	30'	30'	30'	30'
Maximum impervious surface	70%	70%	70%	70%

NOTES

1. All acreages are preliminary until final surveying takes place during the construction drawing phase of development. Exact easement locations, street alignments, etc. may cause acreages to vary.
2. All building setbacks shall be as specified and shall not be subject to any code changes.
3. All building setbacks may be reduced a maximum of 10% by Town of Apex staff.
4. Final tree surveys, final lot and open space surveys, final acreages, etc. will be provided during the subdivision plan process.
5. The final number of out parcels and buildings for all non-residential sites will be determined during the subdivision plan process.
6. Topography taken from County GIS.
7. Protection fencing must be placed away from any saved tree one foot for each inch of tree caliper. Protection fencing must be placed at least 10 feet away from any other designated resource conservation area, such as but not limited to historic buildings and structures, wetlands, and ponds. Protection fencing must be placed along the outside edge of any riparian buffer. Additional protection fencing may be required in other locations close to construction activity where it is deemed necessary by TGE zoning enforcement officer; such areas may include but are not limited to common property lines or near public areas (sidewalks, etc.).
8. All required site elements shown within a particular phase must be installed before a final certificate of occupancy may be issued for any building within that phase.
9. No signs are approved as part of PUD-CU plan approval. a separate sign permit must be obtained. Multiple use lots, non-residential subdivisions, and multiple tenant lots must submit a master sign plan for approval.

PHASING

PHASING IS BASED ON THE YEAR THAT DEVELOPMENT HAS BEEN COMPLETED FOR EACH SITE.

THE FIRST FIGURE WITHIN EACH PARCEL REPRESENTS THE LAG TIME BEFORE DEVELOPMENT STARTS. THE SECOND FIGURE REPRESENTS THE LENGTH OF TIME FOR COMPLETION OF DEVELOPMENT FOR THE PARCEL.

LEGEND

PHASE 1: 0 - 2 YEARS

PHASE 2: 2 - 4 YEARS

The applicant notes that the discrepancy is the result of a scrivener's error in the original document. The correction does not alter the intent, scope, or substance of the previously approved PUD.

No.	Revision	Date	By

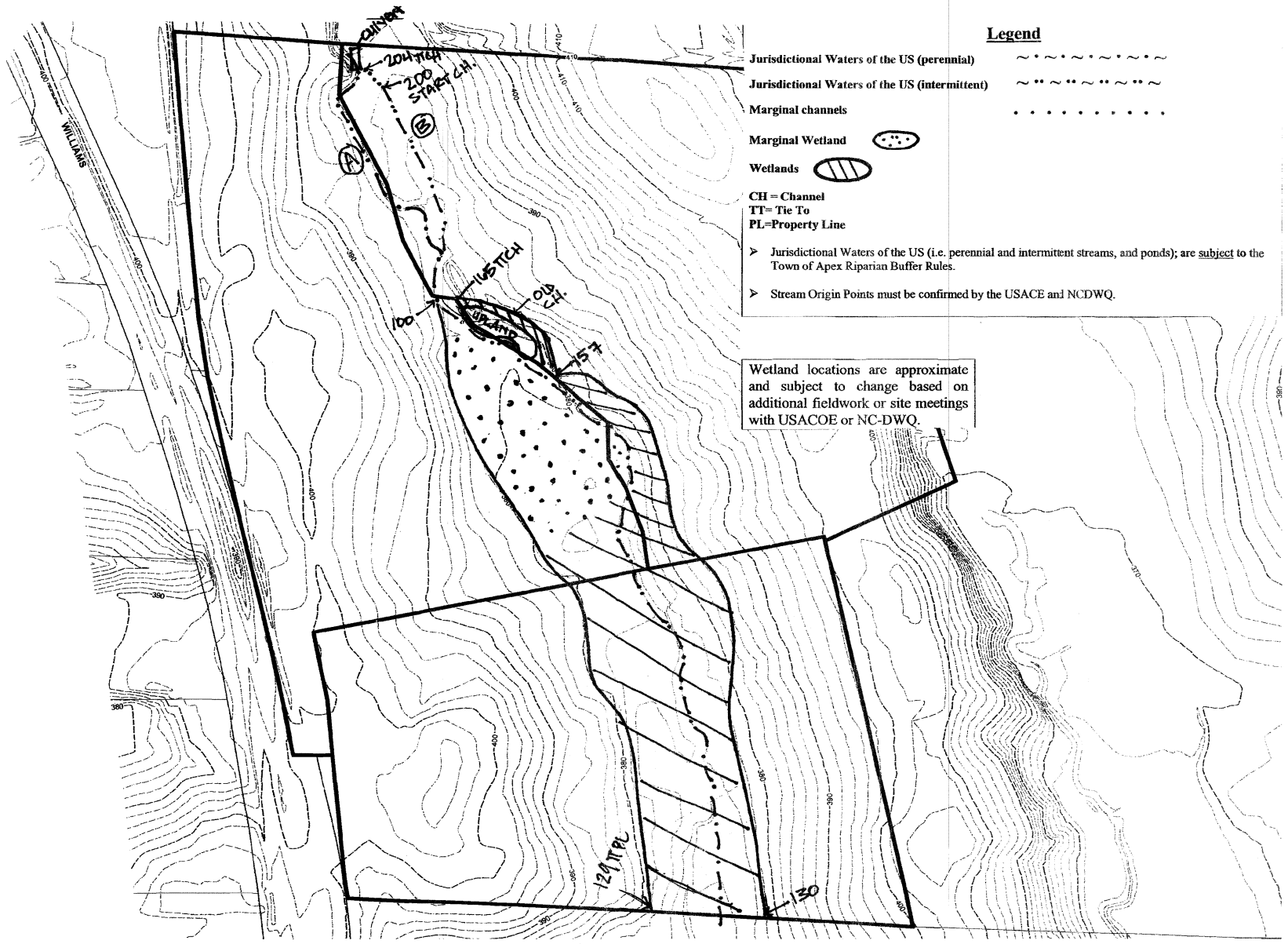
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Drawn By: --- | Date: 06NOV2006
Checked By: --- | Job No.: 2061388

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PRELIMINARY LAND USE PLAN

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Sheet No. 2



Legend

Jurisdictional Waters of the US (perennial)

Jurisdictional Waters of the US (intermittent)

Marginal channels

Marginal Wetland

Wetlands

CH = Channel
TT= Tie To
PL=Property Line

- Jurisdictional Waters of the US (i.e. perennial and intermittent streams, and ponds); are subject to the Town of Apex Riparian Buffer Rules.
- Stream Origin Points must be confirmed by the USACE and NCDWQ.

Wetland locations are approximate and subject to change based on additional fieldwork or site meetings with USACOE or NC-DWQ.

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Drawn By	---
Date	06NOV2006
Checked By	---
Job No.	2061388

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PRELIMINARY WETLANDS MAP

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Sheet No. 1A

Traffic Impact Analysis

Jessie Commons

Apex, NC

Prepared for:

Strategic Real Estate Partners

Kimley»Horn

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Traffic Impact Analysis for

Jessie Commons

Apex, North Carolina

Prepared for:

Strategic Real Estate Partners

Charlotte, NC

Prepared by:

Kimley-Horn and Associates, Inc.

NC License #F-0102
1070 S Main Street, Suite 230
Holly Springs, NC 27540
(919) 677-2000



March 2026

013805027

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Executive Summary

Kimley-Horn and Associates, Inc. has completed a Traffic Impact Analysis (TIA) for the Jessie Commons Project proposed to be located east of NC 55 and south of the existing Town of Apex Public Safety Station #4 in Apex, North Carolina. The development is envisioned to include approximately 300,000 square feet (SF) of light industrial space, 106,000 SF of retail space (including a supermarket), and six outparcels along NC 55. While specific outparcel uses have not been identified at this time, for the purposes of this analysis they were assumed to include a bank, a tire store, a fast-casual restaurant, a fast-food restaurant with drive-through window, a coffee shop with drive-through window, and a gas station/convenience market. As part of this development, Jessie Drive will be constructed from NC 55 through the site frontage but will not connect to the existing terminus at Horton Park Drive. The site is proposed to be accessed via multiple driveways on Jessie Drive Extension as well as a right-in/right-out access on NC 55 north of Jessie Drive Extension. The anticipated full build-out year for the project is 2030.

Based on coordination with the Town of Apex and the North Carolina Department of Transportation (NCDOT), the intersection of NC 55 at Jessie Drive Extension was studied in two separate access configurations:

- Access Scenario #1: Full-Movement Access
- Access Scenario #2: Reduced Conflict Intersection (RCI) (a.k.a. “Superstreet”)

This report presents trip generation, distribution, traffic analyses, and recommendations for transportation improvements required to meet anticipated traffic demands in conjunction with development. The traffic conditions studied include the existing (2026) traffic condition and the projected (2030) background and build-out conditions in the weekday AM and PM peak hours. Town of Apex and NCDOT staff were consulted on the scope of this analysis.

Study Intersections

The following intersections were included in this analysis:

- NC 55 at US 1 Southbound Ramps
- NC 55 at US 1 Northbound Ramps
- NC 55 at U-Turn North of Williams Street*
- NC 55 at Williams Street/Forest Light Way*
- NC 55 at U-Turn South of Forest Light Way*
- NC 55 at Jessie Drive Extension**
- NC 55 at Site Access A (Right-in/Right-out)**
- Jessie Drive Extension at Site Access B (Right-in/Right-out)**
- Jessie Drive Extension at Site Access C (Full-Movement)**
- Jessie Drive Extension at Site Access D (Right-out)**
- Jessie Drive Extension at Site Access E (Full-Movement)**

*Analyzed for future traffic conditions only as existing traffic volumes onto/off of Forest Light Way are impacted by construction traffic associated with the Veridea East Village development and the traffic patterns at the location are expected to change with the completion of the NCDOT HL-0007 project.

**Analyzed for future Build-out conditions only.

Existing Traffic Data

Weekday AM (7:00 – 9:00am) and PM (4:00 – 6:00pm) peak hour turning movement counts were collected at the existing intersections of NC 55 at the US 1 Northbound and Southbound Ramps on May 20, 2025 while Wake County Public Schools were in session. To represent existing year (2026) traffic volumes, a 3% annual growth rate was applied to the count volumes for one year.

As existing traffic volumes at the intersection of NC 55 at William Street/Forest Light Way are impacted by construction traffic associated with the Veridea East Village development, and since traffic patterns at that location are expected to change with the completion of the NCDOT HL-0007 project, that intersection was not evaluated in the existing condition.

Future Background Traffic Volumes

Future background traffic volumes at existing study intersections included ambient traffic growth (via the application of a 3% annual growth rate) along with site traffic from three area developments, which included Aquiline, Veridea East Village, and phase 1 of the North Carolina Children's Hospital (NCC) site.

For the intersection of NC 55 at Williams Street/Forest Light Way and associated U-turns to the north and south, projected traffic volumes for the 2030 study year were obtained from the *Veridea Phase 1 (East Village) – TIA Phasing Analysis* (Kimley-Horn, May 2023) and used as baseline volumes, with approved development traffic added as appropriate.

Trip Generation

As the development is broken up into three pieces without internal connections, trips were generated using data from the ITE *Trip Generation Manual* (Twelfth Edition, 2025) for each of the following three "pods": East Industrial, Northeast Retail, and Southeast Retail.

As shown below in Table ES-1, the East Industrial Pod has the potential to generate 1,080 net new trips on a typical weekday, with 144 new trips during the AM peak hour and 146 net new trips during the PM peak hour.

Table ES-1
Traffic Generation (Vehicles): East Industrial Pod

Land Use Code	Land Use	Intensity		Daily	AM Peak Hour		PM Peak Hour	
				Total	In	Out	In	Out
110	General Light Industrial	300,000	SF	1,080	124	20	33	113

As shown below in Table ES-2, the Northeast Retail Pod has the potential to generate 6,442 net new trips on a typical weekday, with 361 new trips during the AM peak hour and 474 net new trips during the PM peak hour.

Table ES-2 Traffic Generation (Vehicles): Northeast Retail Pod								
Land Use Code	**Land Use**	**Intensity**		**Daily**	**AM Peak Hour**		**PM Peak Hour**	
				Total	**In**	**Out**	**In**	**Out**
821	Shopping Plaza (40k-150k) w/ Supermarket	71,000	SF	7,006	148	99	293	304
912	Drive-In Bank	3,000	SF	298	17	13	32	31
937	Coffee/Donut Shop with Drive-Through Window	3,000	SF	1,802	131	125	59	58
945	Convenience Store/Gas Station (5.5-10k SF Market)	16	FP	3,254	186	185	169	168
Subtotal				12,360	482	422	551	562
Internal Capture				*1,208*	*57*	*57*	*41*	*41*
Pass-by Capture				*4,710*	*215*	*214*	*278*	*279*
Total New Net External Trips: Northeast Retail Pod				**6,442**	**210**	**151**	**232**	**242**

As shown below in Table ES-3, the Southeast Retail Pod has the potential to generate 3,228 net new trips on a typical weekday, with 218 new trips during the AM peak hour and 181 net new trips during the PM peak hour. Based on discussions with the Town and NCDOT, the internal capture reduction in the PM peak hour was capped at 25% of gross trips even though ITE data suggests actual internal capture reductions may be higher.

Table ES-3 Traffic Generation (Vehicles): Southeast Retail Pod								
Land Use Code	**Land Use**	**Intensity**		**Daily**	**AM Peak Hour**		**PM Peak Hour**	
				Total	**In**	**Out**	**In**	**Out**
822	Strip Retail Plaza (<40k)	35,000	SF	1,708	76	62	89	90
848	Tire Store	5,000	SF	144	9	5	8	11
930	Fast Casual Restaurant	6,000	SF	1,356	6	3	46	40
934	Fast-Food Restaurant with Drive-Through Window	5,000	SF	2,242	85	81	82	76
Subtotal				5,450	176	151	224	218
Internal Capture				*926*	*16*	*16*	*78*	*78*
Pass-by Capture				*1,296*	*39*	*38*	*54*	*51*
Total New Net External Trips: Southeast Retail Pod				**3,228**	**121**	**97**	**92**	**89**

Capacity Analyses

Capacity analyses were performed using Synchro Version 12 software. Table ES-4 summarizes the operation of the study intersections for the AM and PM peak hour traffic conditions.

Table ES-4
Intersection Levels of Service

Intersection	Existing Year (2026)		Future Year (2030)					
			Background		Build-Out: Access Scenario 1 Jessie Dr. Ext. - Full-Movement		Build-Out: Access Scenario 2 Jessie Dr. Ext. - RCI Config.	
	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
NC 55 at US 1 Southbound Ramps	D (40.9)	D (52.5)	C (34.0)	D (41.2)	D (36.0)	D (51.9)	D (36.0)	D (51.9)
NC 55 at US 1 Northbound Ramps	C (23.4)	B (19.8)	C (27.5)	C (20.6)	C (29.7)	C (28.7)	C (29.7)	C (28.7)
NC 55 at U-Turn North of Williams Street^	-	-	B (12.9)	B (16.5)	B (10.8)	C (29.3)	B (16.3)	C (22.9)
NC 55 at Williams Street/Forest Light Way^	-	-	Forest Light - B (12.7)	Forest Light - B (17.2)	Forest Light - B (13.4)	Forest Light - B (18.3)	Forest Light - B (13.9)	Forest Light - B (18.2)
	-	-	Williams - C (27.9)	Williams - C (20.4)	Williams - D (35.4)	Williams - C (22.4)	Williams - D (35.4)	Williams - C (22.4)
NC 55 at U-Turn South of Forest Light Way^	-	-	B (11.1)	B (13.5)	B (12.7)	B (14.6)	B (12.9)	B (14.6)
NC 55 at Jessie Drive Extension*	-	-	-	-	C (25.1)	F (94.6)	Jessie Dr. Ext. - C (21.6)	Jessie Dr. Ext. - C (29.0)
							North U-Turn. - C (22.2)	North U-Turn. - F (223.5)
							Comb. Delay - C (21.8)	**Comb. Delay - F (130.3)**
NC 55 at Site Access A (RI/RO)*	-	-	-	-	WB - F (309.2)	WB - F (132.2)	WB - F (309.2)	WB - F (132.2)
Jessie Drive Extension at Site Access B (RI/RO)*	-	-	-	-	NB - B (10.4)	NB - B (10.7)	NB - B (10.4)	NB - B (10.7)
	-	-	-	-	SB - A (9.8)	SB - B (11.7)	SB - A (9.8)	SB - B (11.7)
Jessie Drive Extension at Site Access C (FM)*	-	-	-	-	NB - E (45.5)	NB - F (297.6)	NB - E (45.5)	NB - F (297.6)
	-	-	-	-	SB - B (11.5)	SB - B (14.5)	SB - B (11.5)	SB - B (14.5)
	-	-	-	-	EBL - A (8.0)	EBL - A (9.0)	EBL - A (8.0)	EBL - A (9.0)
	-	-	-	-	WBL - A (7.6)	WBL - A (7.4)	WBL - A (7.6)	WBL - A (7.4)
Jessie Drive Extension at Site Access D (RO)*	-	-	-	-	SB - A (8.4)	SB - A (8.7)	SB - A (8.4)	SB - A (8.7)
Jessie Drive Extension at Site Access E (FM)*	-	-	-	-	NB - B (10.3)	NB - A (9.5)	NB - B (10.3)	NB - A (9.5)
	-	-	-	-	SB - A (9.3)	SB - A (8.6)	SB - A (9.3)	SB - A (8.6)
	-	-	-	-	EBL - A (7.4)	EBL - A (7.3)	EBL - A (7.4)	EBL - A (7.3)

^Analysis includes improvements by other area developments or publicly-funded projects

*Analysis includes improvements recommended as part of this development

For the intersection of NC 55 at Jessie Drive Extension, a cumulative delay for Scenario 2 (based on weighted delay at the RCI interseciton and north U-turn) was calculated for comparison with Scenario 1.

Improvements by Others

The following improvements are committed to be performed as part of Veridea or by publicly-funded projects in the study area and were included in in each of the future traffic conditions:

NC 55 at US 1 Southbound Ramps (*by Veridea East Village)*:

- Restripe the US 1 Southbound Off-Ramp to provide dual exclusive left-turn lanes, a shared through/left lane, and one exclusive right-turn lane
- Modify the existing traffic signal to accommodate the committed laneage

NC 55 at US 1 Northbound Ramps (*by Veridea East Village)*:

- Extend the storage of the inside northbound right-turn lane on NC 55 through future Pristine Water Drive/Atlas Drive and reconfigure as a free-flow right-turn lane onto US 1 Northbound
- Restripe the southbound approach of NC 55 to provide three southbound through lanes and a single exclusive southbound left-turn lane
- Modify the existing traffic signal to accommodate the recommended laneage

NC 55 at Williams Street/Forest Light Way (*by NCDOT Project HL-0007)*:

- Convert the existing full-movement intersection to a RCI with signalized U-turns north and south of the intersection

Recommended Improvements

Based on the capacity analyses presented herein, the following improvements are recommended to be performed as part of the Jessie Commons development:

Jessie Drive Extension:

- Construct Jessie Drive Extension as a four-lane, median-divided roadway through the site

NC 55:

- Provide an additional northbound through lane on NC 55 along the project's frontage, terminating as a right-turn lane at Site Access A

NC 55 at Site Access A:

- Construct Site Access A as a right-in/right-out site access with one ingress lane and one egress lane

Jessie Drive Extension at Site Access B:

- Construct Site Access B as a right-in/right-out access to each retail pod, with one ingress lane and one egress lane

Jessie Drive Extension at Site Access C:

- Construct Site Access C as a full-movement site access to each retail pod, with one ingress lane and two egress lanes (exclusive left-turn lane and a shared through/right lane) on each minor street approach
- Provide an exclusive eastbound left-turn lane with 100 feet of storage on Jessie Drive Extension
- Provide an exclusive westbound left-turn lane with 100 feet of storage on Jessie Drive Extension

Jessie Drive Extension at Site Access D:

- Construct Site Access D as a right-in/right-out access to the north Industrial pod , with one ingress lane and one egress lane

Jessie Drive Extension at Site Access E:

- Construct Site Access E as a full-movement site access to each side of the Industrial pod, with one ingress lane and one egress lane on each minor street approach
- Provide an exclusive eastbound left-turn lane with 50 feet of storage on Jessie Drive Extension

The following improvements are also recommended to be performed at the intersection of NC 55 at Jessie Drive Extension based on Access Scenario 1:

NC 55 at Jessie Drive Extension:

- Provide dual westbound left-turn lanes and an exclusive right-turn lane on Jessie Drive Extension, with 350 feet of storage provided for the inside left-turn lane
- Construct an exclusive northbound right-turn lane on NC 55 with 100 feet of storage and appropriate tapers
- Construct dual southbound left-turn lanes on NC 55, each with 250 feet of storage and appropriate tapers
- Install a traffic signal to accommodate the full-movement intersection configuration

The following improvements were identified at the intersection of NC 55 at Jessie Drive Extension and the associated U-turn to the north based on Access Scenario 2:

NC 55 at Jessie Drive Extension:

- Provide dual westbound right-turn lanes on Jessie Drive Extension
- Construct an exclusive northbound right-turn lane on NC 55 with 100 feet of storage and appropriate tapers
- Construct dual southbound left-turn lanes on NC 55, each with 250 feet of storage and appropriate tapers
- Install a traffic signal to accommodate the RCI configuration

NC 55 at U-Turn North of Jessie Drive Extension:

- Construct a U-turn bulb on NC 55 north of Jessie Drive Extension
- Provide dual northbound U-turn lanes on NC 55, each with 200 feet of storage
- Install a traffic signal

Conclusions

Analyses indicate that all of the study intersections will operate acceptably at project build-out except for the signalized intersection of NC 55 at Jessie Drive Extension (and the associated U-turn, as applicable) and the unsignalized intersections of NC 55 at Site Access A and Jessie Drive Extension at Site Access C.

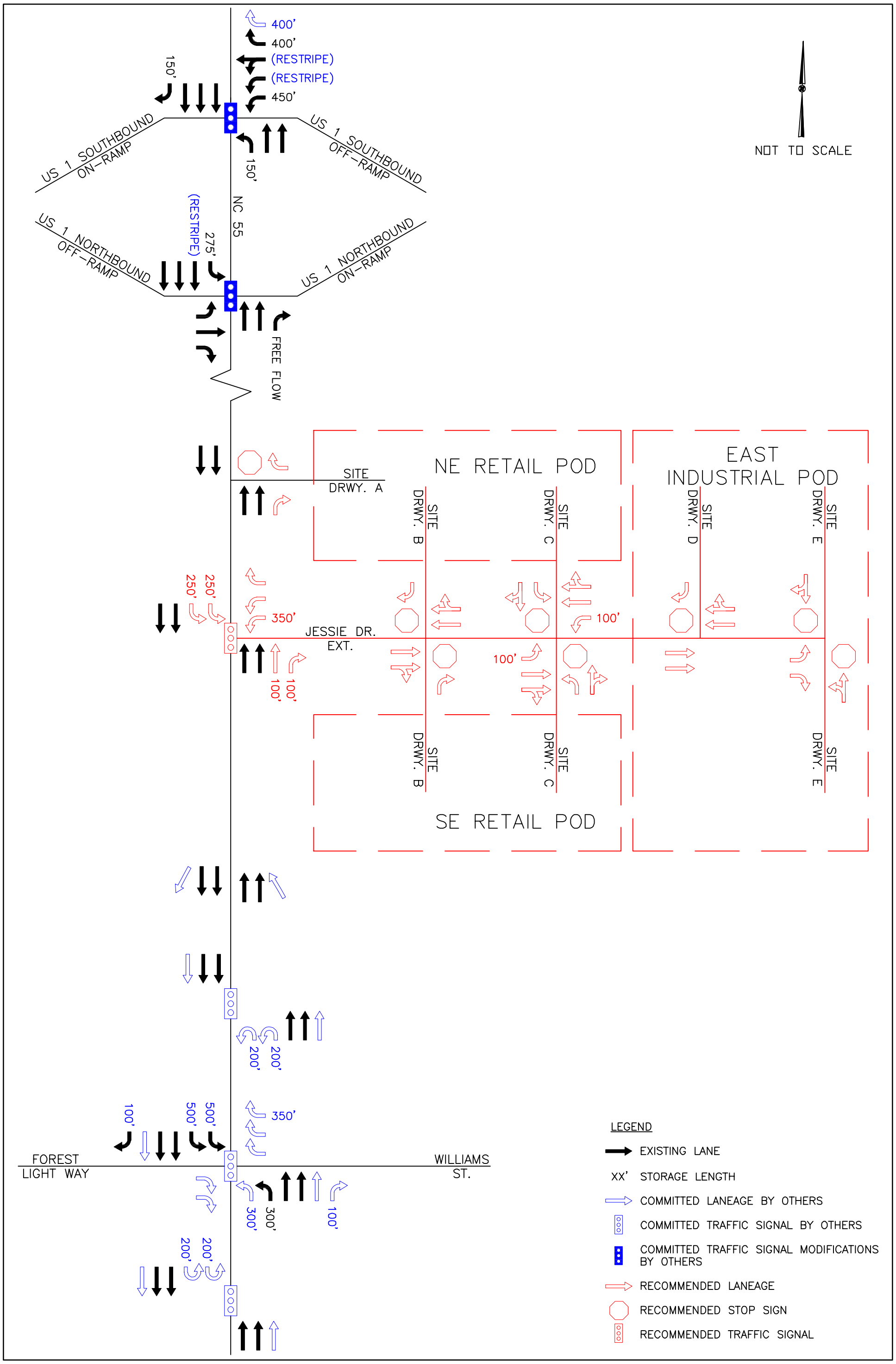
In Access Scenario 1, the signalized intersection of NC 55 at Jessie Drive Extension is expected to operate at LOS C in the AM peak hour and LOS F in the PM peak hour. Similarly, cumulative delays in each peak hour at this intersection pair in Access Scenario 2 (accounting for combined

delays at the Jessie Drive Extension intersection and the north U-turn) also result in overall LOS C in the AM peak hour and LOS F in the PM peak hour but with 50% longer (cumulative) delays than the full-movement scenario. Since the resulting dual-lane U-turn bulb north of Jessie Drive Extension can likely not be accommodated within existing right-of-way and without significant impact to existing property access and operations and due to the shorter delays, Access Scenario 1 is recommended to be implemented as part of this project.

The unsignalized intersection of NC 55 at Site Access A is expected to operate with long delays on the minor street approach (Site Access A) in both peak hours at project build-out. However, it is typical for stop sign-controlled side streets and driveways intersecting major streets to experience long delays during peak hours, while the majority of the traffic moving through the intersection on the major street experiences little or no delay. Therefore, no additional improvements are recommended to be performed at this intersection.

Synchro indicates that the unsignalized intersection of Jessie Drive Extension at Site Access C is expected to operate with long delays on the northbound minor street approach (Site Access C) in the PM peak hour at project build-out. However, it is typical for stop sign-controlled side streets and driveways intersecting major streets to experience long delays during peak hours, while the majority of the traffic moving through the intersection on the major street experiences little or no delay. SimTraffic simulations indicate that minor-street approach delays are expected to be less than 20 seconds, and no queuing issues on the minor street approaches at this intersection (or along Jessie Drive Extension from NC 55) are anticipated.

The committed and recommended roadway laneage in Access Scenario 1 is shown on **Figure ES-1**, and the committed and identified roadway laneage in Access Scenario 2 is shown on **Figure ES-2.**



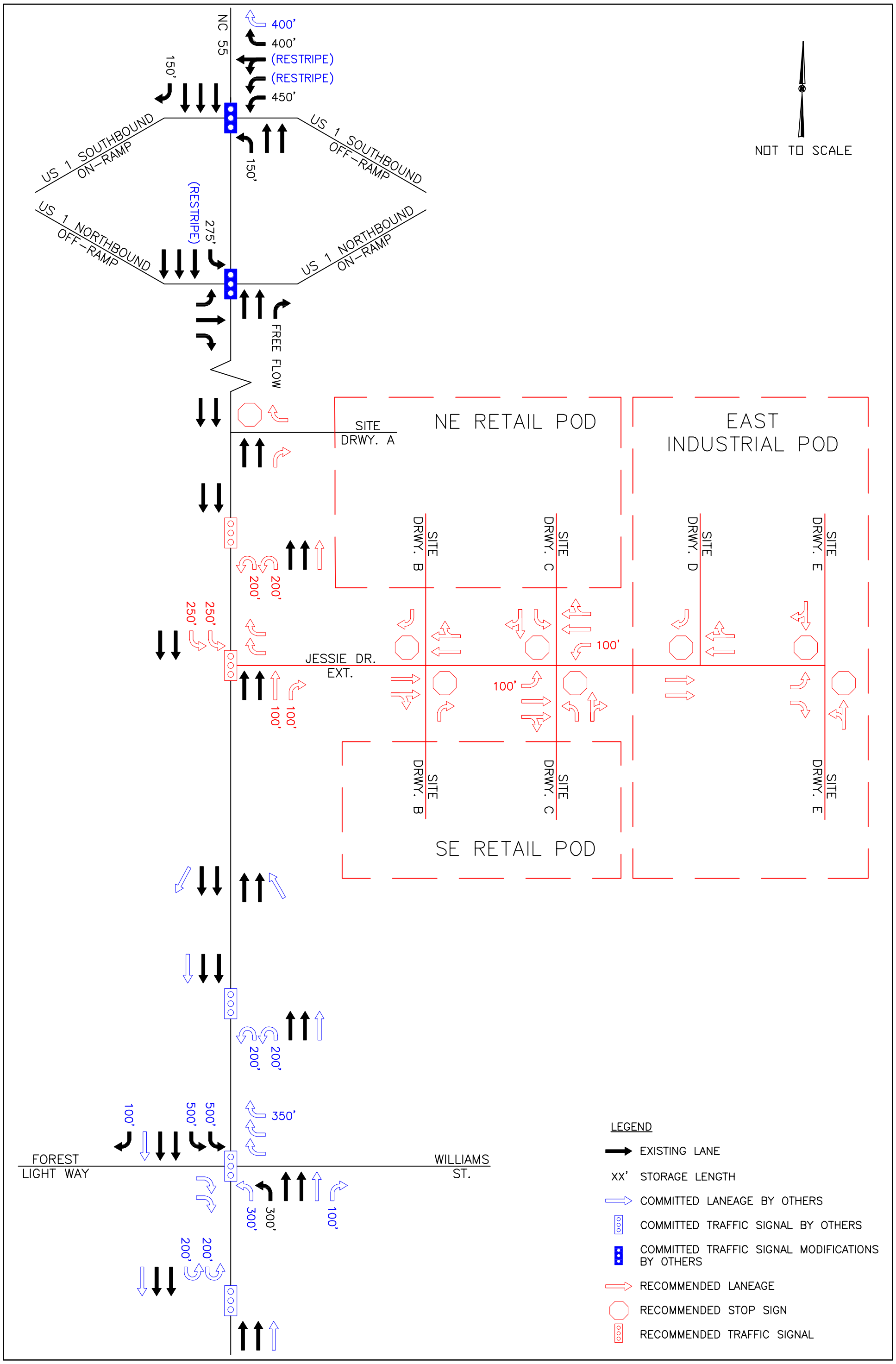
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JESSIE COMMONS
APEX, NC
TRAFFIC IMPACT ANALYSIS

COMMITTED & RECOMMENDED ROADWAY LANEAGE
– ACCESS SCENARIO #1

FIGURE
ES–1

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COMMITTED & RECOMMENDED ROADWAY LANEAGE
– ACCESS SCENARIO #2

FIGURE
ES–2

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1.0 Introduction

Kimley-Horn and Associates, Inc. has completed a Traffic Impact Analysis (TIA) for the Jessie Commons Project proposed to be located east of NC 55 and south of the existing Town of Apex Public Safety Station #4 in Apex, North Carolina. The development is envisioned to include approximately 300,000 square feet (SF) of light industrial space, 106,000 SF of retail space (including a supermarket), and six outparcels along NC 55. While specific outparcel uses have not been identified at this time, for the purposes of this analysis they were assumed to include a bank, a tire store, a fast-casual restaurant, a fast-food restaurant with drive-through window, a coffee shop with drive-through window, and a gas station/convenience market. As part of this development, Jessie Drive will be constructed from NC 55 through the site frontage but will not connect to the existing terminus at Horton Park Drive. The site is proposed to be accessed via multiple driveways on Jessie Drive Extension as well as a right-in/right-out access on NC 55 north of Jessie Drive Extension. The anticipated full build-out year for the project is 2030.

Based on coordination with the Town of Apex and the North Carolina Department of Transportation (NCDOT), the intersection of NC 55 at Jessie Drive Extension was studied in two separate access configurations:

- Access Scenario #1: Full-Movement Access
- Access Scenario #2: Reduced Conflict Intersection (RCI) (a.k.a. “Superstreet”)

This report presents trip generation, distribution, traffic analyses, and recommendations for transportation improvements required to meet anticipated traffic demands in conjunction with development. The traffic conditions studied include the existing (2026) traffic condition and the projected (2030) background and build-out conditions in the weekday AM and PM peak hours.

Town of Apex and NCDOT staff were consulted on the scope of this analysis. The TIA Assumptions Memorandum is included in the Appendix.

2.0 Inventory

2.1 *Study Area*

The study area for this development includes the following intersections:

- NC 55 at US 1 Southbound Ramps
- NC 55 at US 1 Northbound Ramps
- NC 55 at U-Turn North of Williams Street*
- NC 55 at Williams Street/Forest Light Way*
- NC 55 at U-Turn South of Forest Light Way*
- NC 55 at Jessie Drive Extension**
- NC 55 at Site Access A (Right-in/Right-out)**
- Jessie Drive Extension at Site Access B (Right-in/Right-out)**
- Jessie Drive Extension at Site Access C (Full-Movement)**
- Jessie Drive Extension at Site Access D (Right-out)**
- Jessie Drive Extension at Site Access E (Full-Movement)**

*Analyzed for future traffic conditions only as existing traffic volumes onto/off of Forest Light Way are impacted by construction traffic associated with the Veridea East Village development and the traffic patterns at the location are expected to change with the completion of the NCDOT HL-0007 project.
**Analyzed for future Build-out conditions only.

Figure 2.1 shows the site location, and **Figure 2.2** shows the conceptual site plan.

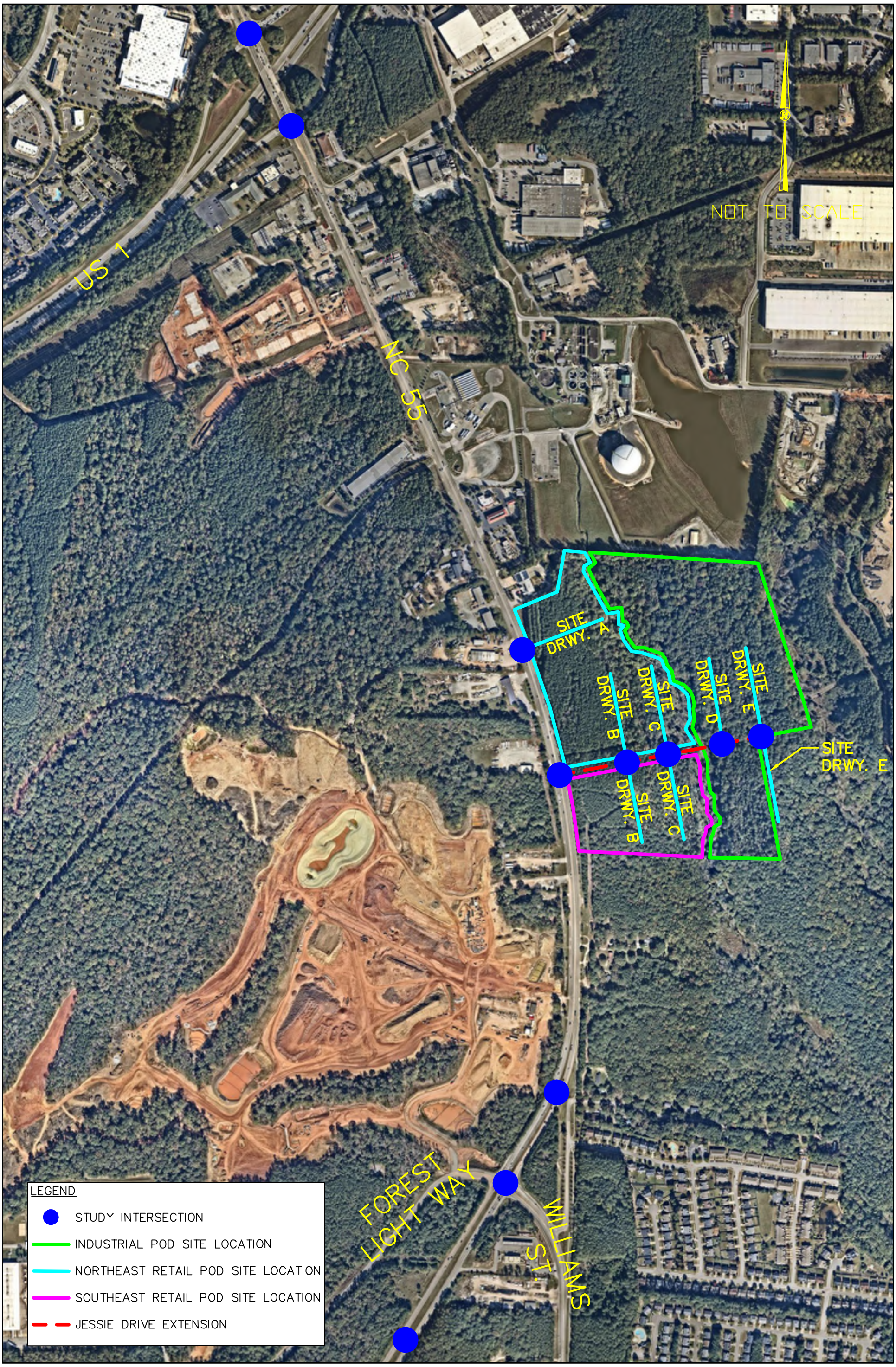
2.2 *Existing Conditions*

The Jessie Commons development is proposed to be east of NC 55 and south of the existing Town of Apex Public Safety Station #4 in Apex, North Carolina. Roadway network elements (speed limit, estimated average daily traffic volume, existing configuration, and Town of Apex Thoroughfare and Collector Street designation) are summarized in Table 2.1.

Table 2.1
Roadway Network Summary

Roadway	Speed Limit	Estimated 2026 ADT Volume	Typical Existing Configuration	Thoroughfare/Collector Street Plan Designation
US 1	70 mph	43,400 vpd west of NC 55	4-Lane Freeway	4-Lane Freeway
NC 55	55 mph	46,000 vpd south of Williams Street	4-Lane Divided south of Williams Street	6-Lane Superstreet Thoroughfare
Williams Street	45 mph	16,500 vpd north of Sunset Lake Road	3-Lane Undivided	4-Lane Thoroughfare

Figure 2.3 shows the existing study intersection laneage.



Kimley»Horn	JESSIE COMMONS APEX, NC TRAFFIC IMPACT ANALYSIS	SITE LOCATION	FIGURE 2.1

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FIGURE 2.2

CONCEPTUAL SITE PLAN

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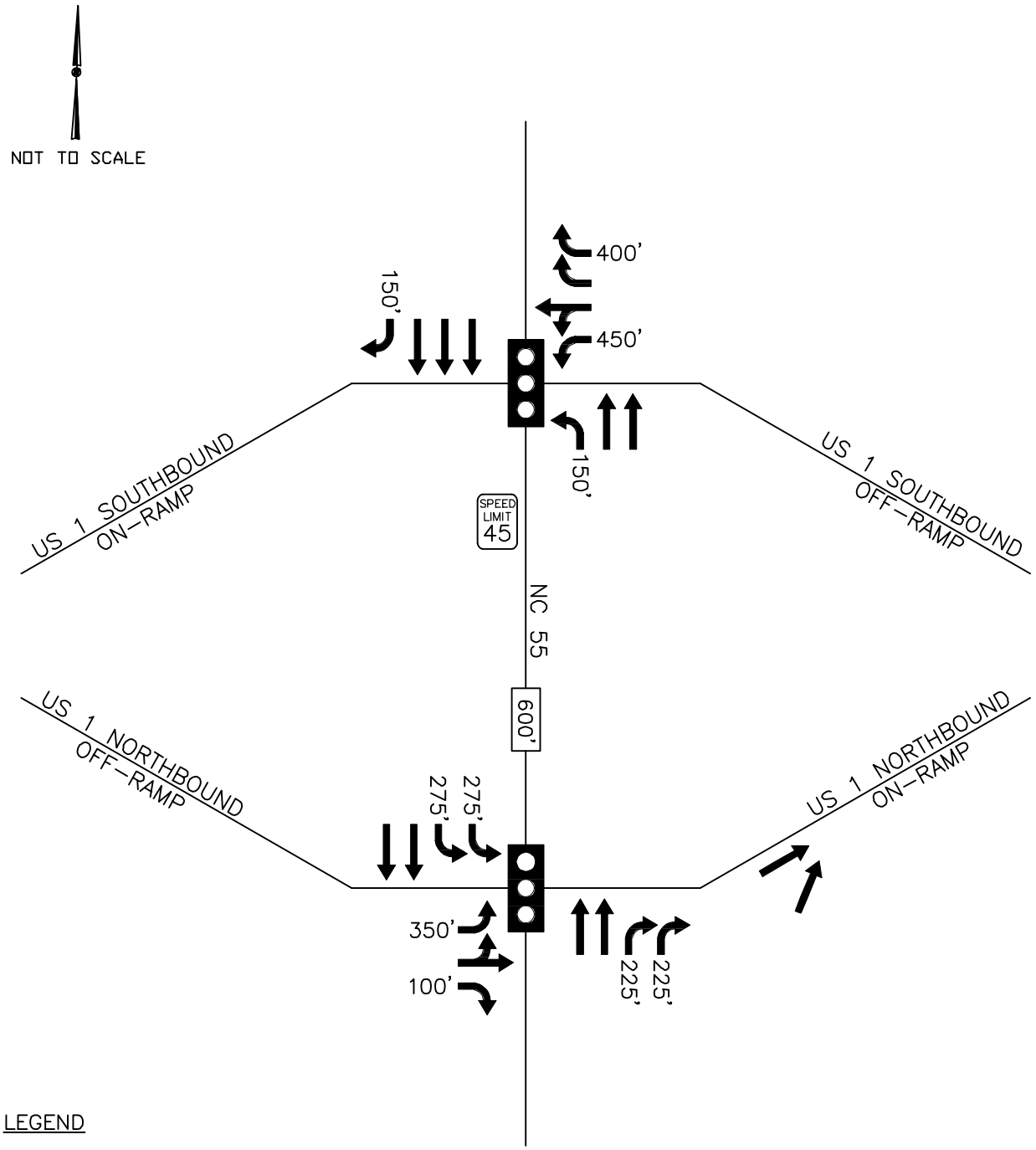
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JESSIE COMMONS
E. WILLIAMS STREET
APEX, NC
WAKE COUNTY

DATE	PROJECT NO.
08.20.25 (REV. 11/24/2025)	240202B
	SHEET NO. SP-3

P:\2024 Projects\240202 - E Williams Street Mixed Use - DR Horton\240202B - Strategic Real Estate Partners (Pardon)\Sketch Plan\Sheet\240202B_SP-3.dwg



Kimley»Horn	JESSIE COMMONS APEX, NC TRAFFIC IMPACT ANALYSIS	EXISTING ROADWAY LANEAGE	FIGURE 2.3

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3.0 Traffic Generation

As the development is broken up into three pieces without internal connections, trips were generated using data from the ITE *Trip Generation Manual* (Twelfth Edition, 2025) for each of the following three "pods": East Industrial, Northeast Retail, and Southeast Retail.

As shown below in Table 3.1, the East Industrial Pod has the potential to generate 1,080 net new trips on a typical weekday, with 144 new trips during the AM peak hour and 146 net new trips during the PM peak hour.

Table 3.1
Traffic Generation (Vehicles): East Industrial Pod

Land Use Code	Land Use	Intensity		Daily	AM Peak Hour		PM Peak Hour	
				Total	In	Out	In	Out
110	General Light Industrial	300,000	SF	1,080	124	20	33	113

As shown below in Table 3.2, the Northeast Retail Pod has the potential to generate 6,442 net new trips on a typical weekday, with 361 new trips during the AM peak hour and 474 net new trips during the PM peak hour.

Table 3.2
Traffic Generation (Vehicles): Northeast Retail Pod

Land Use Code	Land Use	Intensity		Daily	AM Peak Hour		PM Peak Hour	
				Total	In	Out	In	Out
821	Shopping Plaza (40k-150k) w/ Supermarket	71,000	SF	7,006	148	99	293	304
912	Drive-In Bank	3,000	SF	298	17	13	32	31
937	Coffee/Donut Shop with Drive-Through Window	3,000	SF	1,802	131	125	59	58
945	Convenience Store/Gas Station (5.5-10k SF Market)	16	FP	3,254	186	185	169	168
Subtotal				12,360	482	422	551	562
Internal Capture				*1,208*	*57*	*57*	*41*	*41*
Pass-by Capture				*4,710*	*215*	*214*	*278*	*279*
Total New Net External Trips: Northeast Retail Pod				**6,442**	**210**	**151**	**232**	**242**

As shown below in Table 3.3, the Southeast Retail Pod has the potential to generate 3,228 net new trips on a typical weekday, with 218 new trips during the AM peak hour and 181 net new trips during the PM peak hour. Based on discussions with the Town and NCDOT, the internal capture reduction in the PM peak hour was capped at 25% of gross trips even though ITE data suggests actual internal capture reductions may be higher.

Table 3.3 Traffic Generation (Vehicles): Southeast Retail Pod								
Land Use Code	**Land Use**	**Intensity**		**Daily**	**AM Peak Hour**		**PM Peak Hour**	
				Total	**In**	**Out**	**In**	**Out**
822	Strip Retail Plaza (<40k)	35,000	SF	1,708	76	62	89	90
848	Tire Store	5,000	SF	144	9	5	8	11
930	Fast Casual Restaurant	6,000	SF	1,356	6	3	46	40
934	Fast-Food Restaurant with Drive-Through Window	5,000	SF	2,242	85	81	82	76
Subtotal				5,450	176	151	224	218
Internal Capture				*926*	*16*	*16*	*78*	*78*
Pass-by Capture				*1,296*	*39*	*38*	*54*	*51*
Total New Net External Trips: Southeast Retail Pod				**3,228**	**121**	**97**	**92**	**89**

Detailed trip generation calculations are included in the Appendix of this report.

4.0 Site Traffic Distribution

The projected site-generated trips were assigned to the surrounding roadway network based on a review of surrounding land uses and discussions with the Town and NCDOT. Based on the surrounding roadway network and access configurations surrounding the site, separate distributions were developed for the industrial and retail trips.

The following overall distribution was used for new site trips for the East Industrial Pod as shown on **Figure 4.1**:

- 35% to/from the south on NC 55
- 25% to/from the east on US 1
- 15% to/from the west on US 1
- 10% to/from the north on NC 55
- 10% to/from the southeast on Williams Street
- 5% to/from the west on Forest Light Way

The following overall distribution was used for net new external trips for the Northeast Retail Pod as shown on **Figure 4.2**:

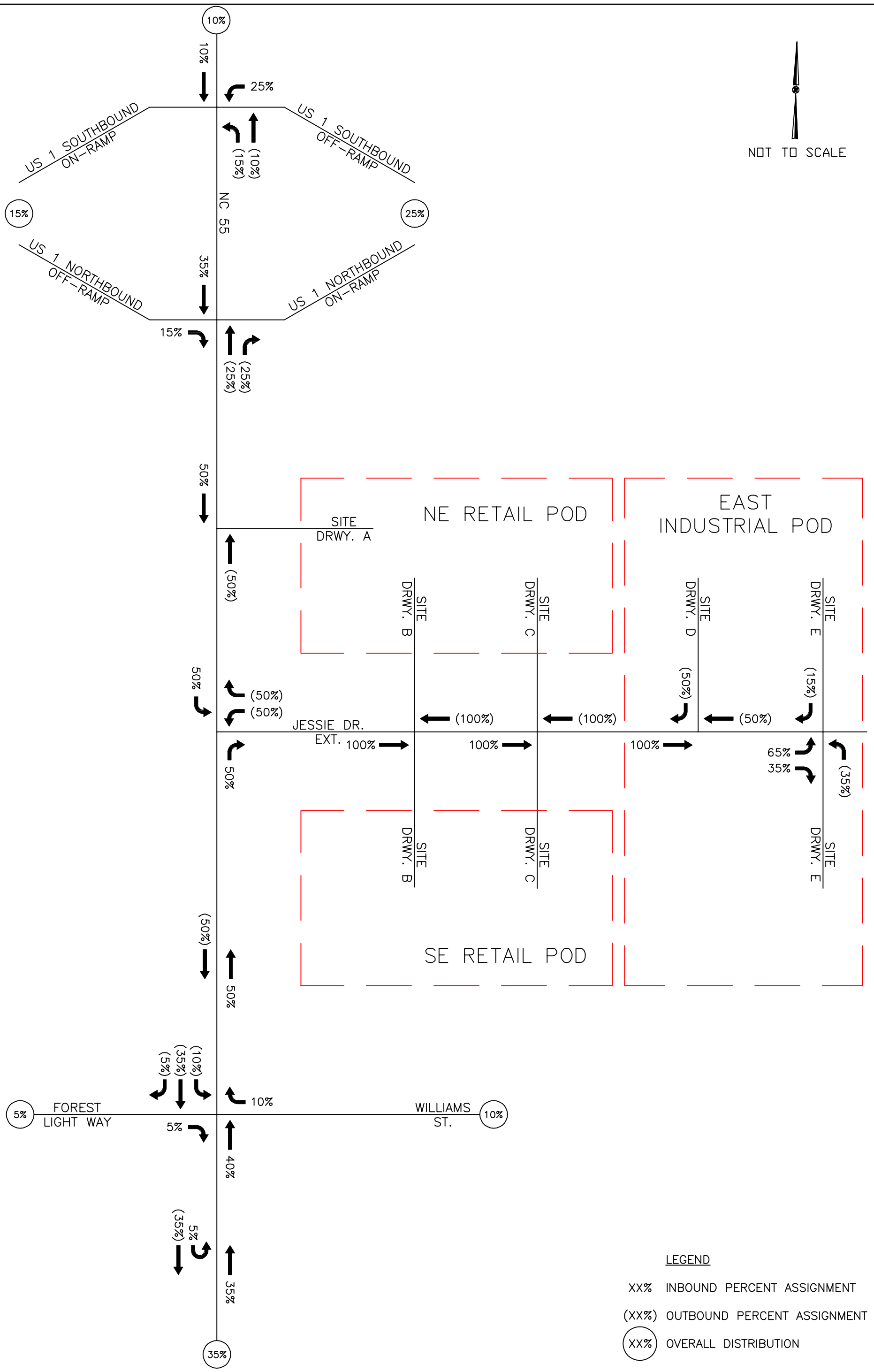
- 25% to/from the south on NC 55
- 20% to/from the southeast on Williams Street
- 15% to/from the north on NC 55
- 12% to/from the west on Forest Light Way
- 10% to/from development between the site and the US 1 interchange
- 5% to/from the east on US 1
- 5% to/from the west on US 1
- 5% to/from the Southeast Retail Pod
- 3% to/from East Industrial Pod

Figures 4.3 and 4.4 depict the retail pass-by percent assignment for the peak hours.

The following overall distribution was used for net new external trips for the Southeast Retail Pod as shown on **Figure 4.5**:

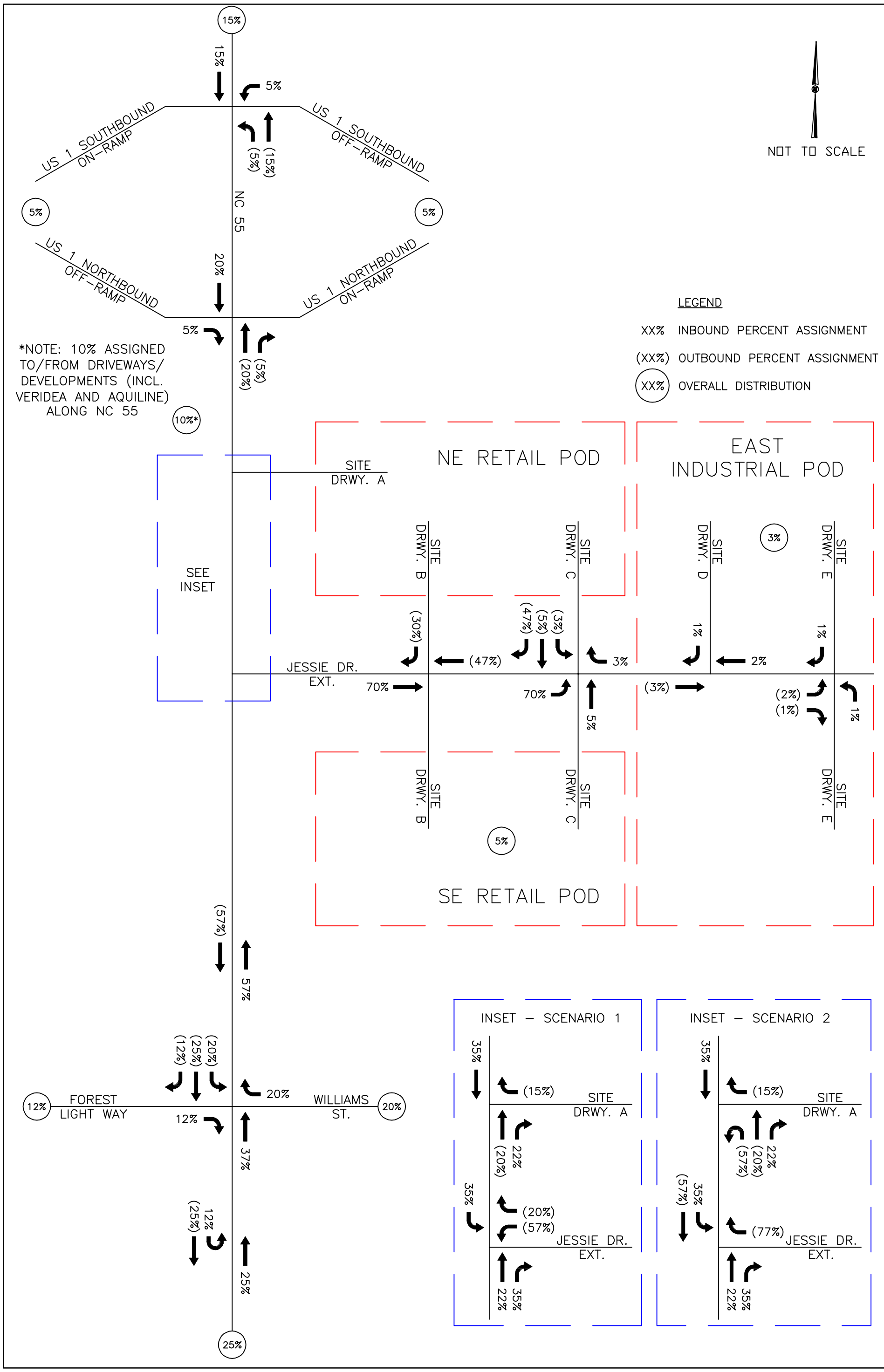
- 25% to/from the south on NC 55
- 20% to/from the southeast on Williams Street
- 15% to/from the north on NC 55
- 12% to/from the west on Forest Light Way
- 10% to/from development between the site and the US 1 interchange
- 5% to/from the east on US 1
- 5% to/from the west on US 1
- 5% to/from the Northeast Retail Pod
- 3% to/from East Industrial Pod

Figures 4.6 and 4.7 depict the retail pass-by percent assignment for the peak hours, respectively.



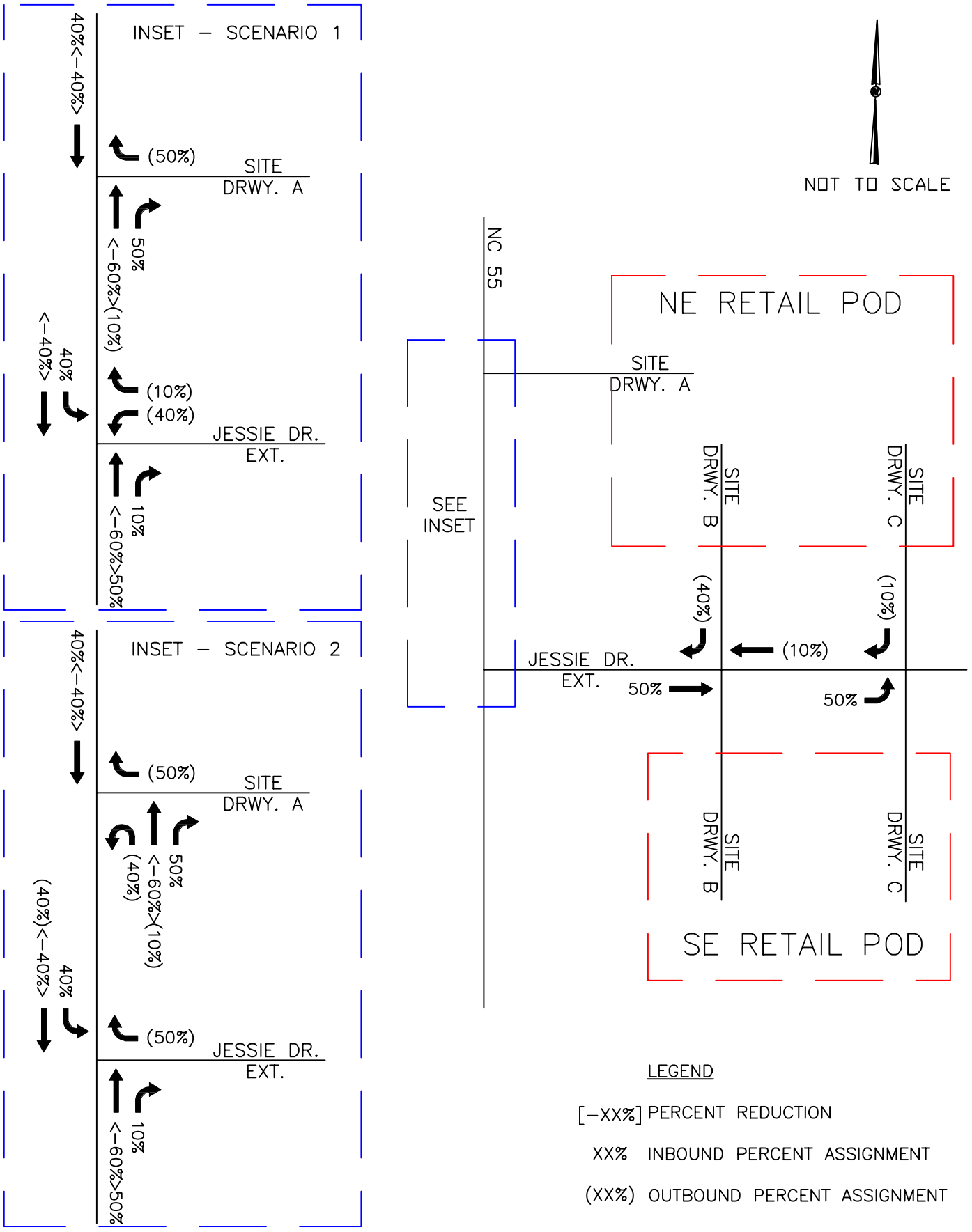
Kimley»Horn	JESSIE COMMONS APEX, NC TRAFFIC IMPACT ANALYSIS	SITE DISTRIBUTION AND PERCENT ASSIGNMENT – EAST INDUSTRIAL POD	FIGURE 4.1

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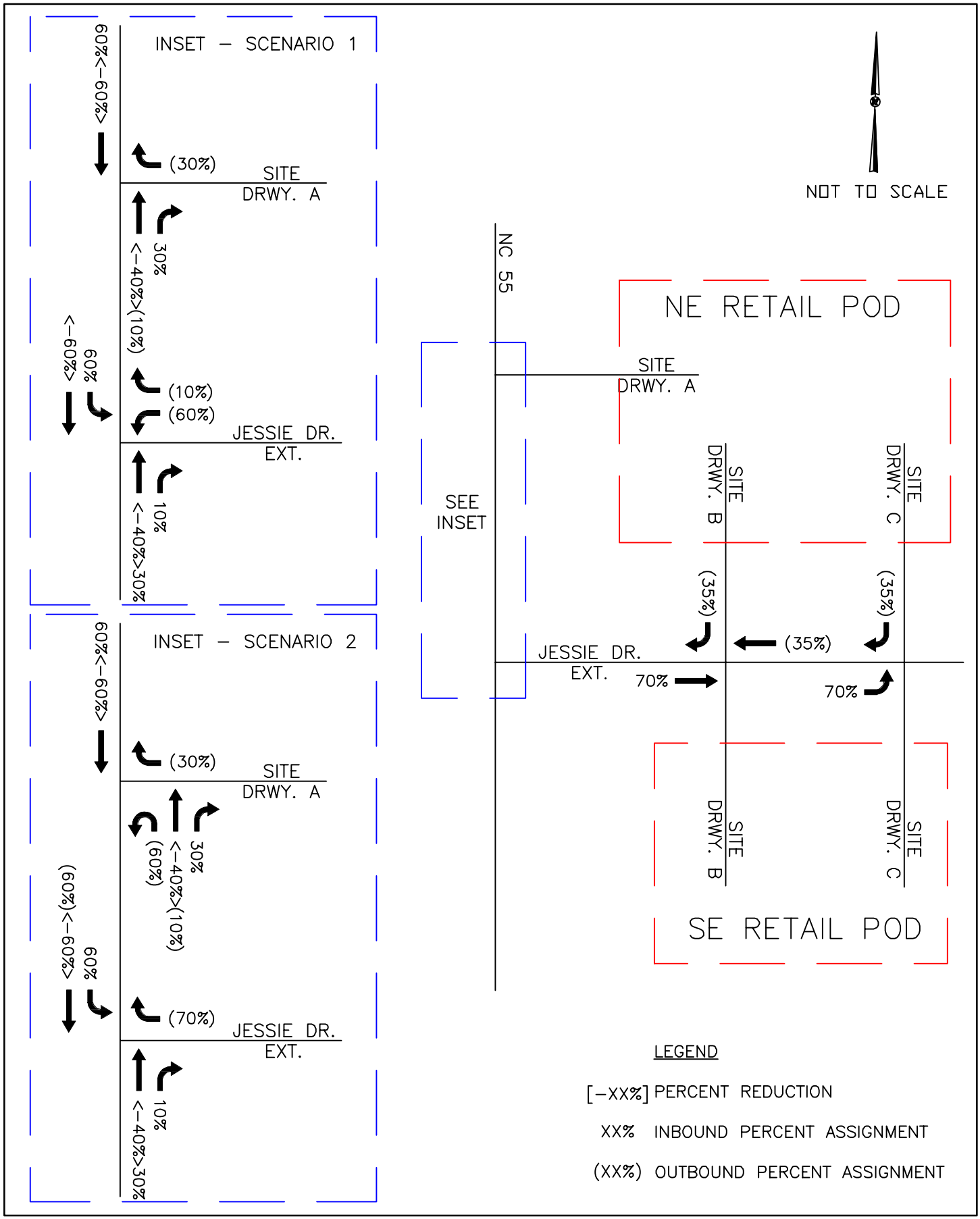
Kimley»Horn	JESSIE COMMONS APEX, NC TRAFFIC IMPACT ANALYSIS	SITE DISTRIBUTION AND PERCENT ASSIGNMENT – NORTHEAST RETAIL POD	FIGURE 4.2

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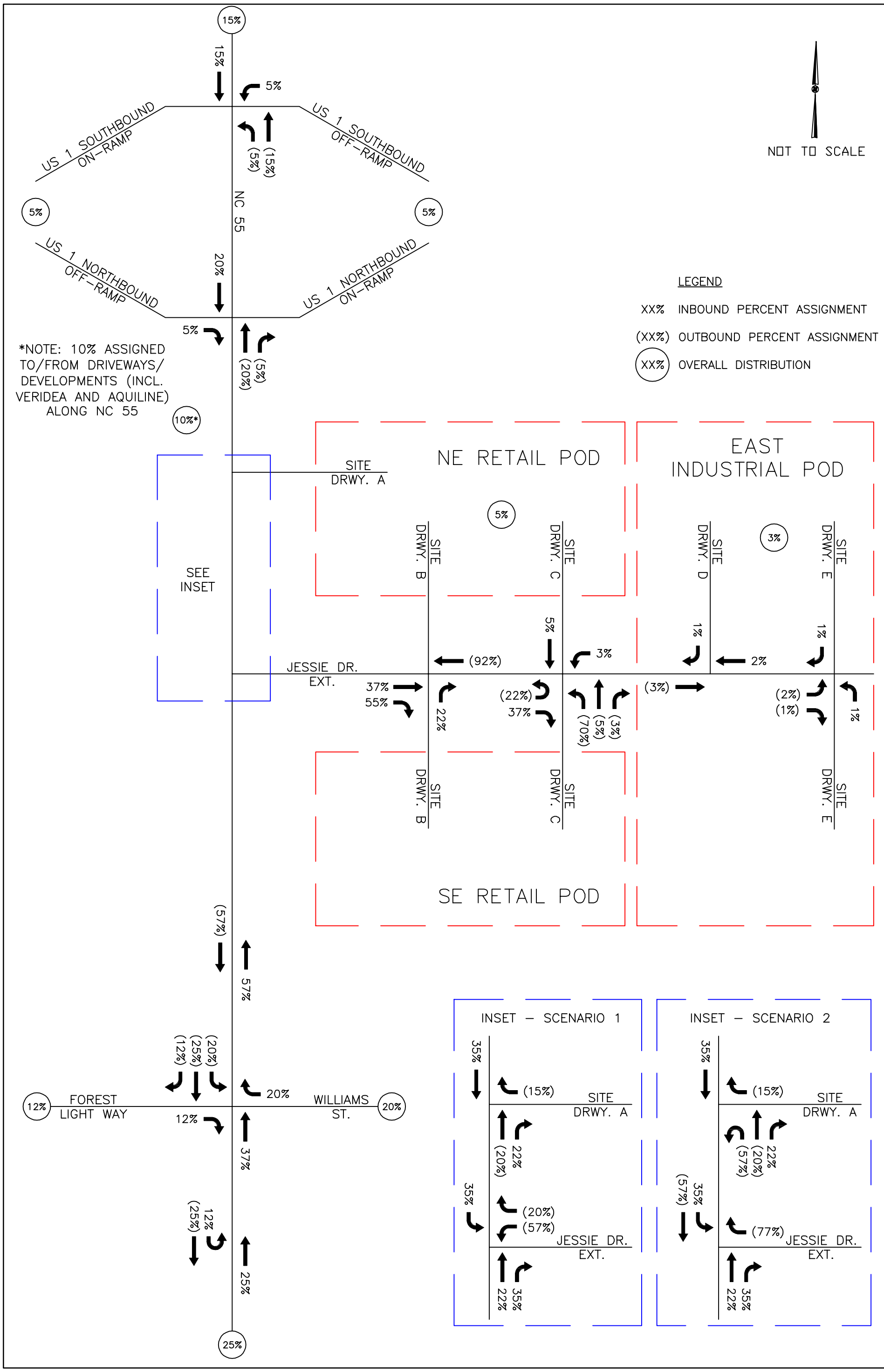
Kimley»Horn	JESSIE COMMONS APEX, NC TRAFFIC IMPACT ANALYSIS	AM PASS–BY ASSIGNMENT: NORTHEAST RETAIL POD	FIGURE 4.3

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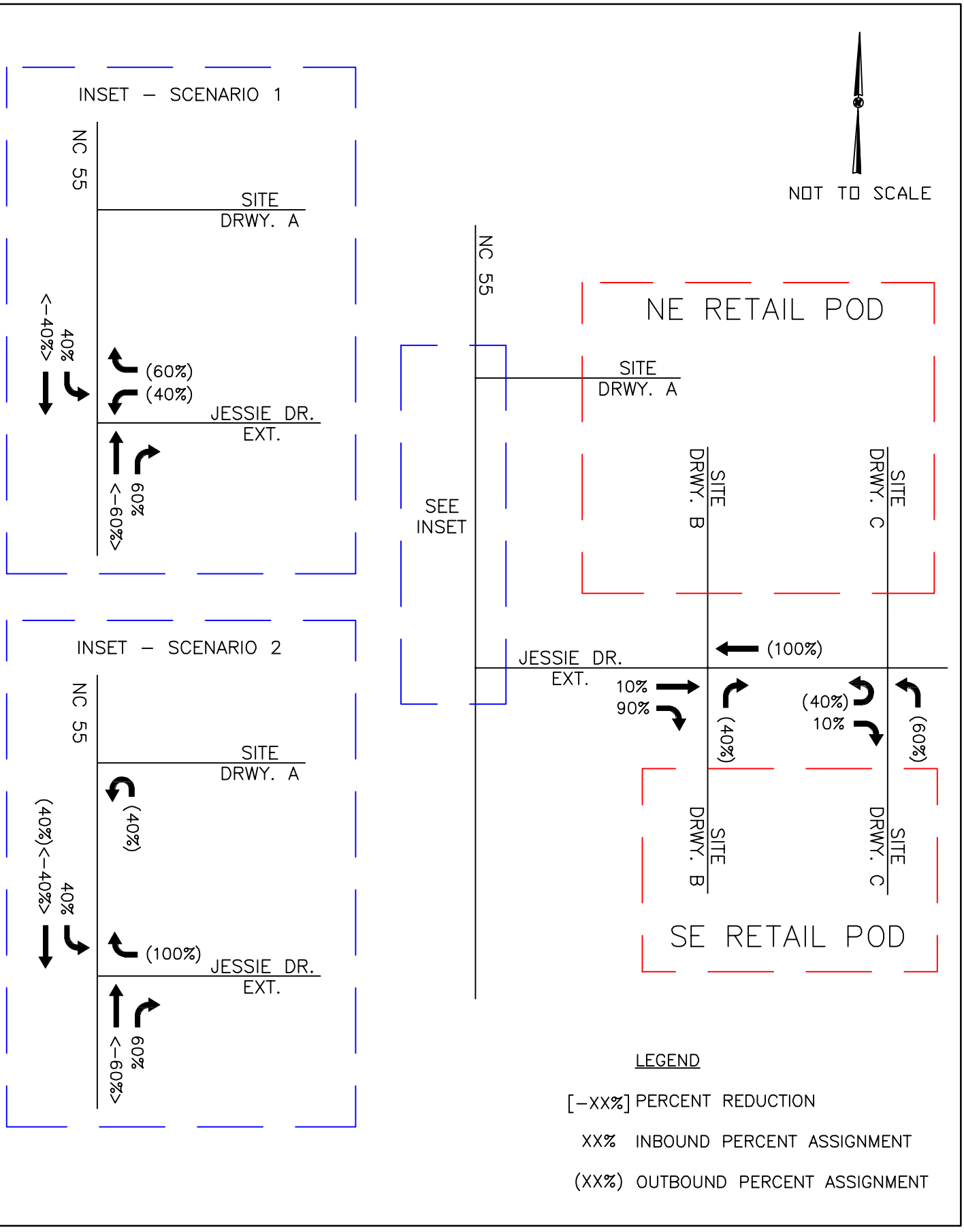
Kimley»Horn	JESSIE COMMONS APEX, NC TRAFFIC IMPACT ANALYSIS	PM PASS–BY ASSIGNMENT: NORTHEAST RETAIL POD	FIGURE 4.4

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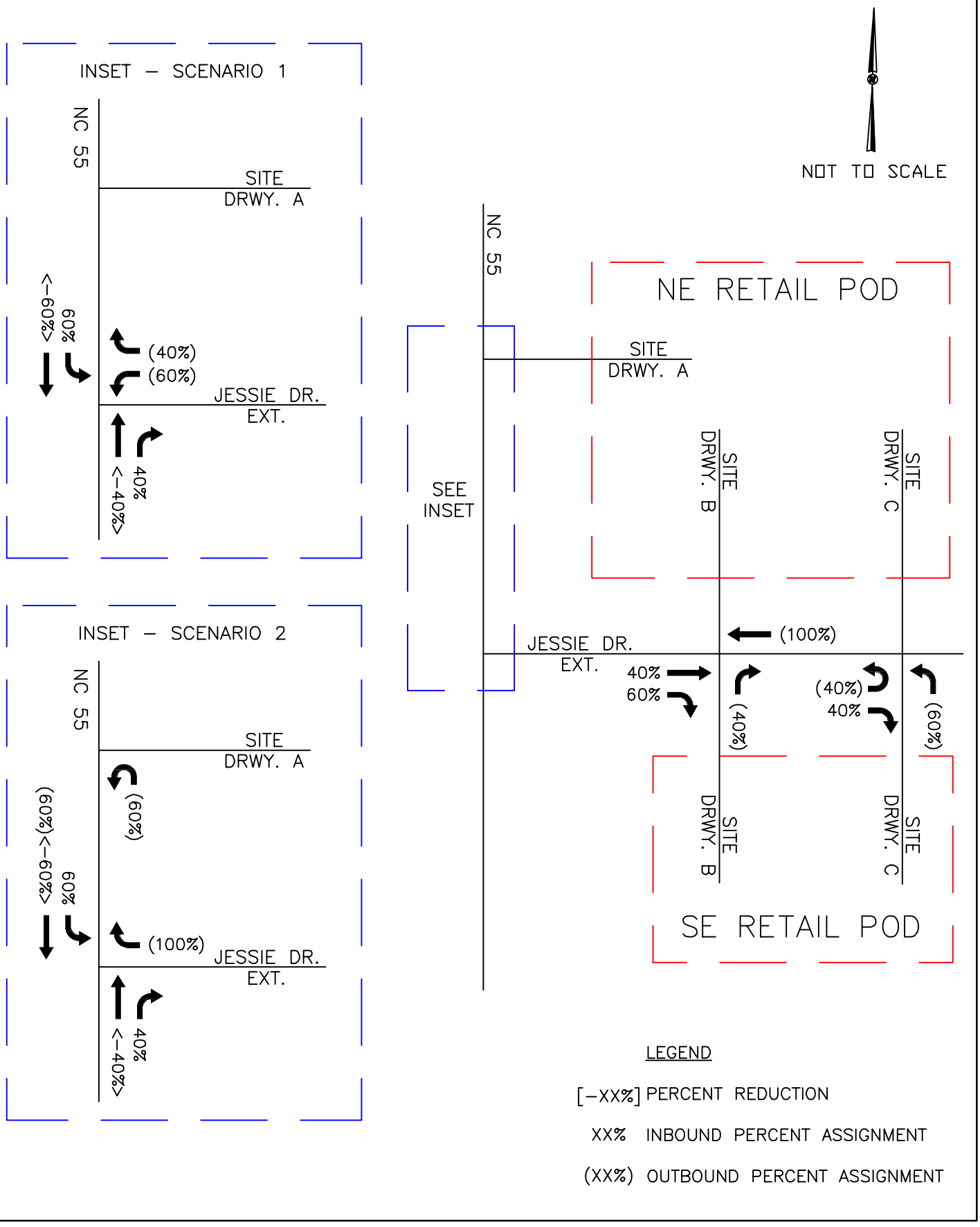
Kimley»Horn	JESSIE COMMONS APEX, NC TRAFFIC IMPACT ANALYSIS	SITE DISTRIBUTION AND PERCENT ASSIGNMENT – SOUTHEAST RETAIL POD	FIGURE 4.5

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Kimley»Horn	JESSIE COMMONS APEX, NC TRAFFIC IMPACT ANALYSIS	AM PASS–BY ASSIGNMENT: SOUTHEAST RETAIL POD	FIGURE 4.6

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Kimley»Horn	JESSIE COMMONS APEX, NC TRAFFIC IMPACT ANALYSIS	PM PASS–BY ASSIGNMENT: SOUTHEAST RETAIL POD	FIGURE 4.7

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5.0 Projected Traffic Volumes

5.1 *Existing Traffic*

Weekday AM (7:00 – 9:00am) and PM (4:00 – 6:00pm) peak hour turning movement counts were collected at the existing intersections of NC 55 at the US 1 Northbound and Southbound Ramps on May 20, 2025 while Wake County Public Schools were in session. To represent existing year (2026) traffic volumes, a 3% annual growth rate was applied to the count volumes for one year.

As existing traffic volumes at the intersection of NC 55 at William Street/Forest Light Way are impacted by construction traffic associated with the Veridea East Village development, and since traffic patterns at that location are expected to change with the completion of the NCDOT HL-0007 project, that intersection was not evaluated in the existing condition.

The existing AM and PM peak hour traffic volumes are shown on **Figure 5.1**, and the traffic count data is included in the Appendix.

5.2 *Projected (2030) Background Traffic Volumes*

Historic Growth Traffic
Consistent with typical Town requirements, a 3% annual growth rate was applied to the study year 2030.

NCDOT Project HL-0007 Forecast Volumes
For the intersection of NC 55 at Williams Street/Forest Light Way and associated U-turns to the north and south, projected traffic volumes for the 2030 study year were obtained from the *Veridea Phase 1 (East Village) – TIA Phasing Analysis* (Kimley-Horn, May 2023) and used as baseline volumes, with approved development traffic added as appropriate.

Approved Development Traffic
Approved development traffic is generated by approved, but not yet fully-constructed, projects in the vicinity of the proposed project. Based on discussions with the Town and NCDOT, traffic from three area developments were included as summarized in Table 5.1.

Table 5.1 Area Approved Development Summary			
Project Name & Location	**Land Uses**	**2030 % Occ.**	**Volume Source Data**
Aquiline: West of NC 55 at Pristine Water Drive	280 mid-rise apts., 50k SF movie theater, 50k SF fitness club, 35k SF supermarket, 15k SF pharmacy	100%	*Aquiline TIA* (Kimley-Horn, 3/2020)
Veridea East Village: Along NC 55 north of NC 55 Business/Technology Drive	320 single-family, 770 low-rise, 1,500 mid-rise, ~166k SF retail, 18k SF office, 2,400-tudent community college	100%	*Veridea Phase 1 – Updated Traffic Memo* (Kimley-Horn, 9/2023)
NCC Phase 1: Northwest of NC 540 at Veridea Parkway	504-bed hospital, 75-bed behavioral health, 210k SF POB, 350k SF MOB, 150-room Ronald McDonald House	50%	*NCC Phase 1 – Updated TIA* (Kimley-Horn, 12/2025)

Total Projected (2030) Background Traffic Volumes

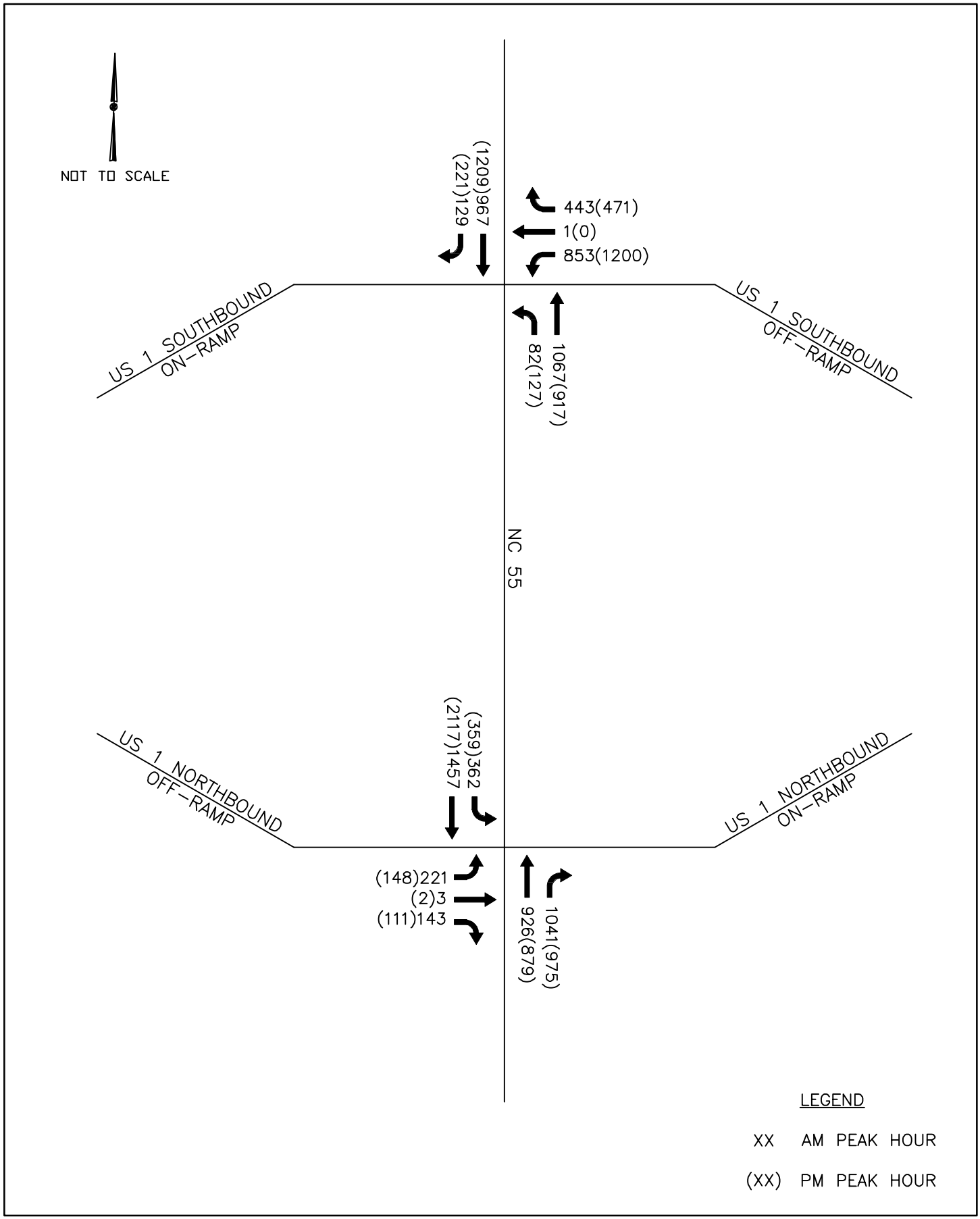
Projected peak hour background traffic volumes, which include existing, historic growth, approved development traffic, and forecast traffic (as applicable) for the study year 2030 are shown on **Figures 5.2 and 5.3** for the AM and PM peak hours, respectively**.**

5.3 *Site Traffic*

Project site traffic was generated and assigned to the adjacent roadway network according to the distributions discussed previously in *Section 4.0*. AM and PM peak hour site traffic volumes are shown on **Figures 5.2 and 5.3**, respectively, for Access Scenario 1. The site traffic volumes for the AM and PM peak hours are shown on **Figures 5.4 and 5.5**, respectively, for Access Scenario 2.

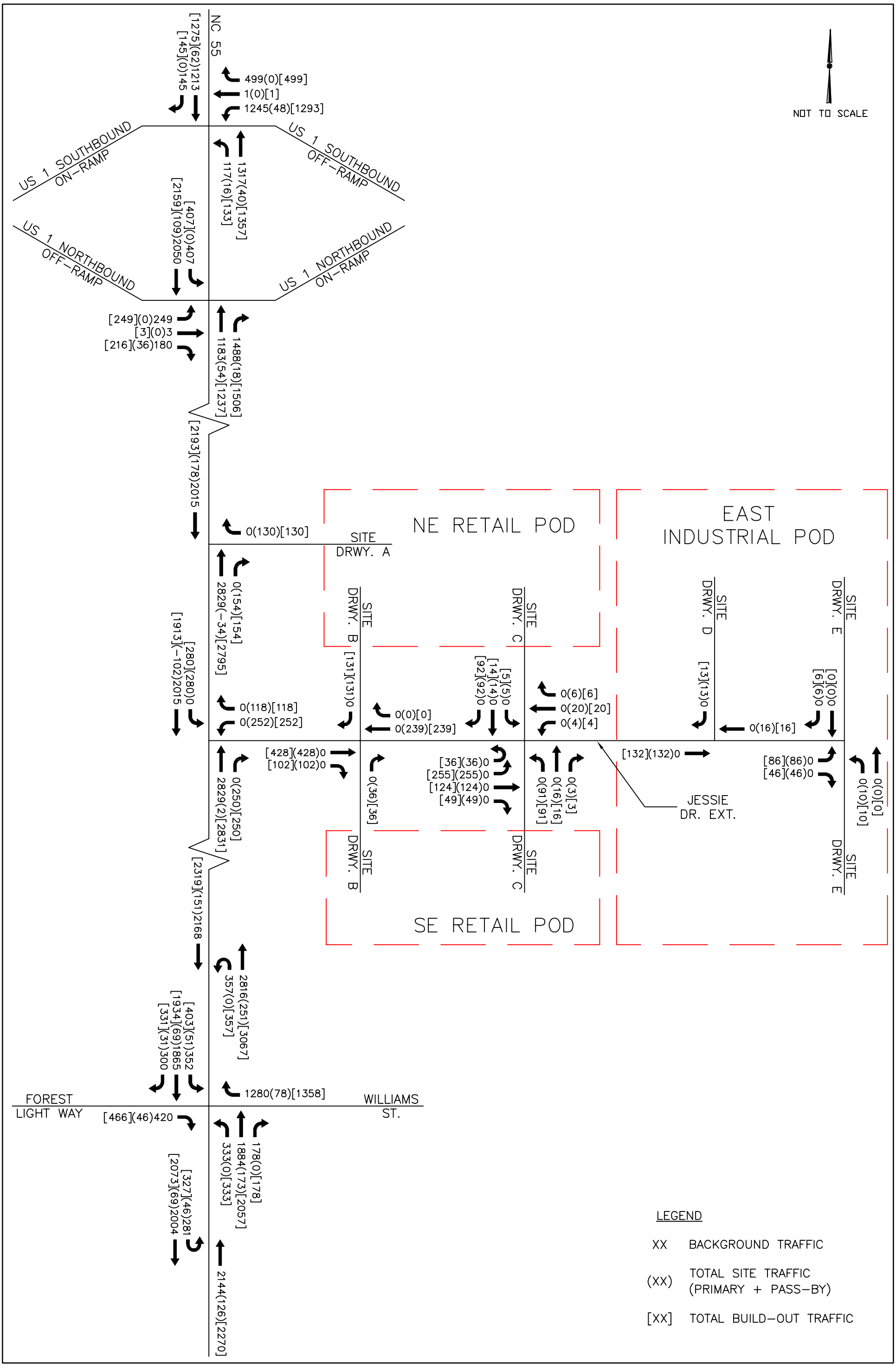
5.4 *Build-Out Traffic*

Projected build-out traffic volumes include background traffic volumes and site traffic volumes. Traffic volume calculations are detailed in intersection spreadsheets in the Appendix of this report. The projected (2030) AM and PM peak hour build-out volumes are shown on **Figures 5.2 and 5.3**, respectively, for Access Scenario 1. The projected (2030) peak hour build-out volumes for the AM and PM peak hours are shown on **Figures 5.4 and 5.5**, respectively, for Access Scenario 2.



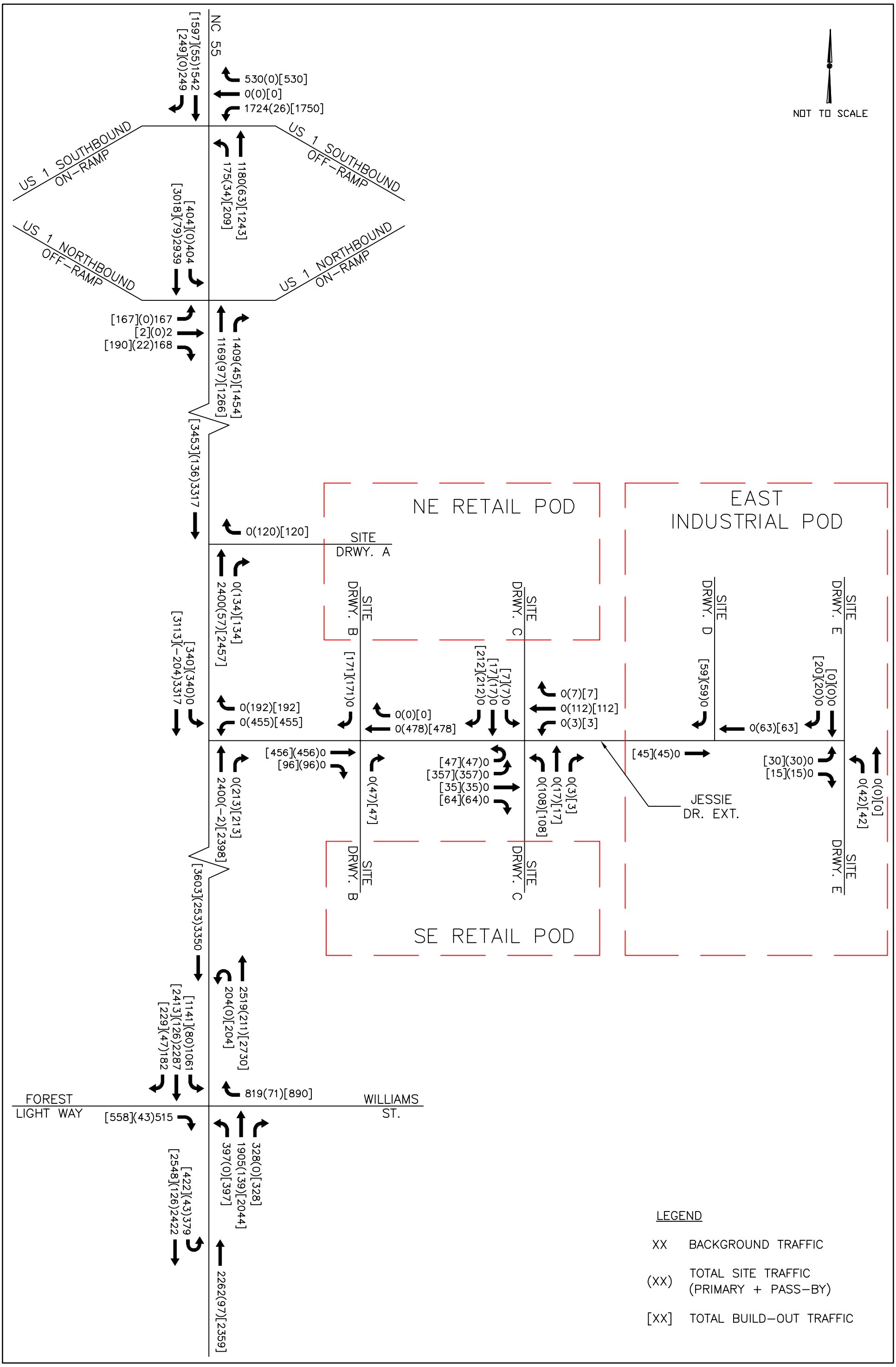
Kimley»Horn	JESSIE COMMONS APEX, NC TRAFFIC IMPACT ANALYSIS	EXISTING (2026) AM AND PM PEAK HOUR TRAFFIC VOLUMES	FIGURE 5.1

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY KIMLEY-HORN AND ASSOCIATES, INC. SHALL BE WITHOUT LIABILITY TO KIMLEY-HORN AND ASSOCIATES, INC.



Kimley»Horn	JESSIE COMMONS APEX, NC TRAFFIC IMPACT ANALYSIS	PROJECTED (2030) BUILD-OUT AM PEAK HOUR TRAFFIC VOLUMES: SCENARIO 1	FIGURE 5.2

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY KIMLEY-HORN AND ASSOCIATES, INC. SHALL BE WITHOUT LIABILITY TO KIMLEY-HORN AND ASSOCIATES, INC.

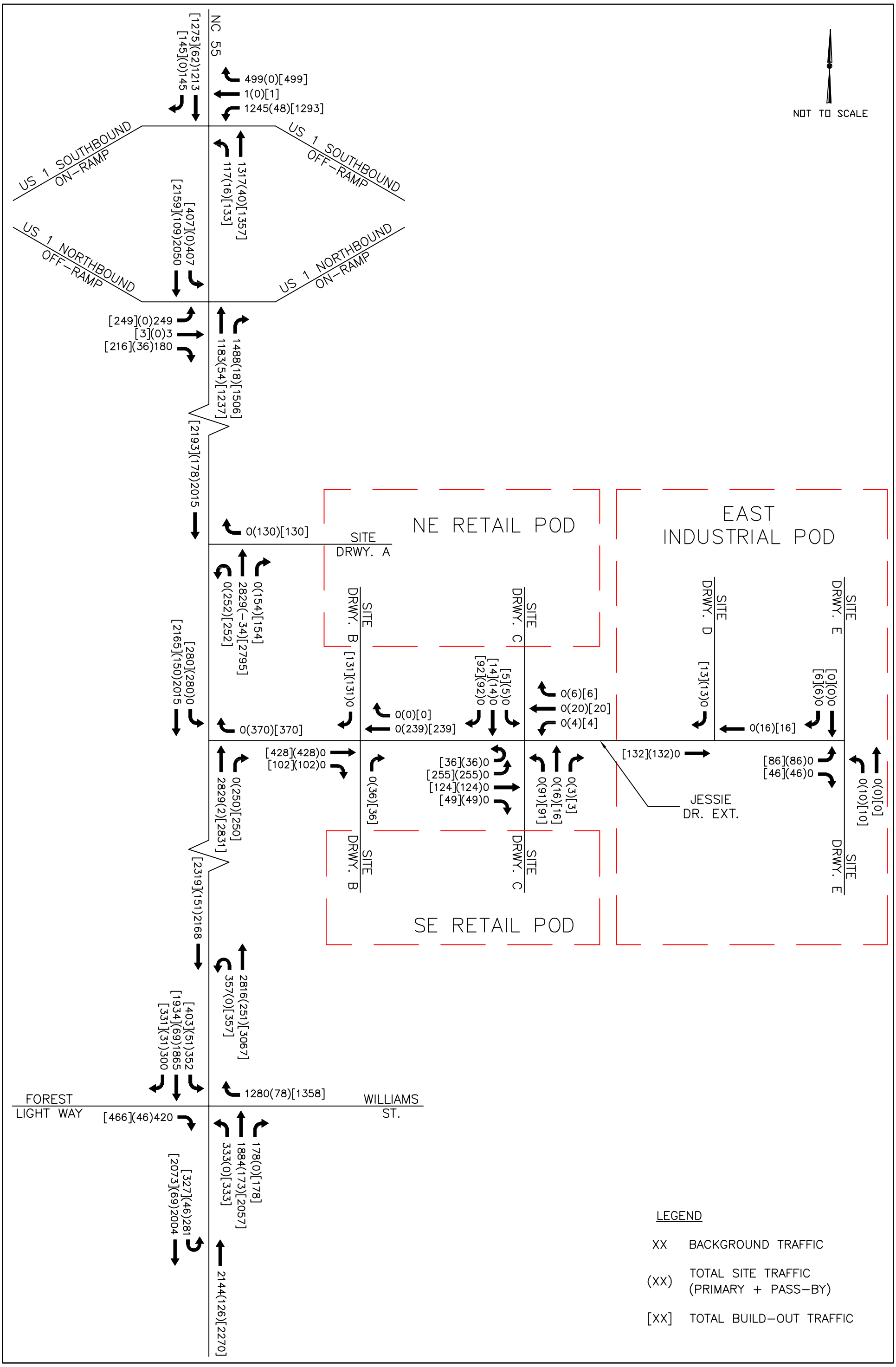


JESSIE COMMONS
APEX, NC
TRAFFIC IMPACT ANALYSIS

PROJECTED (2030) BUILD-OUT PM PEAK HOUR
TRAFFIC VOLUMES: SCENARIO 1

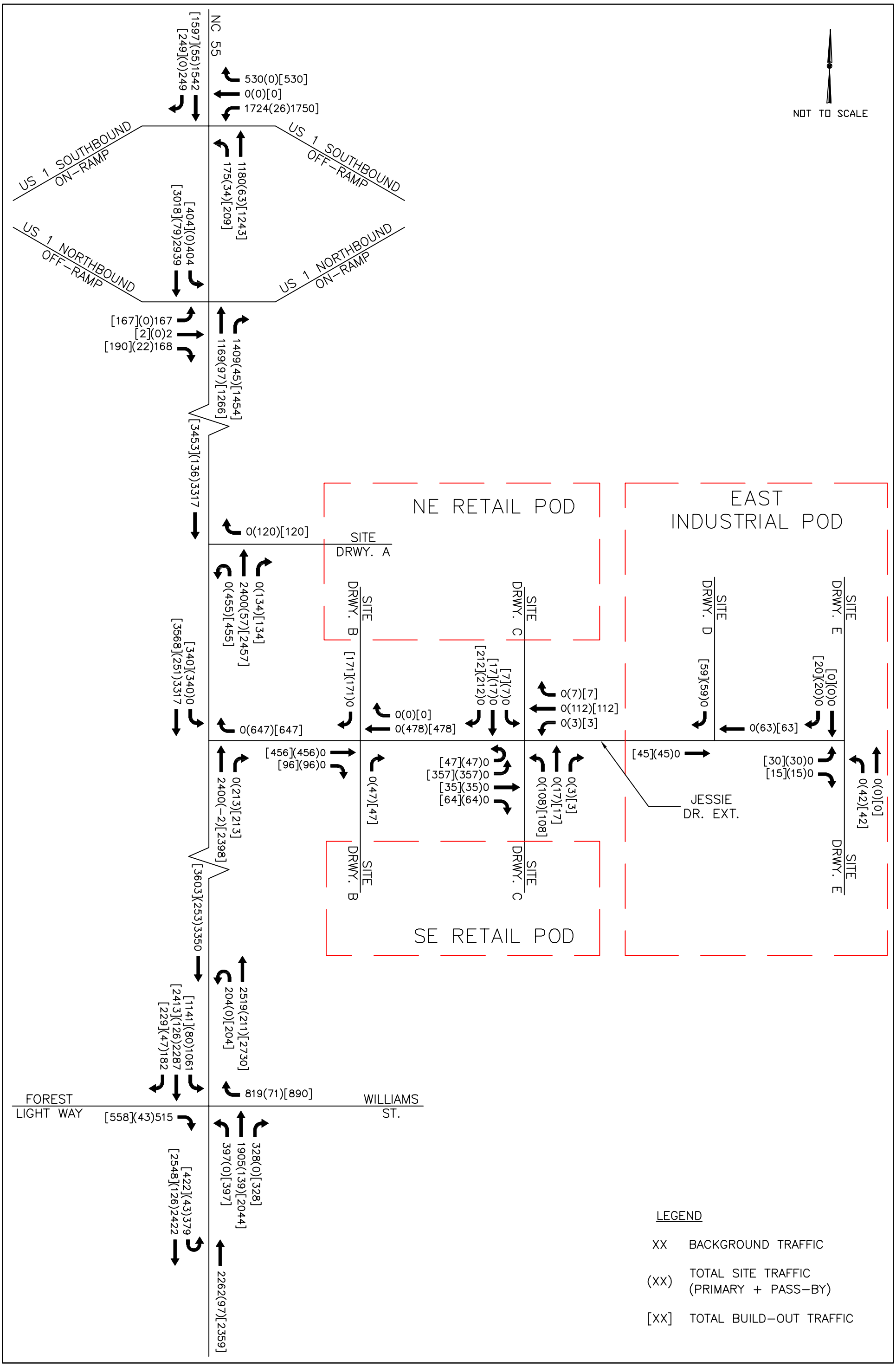
FIGURE
5.3

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY KIMLEY-HORN AND ASSOCIATES, INC. SHALL BE WITHOUT LIABILITY TO KIMLEY-HORN AND ASSOCIATES, INC.



Kimley»Horn	JESSIE COMMONS APEX, NC TRAFFIC IMPACT ANALYSIS	PROJECTED (2030) BUILD-OUT AM PEAK HOUR TRAFFIC VOLUMES: SCENARIO 2	FIGURE 5.4

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY KIMLEY-HORN AND ASSOCIATES, INC. SHALL BE WITHOUT LIABILITY TO KIMLEY-HORN AND ASSOCIATES, INC.



Kimley»Horn	JESSIE COMMONS APEX, NC TRAFFIC IMPACT ANALYSIS	PROJECTED (2030) BUILD-OUT PM PEAK HOUR TRAFFIC VOLUMES: SCENARIO 2	FIGURE 5.5

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6.0 Capacity Analysis

Capacity analyses were performed for the AM and PM peak hours for the existing (2026) traffic condition and the projected (2030) background and build-out traffic conditions at the study intersections using Synchro Version 12 software to determine the impacts of the proposed project.

Capacity is defined as the maximum number of vehicles that can pass over a particular road segment or through a particular intersection within a set time duration. Capacity is combined with Level-of-Service (LOS) to describe the operating characteristics of a road segment or intersection. LOS is a qualitative measure that describes operational conditions and motorist perceptions. The *Highway Capacity Manual (HCM)* defines six levels of service, LOS A through LOS F, with A representing the shortest average delays and F representing the longest average delays. LOS D is the typically accepted standard for signalized intersections in urbanized areas. For signalized intersections, LOS is defined for the overall intersection operation.

For unsignalized intersections, only the movements that must yield right-of-way experience control delay. Therefore, LOS criteria for the overall intersection is not reported by Synchro Version 12 or computable using methodology published in the *HCM*. It is typical for stop sign controlled side streets and driveways intersecting major streets to experience long delays during peak hours, while the majority of the traffic moving through the intersection on the major street experiences little or no delay. Table 6.0 lists the LOS control delay thresholds published in the *HCM* for signalized and unsignalized intersections.

Table 6.0
Level-of-Service Control Delay Thresholds

Level-of-Service	Signalized Intersections – Control Delay Per Vehicle [sec/veh]	Unsignalized Intersections – Average Control Delay [sec/veh] & Qualitative Operational Description	
A	≤ 10	≤ 10	Short Delays
B	> 10 – 20	> 10 – 15	
C	> 20 – 35	> 15 – 25	
D	> 35 – 55	> 25 – 35	Moderate Delays
E	> 55 – 80	> 35 – 50	
F	> 80	> 50	Long Delays

Existing peak hour factors (PHF) were used at existing intersections in each of the traffic conditions, and a PHF of 0.90 was used at new intersections. Right-turns on red (RTOR) were permitted if allowed in the field, and signal timings were optimized in each traffic condition. Additionally, while actual existing and projected volumes are shown in the figures, a minimum volume of 4 vehicles was used for intersection movements even if existing or projected volumes were found to be lower.

6.1 *NC 55 at US 1 Southbound Ramps*

Analyses indicate that the signalized intersection of NC 55 at US 1 Southbound currently operates at LOS D in both the AM and PM peak hours.

The following improvements are committed to be performed as part of the Veridea East Village development and were included in this analysis in the future traffic conditions:

- Restripe the US 1 Southbound Off-Ramp to provide dual exclusive left-turn lanes, a shared through/left lane, and one exclusive right-turn lane
- Modify the existing traffic signal to accommodate the committed laneage

Analyses indicate that, with the committed improvements in place, this intersection is expected to operate at LOS C in AM peak hour and continue operating at LOS D in the PM peak hour in the projected (2030) background traffic condition. In the projected (2030) build-out condition, the intersection is expected to operate at LOS D in both peak hours for either access scenario. No improvements are recommended to be performed at this intersection as part of the Jessie Commons development.

Table 6.1 summarizes the operation of the intersection of NC 55 at US 1 Southbound Ramps for the existing (2026) and projected (2030) background and build-out traffic conditions. As LOS and delay were consistent between both studied access scenarios, those findings were not duplicated in the table below.

Table 6.1
Level-of-Service
NC 55 at US 1 Southbound Ramps (Signalized)

Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
Existing (2026) Traffic	D (40.9)	D (52.5)
Background (2030) Traffic	C (34.0)	D (41.2)
Build-out (2030) Traffic: Access Scenarios 1 & 2	D (36.0)	D (51.9)

6.2 *NC 55 at US 1 Northbound Ramps*

Analyses indicate that the signalized intersection of NC 55 at US 1 Northbound Ramps currently operates at LOS C in the AM peak hour and LOS B in the PM peak hour.

The following improvements are committed to be performed as part of the Veridea East Village development and were included in this analysis in the future traffic conditions:

- Extend the storage of the inside northbound right-turn lane on NC 55 through future Pristine Water Drive/Atlas Drive and reconfigure as a free-flow right-turn lane onto US 1 Northbound
- Restripe the southbound approach of NC 55 to provide three southbound through lanes and a single exclusive southbound left-turn lane
- Modify the existing traffic signal to accommodate the recommended laneage

Analyses indicate that with these improvements in place, the intersection is expected to operate at LOS C in both the AM and PM peak hours in the study year 2030 with or without the proposed Jessie Commons development in place. No improvements are recommended to be performed at this intersection as part of the Jessie Commons development.

Table 6.2 summarizes the operation of the intersection of NC 55 at US 1 Northbound Ramps for the existing (2026) and projected (2030) background and build-out traffic conditions. As LOS and delay were consistent between both studied access scenarios, those findings were not duplicated in the table below.

Table 6.2
Level-of-Service
NC 55 at US 1 Northbound Ramps

Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
Existing (2026) Traffic	C (23.4)	B (19.8)
Background (2030) Traffic	C (27.5)	C (20.6)
Build-out (2030) Traffic: Access Scenarios 1 & 2	C (29.7)	C (28.7)

6.3 *NC 55 at U-Turn North of Williams Street*

NCDOT Project HL-0007 proposes the construction of a U-turn bulb-out with dual U-turn lanes on NC 55 north of Williams Street.

Analyses indicate that this intersection is expected to operate at LOS B in both peak hours in the projected (2030) background traffic condition. In the projected (2030) build-out condition, this intersection is expected to operate at LOS B in the AM peak hour and operate at LOS C in the PM peak hour for either access condition but with varying levels of delay. Based on these results and the relatively minimal impact of project traffic, no improvements are recommended to be performed at this intersection as part of this project.

Table 6.3 summarizes the operation of the intersection of NC 55 at U-Turn North of Williams Street for the projected (2030) background and build-out traffic conditions.

Table 6.3
Level-of-Service
NC 55 at U-Turn North of Williams Street (Signalized)

Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
Background (2030) Traffic	B (12.9)	B (16.5)
Build-out (2030) Traffic: Access Scenario 1	B (10.8)	C (29.3)
Build-out (2030) Traffic: Access Scenario 2	B (16.2)	C (22.9)

6.4 *NC 55 at Williams Street/Forest Light Way*

As part of NCDOT Project HL-0007 the intersection of NC 55 at Williams Street/Forest Light Way (formerly Technology Drive) is proposed to be converted to an RCI configuration. The laneage at this intersection will consist of dual left-turn lanes, three through lanes, and an exclusive right-turn lane on both the northbound and southbound approaches of NC 55. The eastbound approach of Forest Light Way will have dual right-turn lanes, while three westbound right-turn lanes will be provided on Williams Street.

Analyses indicate that with these improvements in place, the Forest Light Way intersection is expected to operate at LOS B and the Williams Street intersection is expected to operate at LOS C in both peak hours in the projected (2030) background traffic condition.

In the projected (2030) build-out condition, the Forest Light Way intersection is expected to continue to operate at LOS B in both peak hours, while the Williams Street intersection is expected to operate at LOS D in the AM peak hour and LOS C in the PM peak hour for both access scenarios.

Based on these results and the minimal impact of project traffic, no improvements are recommended to be performed at this intersection as part of this project.

Table 6.4 summarizes the operation of the intersection of NC 55 at Williams Street/Forest Light Way for the projected (2030) background and build-out traffic conditions.

Table 6.4
Level-of-Service
NC 55 at Williams Street/Forest Light Way (Signalized)

Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
Background (2030) Traffic	Forest Light – B (12.7) Williams – C (27.9)	Forest Light – B (17.2) Williams – C (20.4)
Build-out (2030) Traffic: Access Scenario 1	Forest Light – B (13.4) Williams – D (35.4)	Forest Light – B (18.3) Williams – C (22.4)
Build-out (2030) Traffic: Access Scenario 2	Forest Light – B (13.9) Williams – D (35.4)	Forest Light – B (18.2) Williams – C (22.4)

6.5 *NC 55 at U-Turn South of Forest Light Way*

NCDOT Project HL-0007 proposes the construction of a U-turn bulb-out with dual U-turn lanes on NC 55 south of Forest Light Way.

Analyses indicate that this intersection is expected to operate at LOS B in both peak hours in the study year 2030 with or without the proposed Jessie Commons development in place. Based on these results and the minimal impact of project traffic, no improvements are recommended to be performed at this intersection as part of this project.

Table 6.5 summarizes the operation of the intersection of NC 55 at U-Turn South of Forest Light Way for the projected (2030) background and build-out traffic conditions.

Table 6.5
Level-of-Service
NC 55 at U-Turn South of Forest Light Way (Signalized)

Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
Background (2030) Traffic	B (11.1)	B (13.5)
Build-out (2030) Traffic: Access Scenario 1	B (12.7)	B (14.6)
Build-out (2030) Traffic: Access Scenario 2	B (12.9)	B (14.6)

6.6 *NC 55 at Jessie Drive Extension*

Jessie Drive Extension is proposed to connect to NC 55 approximately 2,900 feet north of the NC 55 at Williams Street/Forest Light Way intersection.

Based on the capacity analyses presented herein, the following improvements are recommended to be performed as part of the Jessie Commons development:

- Construct Jessie Drive Extension as a four-lane, median-divided roadway through the site
- Provide an additional northbound through lane on NC 55 along the project's frontage, terminating as a right-turn lane at Site Access A

The following improvements are also recommended to be performed based on Access Scenario 1:

- Provide dual westbound left-turn lanes and an exclusive right-turn lane on Jessie Drive Extension, with 350 feet of storage provided for the inside left-turn lane
- Construct an exclusive northbound right-turn lane on NC 55 with 100 feet of storage and appropriate tapers
- Construct dual southbound left-turn lanes on NC 55, each with 250 feet of storage and appropriate tapers
- Install a traffic signal to accommodate the full-movement intersection configuration

The following improvements are also recommended to be performed based on Access Scenario 2:

- Provide dual westbound right-turn lanes on Jessie Drive Extension
- Construct an exclusive northbound right-turn lane on NC 55 with 100 feet of storage and appropriate tapers
- Construct dual southbound left-turn lanes on NC 55, each with 250 feet of storage and appropriate tapers
- Install a traffic signal to accommodate the RCI configuration

In Access Scenario 1, the signalized intersection of NC 55 at Jessie Drive Extension is expected to operate at LOS C in the AM peak hour and LOS F in the PM peak hour. Similarly, cumulative delays in each peak hour at this intersection pair in Access Scenario 2 (accounting for combined delays at this intersection and the associated north U-turn) also result in overall LOS C in the AM peak hour and LOS F in the PM peak hour but with 50% longer (cumulative) delays than the full-movement scenario. Since the resulting dual-lane U-turn bulb north of Jessie Drive Extension can likely not be accommodated within existing right-of-way and without significant impact to existing property access and operations and due to the shorter delays, Access Scenario 1 is recommended to be implemented as part of this project.

Table 6.6 summarizes the operation of the intersection of NC 55 at Jessie Drive Extension the projected (2030) build-out traffic conditions.

Table 6.6 Level-of-Service NC 55 at Jessie Drive Extension (Signalized)		
Condition	**AM Peak Hour LOS (Delay)**	**PM Peak Hour LOS (Delay)**
Build-out (2030) Traffic: Access Scenario 1 – *Full-Movement*	C (25.1)	F (94.6)
Build-out (2030) Traffic: Access Scenario 2 – *RCI*	C (21.3)	C (29.0)
	Combined Delay with North U-Turn: C (21.7)	**Combined Delay with North U-Turn: F (126.8)**

6.7 *NC 55 at Site Access A (Right-in/Right-out)*

A right-in/right-out site access with one ingress lane and one egress lane is proposed to be constructed on NC 55 approximately 3,800 feet north of Williams Street.

Based on the capacity analyses presented herein, the following improvements are recommended to be performed as part of the Jessie Commons development:

- Provide an additional northbound through lane on NC 55 along the project's frontage, terminating as a right-turn lane at Site Access A

This unsignalized intersection is expected to operate with long delays on the minor street approach (Site Access A) in both peak hours at project build-out for both access scenarios. However, it is typical for stop sign-controlled side streets and driveways intersecting major streets to experience long delays during peak hours, while the majority of the traffic moving through the intersection on the major street experiences little or no delay. Therefore, no additional improvements are recommended to be performed at this intersection.

Table 6.7 summarizes the operation of the intersection of NC 55 at Site Access A for the projected (2030) build-out traffic conditions.

Table 6.7
Level-of-Service
NC 55 at Site Access A (Right-in/Right-out, Unsignalized)

Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
Build-out (2030) Traffic: Access Scenarios 1 & 2	WB - F (308.2)	WB - F (132.2)

6.8 *Jessie Drive Extension at Site Access B (Right-in/Right-out)*

A right-in/right-out site access with one ingress lane and one egress lane for both the Northeast and Southeast Retail Pods is proposed to be constructed on Jessie Drive Extension approximately 400 feet east of NC 55.

Analyses indicate that this intersection is expected to operate with short delays and queues on both the northbound and southbound minor-street approaches (Site Access B) for both access scenarios, and SimTraffic confirms that queues from adjacent intersections are not expected to extend through this intersection. Therefore, no additional improvements are recommended to be performed at this intersection as part of this project beyond the construction of Jessie Drive Extension as a four-lane, median-divided roadway through the site.

Table 6.8 summarizes the operation of the intersection of Jessie Drive Extension at Site Access B for the projected (2030) build-out traffic condition.

Table 6.8
Level-of-Service
NC 55 at Site Access B (Right-in/Right-out, Unsignalized)

Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
Build-out (2030) Traffic: Access Scenarios 1 & 2	NB – B (10.4) SB – A (9.8)	NB – B (10.7) SB – B (11.7)

6.9 *Jessie Drive Extension at Site Access C (Full-Movement)*

A full-movement site access with one ingress lane and two egress lanes for both the Northeast and Southeast Retail Pods is proposed to be constructed on Jessie Drive Extension approximately 700 feet east of NC 55.

In addition to the construction of Jessie Drive Extension as a four-lane, median-divided roadway through the site, the following improvements are recommended as part of this development:

- Provide an exclusive left-turn lane and a shared through/right lane on each minor street approach
- Provide an exclusive eastbound left-turn lane with 100 feet of storage on Jessie Drive Extension
- Provide an exclusive westbound left-turn lane with 100 feet of storage on Jessie Drive Extension

Synchro indicates that the unsignalized intersection of Jessie Drive Extension at Site Access C is expected to operate with moderate delays in the AM peak hour and with long delays in the PM peak hour on the northbound minor street approach (Site Access C) at project build-out for either access scenario. However, it is typical for stop sign-controlled side streets and driveways intersecting major streets to experience long delays during peak hours, while the majority of the traffic moving through the intersection on the major street experiences little or no delay. SimTraffic simulations indicate that minor-street approach delays are expected to be less than 20 seconds, and no queuing issues on the minor street approaches at this intersection (or along Jessie Drive Extension from NC 55) are anticipated.

Table 6.9 summarizes the operation of the intersection of Jessie Drive Extension at Site Access C for the projected (2030) build-out traffic condition.

Table 6.9
Level-of-Service
Jessie Drive Extension at Site Access C (Full-Movement, Unsignalized)

Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
Build-out (2030) Traffic: Access Scenarios 1 & 2	NB – E (45.5) SB – B (11.5) EBL – A (8.0) WBL – A (7.6)	NB – F (297.6) SB – B (14.5) EBL – A (9.0) WBL – A (7.4)

6.10 *Jessie Drive Extension at Site Access D (Right-out)*

A right-out site access with one egress lane is proposed to be constructed on Jessie Drive Extension approximately 1,000 feet east of NC 55.

Analyses indicate that this intersection is expected to operate with short delays and queues on both the northbound and southbound minor-street approach (Site Access D) for either access condition, and SimTraffic confirms that queues from adjacent intersections are not expected to extend through this intersection. Therefore, no additional improvements are recommended to be performed at this intersection as part of this project beyond the construction of Jessie Drive Extension as a four-lane, median-divided roadway through the site.

Table 6.10 summarizes the operation of the intersection of Jessie Drive Extension at Site Access D for the projected (2030) build-out traffic condition.

Table 6.10
Level-of-Service
Jessie Drive Extension at Site Access D (Right-out, Unsignalized)

Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
Build-out (2030) Traffic: Access Scenarios 1 & 2	SB - A (8.4)	SB - A (8.7)

6.11 *Jessie Drive Extension at Site Access E (Full-Movement)*

A full-movement site access with one ingress lane and one egress lane is proposed to be constructed on Jessie Drive Extension approximately 1,300 feet east of NC 55.

In addition to the construction of Jessie Drive Extension as a four-lane, median-divided roadway through the site, the following improvements are recommended as part of this development:

- Provide an exclusive eastbound left-turn lane with 50 feet of storage on Jessie Drive Extension

Analyses indicate that with these improvements in place, the intersection is expected to operate with short delays and queues on both the northbound and southbound minor-street approaches (Site Access E) at project build-out for either access condition. Therefore, no additional improvements are recommended to be performed at this intersection as part of this project.

Table 6.11 summarizes the operation of the intersection of Jessie Drive Extension at Site Access E for the projected (2030) build-out traffic condition.

Table 6.11
Level-of-Service
Jessie Drive Extension at Site Access E (Full-Movement, Unsignalized)

Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
Build-out (2030) Traffic: Access Scenarios 1 & 2	NB – B (10.3) SB – A (9.3) EBL – A (7.4)	NB – A (9.5) SB – A (8.6) EBL – A (7.3)

6.12 *NC 55 at U-Turn North of Jessie Drive Extension*

In Access Scenario 2, a U-turn bulb approximately 800 feet north of Jessie Drive Extension was evaluated.

Based on this analysis, the following improvements were identified based on Access Scenario 2:

- Provide dual northbound U-turn lanes on NC 55, each with 200 feet of storage
- Install a traffic signal

In Access Scenario 2, the signalized intersection of NC 55 at the U-turn north of Jessie Drive Extension is expected to operate at LOS C in the AM peak hour and LOS F in the PM peak hour. Similarly, cumulative delays in each peak hour at this intersection pair in Access Scenario 2 (accounting for combined delays at this intersection and the Jessie Drive Extension intersection) also result in overall LOS C in the AM peak hour and LOS F in the PM peak hour but with 50% longer delays than the full-movement scenario.

Since this resulting dual-lane U-turn bulb can likely not be accommodated within existing right-of-way and without significant impact to existing property access and operations and due to the shorter delays, Access Scenario 1 is recommended to be implemented as part of this project.

Table 6.12 summarizes the operation of the intersection of NC 55 at the U-Turn Jessie Drive Extension the projected (2030) build-out traffic conditions.

Table 6.12
Level-of-Service
NC 55 at U-Turn North of Jessie Drive Extension (Signalized)

Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
Build-out (2030) Traffic: Access Scenario 2 – *RCI*	C (22.3)	F (223.5)
	Combined Delay with Jessie Drive Extension: C (21.7)	**Combined Delay with Jessie Drive Extension: F (126.8)**

7.0 Recommendations

Improvements by Others

The following improvements are committed to be performed as part of Veridea or by publicly-funded projects in the study area and were included in in each of the future traffic conditions:

NC 55 at US 1 Southbound Ramps (*by Veridea East Village)*:

- Restripe the US 1 Southbound Off-Ramp to provide dual exclusive left-turn lanes, a shared through/left lane, and one exclusive right-turn lane
- Modify the existing traffic signal to accommodate the committed laneage

NC 55 at US 1 Northbound Ramps (*by Veridea East Village)*:

- Extend the storage of the inside northbound right-turn lane on NC 55 through future Pristine Water Drive/Atlas Drive and reconfigure as a free-flow right-turn lane onto US 1 Northbound
- Restripe the southbound approach of NC 55 to provide three southbound through lanes and a single exclusive southbound left-turn lane
- Modify the existing traffic signal to accommodate the recommended laneage

NC 55 at Williams Street/Forest Light Way (*by NCDOT Project HL-0007)*:

- Convert the existing full-movement intersection to a RCI with signalized U-turns north and south of the intersection

Recommended Improvements

Based on the capacity analyses presented herein, the following improvements are recommended to be performed as part of the Jessie Commons development:

Jessie Drive Extension:

- Construct Jessie Drive Extension as a four-lane, median-divided roadway through the site

NC 55:

- Provide an additional northbound through lane on NC 55 along the project's frontage, terminating as a right-turn lane at Site Access A

NC 55 at Site Access A:

- Construct Site Access A as a right-in/right-out site access with one ingress lane and one egress lane

Jessie Drive Extension at Site Access B:

- Construct Site Access B as a right-in/right-out access to each retail pod, with one ingress lane and one egress lane

Jessie Drive Extension at Site Access C:

- Construct Site Access C as a full-movement site access to each retail pod, with one ingress lane and two egress lanes (exclusive left-turn lane and a shared through/right lane) on each minor street approach
- Provide an exclusive eastbound left-turn lane with 100 feet of storage on Jessie Drive Extension
- Provide an exclusive westbound left-turn lane with 100 feet of storage on Jessie Drive Extension

Jessie Drive Extension at Site Access D:

- Construct Site Access D as a right-in/right-out access to the north Industrial pod , with one ingress lane and one egress lane

Jessie Drive Extension at Site Access E:

- Construct Site Access E as a full-movement site access to each side of the Industrial pod, with one ingress lane and one egress lane on each minor street approach
- Provide an exclusive eastbound left-turn lane with 50 feet of storage on Jessie Drive Extension

The following improvements are also recommended to be performed at the intersection of NC 55 at Jessie Drive Extension based on Access Scenario 1:

NC 55 at Jessie Drive Extension:

- Provide dual westbound left-turn lanes and an exclusive right-turn lane on Jessie Drive Extension, with 350 feet of storage provided for the inside left-turn lane
- Construct an exclusive northbound right-turn lane on NC 55 with 100 feet of storage and appropriate tapers
- Construct dual southbound left-turn lanes on NC 55, each with 250 feet of storage and appropriate tapers
- Install a traffic signal to accommodate the full-movement intersection configuration

The following improvements were identified at the intersection of NC 55 at Jessie Drive Extension and the associated U-turn to the north based on Access Scenario 2:

NC 55 at Jessie Drive Extension:

- Provide dual westbound right-turn lanes on Jessie Drive Extension
- Construct an exclusive northbound right-turn lane on NC 55 with 100 feet of storage and appropriate tapers
- Construct dual southbound left-turn lanes on NC 55, each with 250 feet of storage and appropriate tapers
- Install a traffic signal to accommodate the RCI configuration

NC 55 at U-Turn North of Jessie Drive Extension:

- Construct a U-turn bulb on NC 55 north of Jessie Drive Extension
- Provide dual northbound U-turn lanes on NC 55, each with 200 feet of storage
- Install a traffic signal

Conclusions

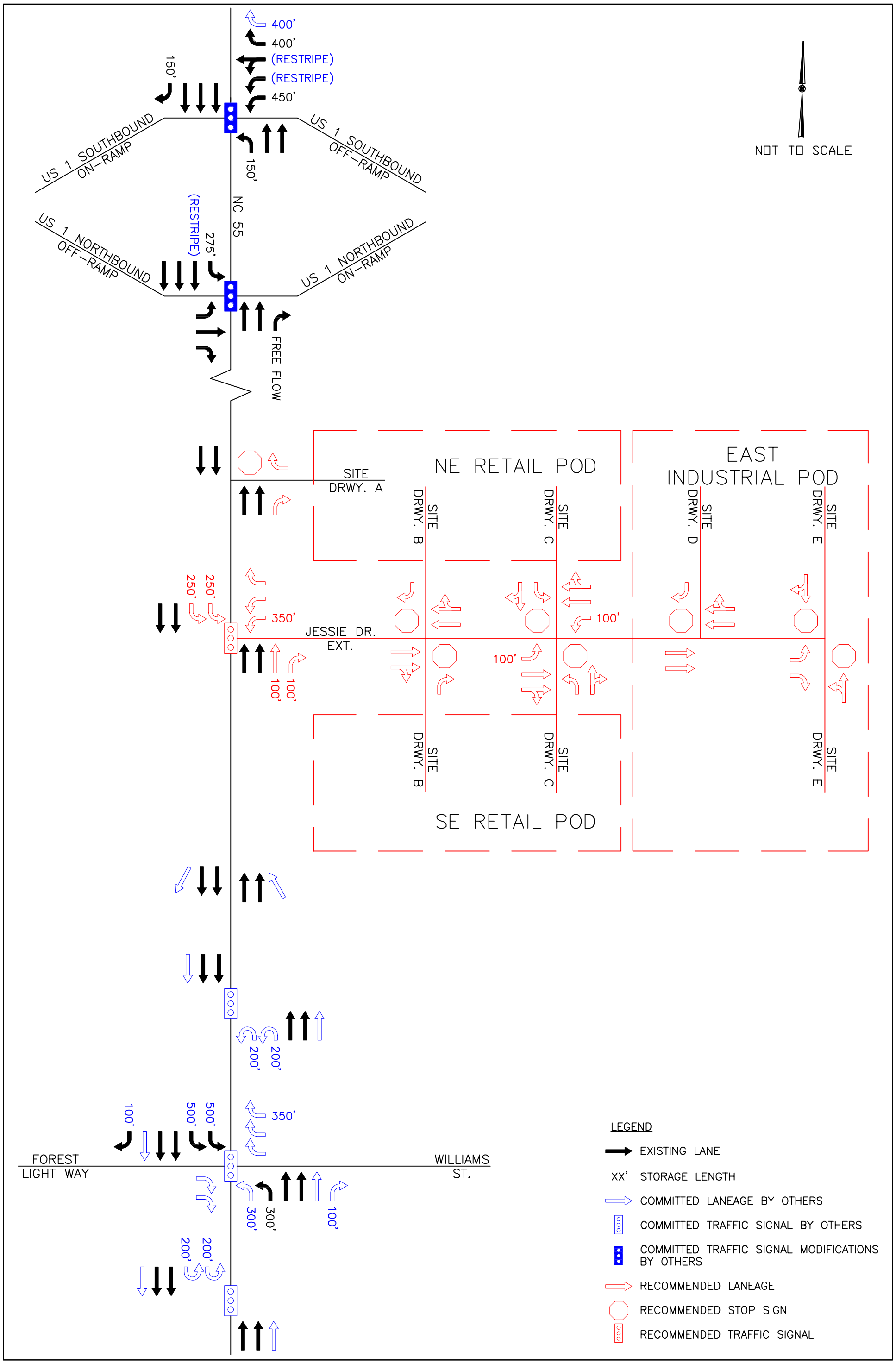
Analyses indicate that all of the study intersections will operate acceptably at project build-out except for the signalized intersection of NC 55 at Jessie Drive Extension (and the associated U-turn, as applicable) and the unsignalized intersections of NC 55 at Site Access A and Jessie Drive Extension at Site Access C.

In Access Scenario 1, the signalized intersection of NC 55 at Jessie Drive Extension is expected to operate at LOS C in the AM peak hour and LOS F in the PM peak hour. Similarly, cumulative delays in each peak hour at this intersection pair in Access Scenario 2 (accounting for combined delays at the Jessie Drive Extension intersection and the north U-turn) also result in overall LOS C in the AM peak hour and LOS F in the PM peak hour but with 50% longer (cumulative) delays than the full-movement scenario. Since the resulting dual-lane U-turn bulb north of Jessie Drive Extension can likely not be accommodated within existing right-of-way and without significant impact to existing property access and operations and due to the shorter delays, Access Scenario 1 is recommended to be implemented as part of this project.

The unsignalized intersection of NC 55 at Site Access A is expected to operate with long delays on the minor street approach (Site Access A) in both peak hours at project build-out. However, it is typical for stop sign-controlled side streets and driveways intersecting major streets to experience long delays during peak hours, while the majority of the traffic moving through the intersection on the major street experiences little or no delay. Therefore, no additional improvements are recommended to be performed at this intersection.

Synchro indicates that the unsignalized intersection of Jessie Drive Extension at Site Access C is expected to operate with long delays on the northbound minor street approach (Site Access C) in the PM peak hour at project build-out. However, it is typical for stop sign-controlled side streets and driveways intersecting major streets to experience long delays during peak hours, while the majority of the traffic moving through the intersection on the major street experiences little or no delay. SimTraffic simulations indicate that minor-street approach delays are expected to be less than 20 seconds, and no queuing issues on the minor street approaches at this intersection (or along Jessie Drive Extension from NC 55) are anticipated.

The committed and recommended roadway laneage in Access Scenario 1 is shown on **Figure 7.1**, and the committed and identified roadway laneage in Access Scenario 2 is shown on **Figure 7.2.**



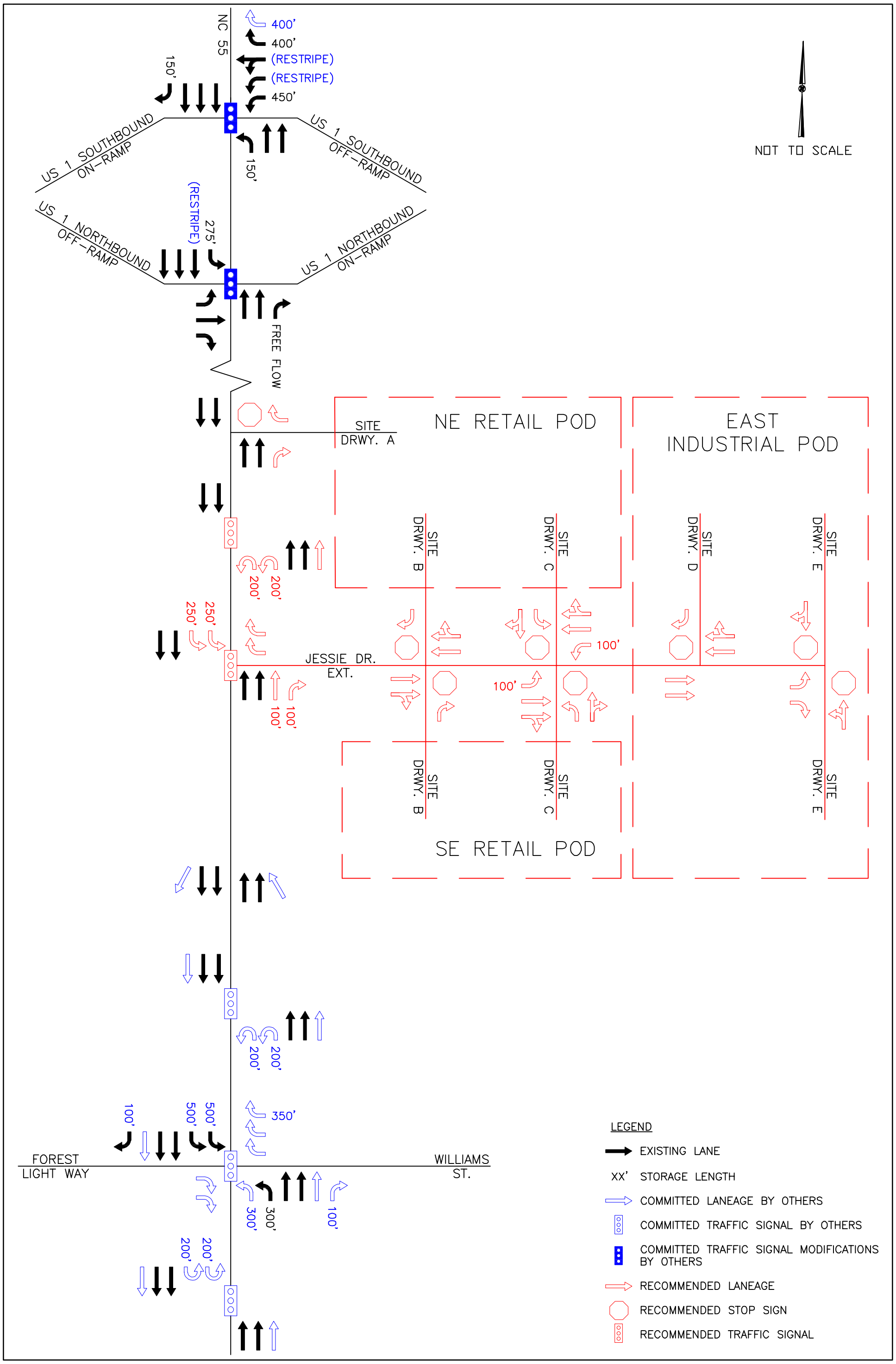
Kimley»Horn

JESSIE COMMONS
APEX, NC
TRAFFIC IMPACT ANALYSIS

COMMITTED & RECOMMENDED
ROADWAY LANEAGE: SCENARIO 1

FIGURE
7.1

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JESSIE COMMONS
APEX, NC
TRAFFIC IMPACT ANALYSIS

COMMITTED & RECOMMENDED
ROADWAY LANEAGE: SCENARIO 2

FIGURE
7.2

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Appendix

Appendix A:

Memorandum of Understanding

Kimley»Horn

MEMORANDUM OF UNDERSTANDING (MOU)

To:	Russell Dalton, P.E., Town of Apex Daniel Boulware, P.E., NCDOT
From:	Kevin Dean, P.E., Kimley-Horn
Date:	February 2, 2026 (*Revised March 3, 2026)*
Subject:	Jessie Commons – Apex, NC – Traffic Impact Analysis Assumptions

Introduction

The Jessie Commons development is proposed to be constructed east of NC 55 and south of the existing Town of Apex Public Safety Station #4 in Apex, North Carolina. As currently envisioned this development will include approximately 300,000 square feet (SF) of light industrial space, 106,000 SF of retail space (including a supermarket), and 6 outparcels along NC 55. As part of this development, Jessie Drive will be constructed from NC 55 through the site frontage but will not connect to the existing terminus at Horton Park Drive. Site access is proposed via multiple driveways on the Jessie Drive Extension as well as a right-in/right-out access on NC 55 north of Jessie Drive Extension, and the development is anticipated to be built-out by the year 2030.

Based on discussions with the applicant, Town, and NCDOT, the following access scenarios will be evaluated for the intersection of NC 55 at Jessie Drive Extension:

- Access Scenario #1: Full-Movement
- Access Scenario #2: Reduced Conflict Intersection (RCI or "Superstreet")

The conceptual site plan and an exhibit detailing site location/site access are attached.

Study Intersections

The study area will consist of the following intersections:

NC 55 at US 1 Southbound Ramps	*(Signalized)*
NC 55 at US 1 Northbound Ramps	*(Signalized)*
NC 55 at U-Turn North of Williams Street/Forest Light Way*	*(Signalized)*
NC 55 at Williams Street/Forest Light Way*	*(Signalized)*
NC 55 at U-Turn South of Williams Street/Forest Light Way*	*(Signalized)*
NC 55 at Jessie Drive Extension**	*(Mult. Access Scenarios)*
NC 55 at Site Access A**	*(Right-in/Right-out)*
Jessie Drive Extension at Site Access B**	*(Right-in/Right-out)*
Jessie Drive Extension at Site Access C**	*(Full-Movement)*
Jessie Drive Extension at Site Access D**	*(Right-out Only)*
Jessie Drive Extension at Site Access E**	*(Full-Movement)*

**To be analyzed for future traffic conditions only as existing traffic volumes onto/off of Forest Light Way are impacted by construction traffic associated with the Veridea East Village development and traffic patterns at that location are expected to change with the completion of the NCDOT HL-0007 project.*

*** To be analyzed for future Build-out conditions only.*

Study Scenarios

The study shall consist of the following scenarios:

1. Existing Year (2026)
2. Background Year (2030)
3. Build-out (2030) – Access Scenario #1
4. Build-out (2030) – Access Scenario #2

Volume Development Methodology

1) Traffic Data Collection: AM and PM peak hour turning movement counts collected in May 2025 while Wake County schools were in session will be used in this analysis to represent existing year (2026) volumes with no adjustments proposed.

2) Background Growth Rate: Based on typical Town guidelines, a 3% annual growth rate will be applied to existing volumes up to the study year 2030.

3) NCDOT Project HL-0007: NCDOT proposes to convert the existing intersection of NC 55 at Williams Street/Forest Light Way (Technology Drive) to a reduced conflict intersection (RCI) with U-turn bulb-outs to the north and south of the intersection. Improvements associated with that project will be included in each of the future traffic conditions.

4) Approved Developments: Portion of three developments in the study were identified for inclusion as background traffic and will be included in each of the future traffic conditions. The attached table details the project name, location, and anticipated occupancy assumptions for the year 2030.

5) Trip Generation
   a) Trip generation will be based on data for the General Urban/Suburban setting from the 12th Edition of the ITE *Trip Generation Manual*.
   b) Trip generation will be prepared for each of the development "pods", though some site trips from each pod will be assigned to other pods within development to account for trip capture between uses.
   c) While the specific uses for the outparcels along NC 55 and an additional retail parcel are unknown, the following uses will be assumed in this TIA:
      i) **Northeast Retail Pod**: 71,000 SF shopping plaza with supermarket, 3,000 SF drive-in bank, 3,000 SF coffee/donut shop with drive-through window, and 6,100 SF convenience store with 16 fueling positions
      ii) **Southeast Retail Pod**: 35,000 SF strip retail plaza, 5,000 SF tire store, 6,000 SF fast-casual restaurant, and 5,000 SF fast-food restaurant with drive-through window
      iii) **East Industrial Pod**: 300,000 SF general light industrial space

Trip Distribution / Assignment

Projected net new site traffic will be assigned to the study network based on a review of the surrounding roadway network and land uses.

The following overall distribution will be used for new site trips for the East Industrial Pod:

- 35% to/from the south on NC 55
- 25% to/from the east on US 1
- 15% to/from the west on US 1
- 10% to/from the north on NC 55
- 10% to/from the southeast on Williams Street
- 5% to/from the west on Forest Light Way

The following overall distribution was used for net new external trips for the Northeast Retail Pod:

- 25% to/from the south on NC 55
- 20% to/from the southeast on Williams Street
- 15% to/from the north on NC 55
- 12% to/from the west on Forest Light Way
- 10% to/from development between the site and the US 1 interchange
- 5% to/from the east on US 1
- 5% to/from the west on US 1
- 5% to/from the Southeast Retail Pod
- 3% to/from East Industrial Pod

The following overall distribution was used for net new external trips for the Southeast Retail:

- 25% to/from the south on NC 55
- 20% to/from the southeast on Williams Street
- 15% to/from the north on NC 55
- 12% to/from the west on Forest Light Way
- 10% to/from development between the site and the US 1 interchange
- 5% to/from the east on US 1
- 5% to/from the west on US 1
- 5% to/from the Northeast Retail Pod
- 3% to/from East Industrial Pod

Peak hour pass-by trips will be assigned based on a review of existing traffic patterns.

Other Analysis Assumptions

The following additional assumptions will be used for the analysis:

- Existing peak hour factors (PHF) will be used at all intersections, and a PHF of 0.90 will be used for turning movements at new intersections.
- Where U-turn volumes are less than 10 vehicles, those trips will be analyzed as left-turns.
- A minimum volume of 4 vehicles will be analyzed on study intersection movements even when existing or projected volumes are lower.
- Right-turns on red (RTOR) and permitted + protected left-turn phasing will be permitted in the analysis where currently permitted or planned to be.
- Signal timings will be obtained from NCDOT and will be optimized in each traffic condition.

Attachments

Conceptual Site Plan
Study Area and Site Trip Distribution
Trip Generation
Approved Development Summary



PEAK
Engineering & Design
1125 Apex Peakway | Apex, NC 27502
ph: 919.439.0100
www.PeakEngineering.com

JESSIE COMMONS
E. WILLIAMS STREET
APEX, NC
WAKE COUNTY

DATE	PROJECT NO.
08.20.25 (REV. 11/24/2025)	240202B
	SHEET NO. SP-3

CONCEPTUAL SITE PLAN

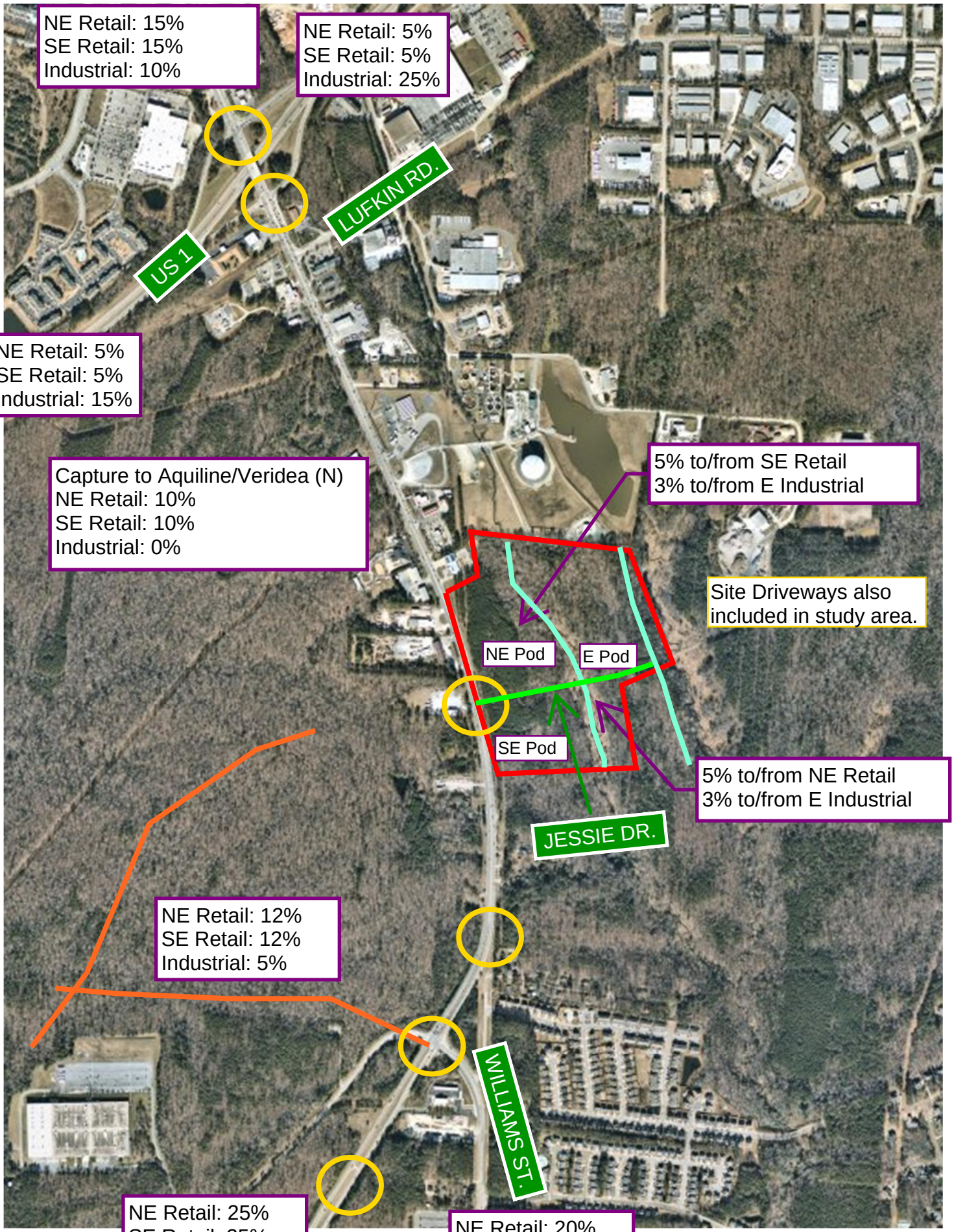
JESSIE COMMONS
APEX, NC
TRAFFIC IMPACT ANALYSIS

Kimley»Horn

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Jessie Commons



Jessie Commons

Table 1 - Trip Generation (12th Edition): NE Retail Pod

Land Use	Intensity		Daily			AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out	Total	In	Out
821 Shopping Plaza (40K-150K) w/ supermarket	71,000	s.f.	7,006	3,503	3,503	247	148	99	597	293	304
912 Drive-In Bank	3,000	s.f.	298	149	149	30	17	13	63	32	31
937 Coffee/Donut Shop with Drive-Through Window	3,000	s.f.	1,802	901	901	256	131	125	117	59	58
945 Convenience Store/Gas Station (5.5-10k SF Market)	16	f.p.	3,254	1,627	1,627	371	186	185	337	169	168
Subtotal			**12,360**	**6,180**	**6,180**	**904**	**482**	**422**	**1,113**	**551**	**562**
Internal Capture											
821 Shopping Plaza (40K-150K) w/ supermarket			400	164	236	20	7	13	24	14	10
912 Drive-In Bank			17	7	10	3	1	2	3	2	1
937 Coffee/Donut Shop with Drive-Through Window			604	356	248	57	39	18	41	17	24
945 Convenience Store/Gas Station (5.5-10k SF Market)			187	77	110	34	10	24	14	8	6
	AM Peak	**PM Peak**									
Internal Capture Total	12.61%	7.37%	*1,208*	*604*	*604*	*114*	*57*	*57*	*82*	*41*	*41*
Total External Trips			**11,152**	**5,576**	**5,576**	**790**	**425**	**365**	**1,031**	**510**	**521**
Pass-By Capture	AM	PM									
821 Shopping Plaza (40K-150K)	0%	40%	1,322	661	661	0	0	0	230	112	118
912 Drive-In Bank	29%	35%	90	45	45	8	5	3	22	11	11
937 Coffee/Donut Shop with Drive-Through Window	83%	81%	982	491	491	165	76	89	62	34	28
945 Convenience Store/Gas Station	76%	75%	2,316	1158	1,158	256	134	122	243	121	122
	AM Peak	**PM Peak**									
Pass-By Capture Total	*47.46%*	*50.04%*	*4,710*	*2,355*	*2,355*	*429*	*215*	*214*	*557*	*278*	*279*
Total Net New External Trips: NE Pod			**6,442**	**3,221**	**3,221**	**361**	**210**	**151**	**474**	**232**	**242**

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Jessie Commons	**Organization:**	Kimley-Horn
Project Location:	Apex, NC	**Perormed By:**	
Scenario Description:	Jessie Dr Ext. Full-Mvmt.	**Date:**	
Analysis Year:	2030	**Checked By:**	
Analysis Period:	**AM Peak Hour**	**Date:**	

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

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office		0	SF	0	0	0
Retail	821,912,945	74,016	SF	648	351	297
Restaurant	937	3,000	SF	256	131	125
Cinema/Entertainment		0	SF	0	0	0
Residential		0	units	0	0	0
Hotel		0	rooms	0	0	0
All Other Land Uses[2]		0	SF	0	0	0
				904	**482**	**422**

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.1	0%	0%	1.1	0%	0%
Retail	1.1	0%	0%	1.1	0%	0%
Restaurant	1.1	0%	0%	1.1	0%	0%
Cinema/Entertainment	1.1	0%	0%	1.1	0%	0%
Residential	1.1	0%	0%	1.1	0%	0%
Hotel	1.1	0%	0%	1.1	0%	0%
All Other Land Uses[2]	1.1	0%	0%	1.1	0%	0%

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

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

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		42	0	0	0
Restaurant	0	19		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	994	530	464
Internal Capture Percentage	12%	12%	13%
External Vehicle-Trips[5]	794	427	367
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

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

Land Use	Entering Trips	Exiting Trips
Office	0%	0%
Retail	5%	13%
Restaurant	29%	14%
Cinema/Entertainment	0%	0%
Residential	0%	0%
Hotel	0%	0%

[1]Land Use Codes (LUCs) from *Trip Generation Manual* , published by the Institute of Transportation Engineers (ITE).
[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.
[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).
4Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mized-use project, manual adjustments must be made
5Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.
[6]Person-Trips
*Indicates computaton that has been rounded to the nearest whole number.
Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

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

Land Use	Table 7-A (D) Entering Trips			Table 7-A (O) Exiting Trips		
	Veh. Occ.[4]	Vehicle Trips	Person-Trips*	Veh. Occ.[4]	Vehicle Trips	Person-Trips*
Office	1.1	0	0	1.1	0	0
Retail	1.1	351	386	1.1	297	327
Restaurant	1.1	131	144	1.1	125	138
Cinema/Entertainment	1.1	0	0	1.1	0	0
Residential	1.1	0	0	1.1	0	0
Hotel	1.1	0	0	1.1	0	0

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	95		42	0	46	0
Restaurant	43	19		0	6	4
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		124	33	0	0	0
Retail	0		72	0	0	0
Restaurant	0	31		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	66	29	0		0
Hotel	0	15	9	0	0	

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

Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	% Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	19	367	386	334	0	0
Restaurant	42	102	144	93	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[2]	0	0	0	0	0	0

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

Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	% Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	42	285	327	259	0	0
Restaurant	19	119	138	108	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[2]	0	0	0	0	0	0

1Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.
[2]Person-Trips
[3]Total estimate for all other land uses at mixed use development site is not subject to internal capture computations in this estimator.
*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Jessie Commons	**Organization:**	Kimley-Horn
Project Location:	Apex, NC	**Perormed By:**	
Scenario Description:	Jessie Dr Ext. Full-Mvmt.	**Date:**	
Analysis Year:	2030	**Checked By:**	
Analysis Period:	**PM Peak Hour**	**Date:**	

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

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office		0	SF	0	0	0
Retail	821,912,945	74,016	SF	996	492	504
Restaurant	937	3,000	SF	117	59	58
Cinema/Entertainment		0	SF	0	0	0
Residential		0	units	0	0	0
Hotel		0	rooms	0	0	0
All Other Land Uses[2]		0	SF	0	0	0
				1,113	**551**	**562**

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.1	0%	0%	1.1	0%	0%
Retail	1.1	0%	0%	1.1	0%	0%
Restaurant	1.1	0%	0%	1.1	0%	0%
Cinema/Entertainment	1.1	0%	0%	1.1	0%	0%
Residential	1.1	0%	0%	1.1	0%	0%
Hotel	1.1	0%	0%	1.1	0%	0%
All Other Land Uses[2]	1.1	0%	0%	1.1	0%	0%

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

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

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		19	0	0	0
Restaurant	0	26		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	1,224	606	618
Internal Capture Percentage	7%	7%	7%
External Vehicle-Trips[5]	1,031	510	521
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

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

Land Use	Entering Trips	Exiting Trips
Office	0%	0%
Retail	5%	3%
Restaurant	29%	41%
Cinema/Entertainment	0%	0%
Residential	0%	0%
Hotel	0%	0%

[1]Land Use Codes (LUCs) from *Trip Generation Manual* , published by the Institute of Transportation Engineers (ITE).
[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.
[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual).*
[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mized-use project, manual adjustments must be made
[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.
[6]Person-Trips
*Indicates computaton that has been rounded to the nearest whole number.
Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

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

Land Use	Table 7-P (D) Entering Trips			Table 7-P (O) Exiting Trips		
	Veh. Occ.[4]	Vehicle Trips	Person-Trips*	Veh. Occ.[4]	Vehicle Trips	Person-Trips*
Office	1.1	0	0	1.1	0	0
Retail	1.1	492	541	1.1	504	554
Restaurant	1.1	59	65	1.1	58	64
Cinema/Entertainment	1.1	0	0	1.1	0	0
Residential	1.1	0	0	1.1	0	0
Hotel	1.1	0	0	1.1	0	0

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	11		161	22	144	28
Restaurant	2	26		5	11	4
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		43	1	0	0	0
Retail	0		19	0	0	0
Restaurant	0	271		0	0	0
Cinema/Entertainment	0	22	2		0	0
Residential	0	54	9	0		0
Hotel	0	11	3	0	0	

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

Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	% Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	26	515	541	468	0	0
Restaurant	19	46	65	42	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[2]	0	0	0	0	0	0

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

Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	% Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	19	535	554	486	0	0
Restaurant	26	38	64	35	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[2]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.
[2]Person-Trips
[3]Total estimate for all other land uses at mixed use development site is not subject to internal capture computations in this estimator.
*Indicates computation that has been rounded to the nearest whole number.

Internal Capture Reduction Calculations

Methodology for A.M. Peak Hour and P.M. Peak Hour
based on the *Trip Generation Handbook* , 3rd Edition, published by the Institute of Transportation Engineers

Methodology for Daily
based on the average of the Unconstrained Rates for the A.M. Peak Hour and P.M. Peak Hour

SUMMARY

GROSS TRIP GENERATION

INPUT

Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit	Enter	Exit
Office	0	0	0	0	0	0
Retail	5,279	5,279	351	297	492	504
Restaurant	901	901	131	125	59	58
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
	6,180	6,180	482	422	551	562

INTERNAL TRIPS

OUTPUT

Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit	Enter	Exit
Office	0	0	0	0	0	0
Retail	248	356	18	39	24	17
Restaurant	356	248	39	18	17	24
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
	604	604	57	57	41	41
% Reduction	9.8%		12.6%		7.4%	

EXTERNAL TRIPS

OUTPUT

Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit	Enter	Exit
Office	0	0	0	0	0	0
Retail	5,031	4,923	333	258	468	487
Restaurant	545	653	92	107	42	34
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
	5,576	5,576	425	365	510	521

Jessie Commons

Table 2 - Trip Generation (12th Edition): SE Retail Pod

Land Use	Intensity		Daily			AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out	Total	In	Out
822 Strip Retail Plaza (<40K) - South	35,000	s.f.	1,708	854	854	138	76	62	179	89	90
848 Tire Store	5,000	s.f.	144	72	72	14	9	5	19	8	11
930 Fast Casual Restaurant	6,000	s.f.	1,356	678	678	9	6	3	86	46	40
934 Fast-Food Restaurant with Drive-Through Window	5,000	s.f.	2,242	1,121	1,121	166	85	81	158	82	76
Subtotal			**5,450**	**2,725**	**2,725**	**327**	**176**	**151**	**442**	**224**	**218**
Internal Capture											
822 Strip Retail Plaza (<40K) - South			427	248	179	14	6	8	50	31	19
848 Tire Store			36	21	15	2	1	1	5	3	2
930 Fast Casual Restaurant			174	73	101	2	1	1	19	8	11
934 Fast-Food Restaurant with Drive-Through Window			289	121	168	14	8	6	36	13	23
	AM Peak	**PM Peak**									
Internal Capture Total	9.79%	25.00%	*926*	*463*	*463*	*32*	*16*	*16*	*111*	*55*	*55*
Total External Trips			**4,524**	**2,262**	**2,262**	**295**	**160**	**135**	**332**	**169**	**163**
Pass-By Capture	AM	PM									
822 Strip Retail Plaza (<40K) - South	0%	40%	256	128	128	0	0	0	51	23	28
848 Tire Store	0%	25%	14	7	7	0	0	0	3	1	2
934 Fast-Food Restaurant with Drive-Through Window	50%	55%	1,026	513	513	77	39	38	67	38	29
	AM Peak	**PM Peak**									
Pass-By Capture Total	*23.55%*	*27.38%*	*1,296*	*648*	*648*	*77*	*39*	*38*	*121*	*62*	*59*
Total Net New External Trips: SE Pod			**3,228**	**1,614**	**1,614**	**218**	**121**	**97**	**211**	**107**	**104**

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Jessie Commons	**Organization:**	Kimley-Horn
Project Location:	Apex, NC	**Perormed By:**	
Scenario Description:	Jessie Dr Ext. Full-Mvmt.	**Date:**	
Analysis Year:	2030	**Checked By:**	
Analysis Period:	**AM Peak Hour**	**Date:**	

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

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office		0	SF	0	0	0
Retail	822,848	40,000	SF	152	85	67
Restaurant	930,934	11,000	SF	175	91	84
Cinema/Entertainment		0	SF	0	0	0
Residential		0	units	0	0	0
Hotel		0	rooms	0	0	0
All Other Land Uses[2]		0	SF	0	0	0
				327	**176**	**151**

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.1	0%	0%	1.1	0%	0%
Retail	1.1	0%	0%	1.1	0%	0%
Restaurant	1.1	0%	0%	1.1	0%	0%
Cinema/Entertainment	1.1	0%	0%	1.1	0%	0%
Residential	1.1	0%	0%	1.1	0%	0%
Hotel	1.1	0%	0%	1.1	0%	0%
All Other Land Uses[2]	1.1	0%	0%	1.1	0%	0%

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

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

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		10	0	0	0
Restaurant	0	7		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	360	194	166
Internal Capture Percentage	9%	9%	10%
External Vehicle-Trips[5]	296	161	135
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

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

Land Use	Entering Trips	Exiting Trips
Office	0%	0%
Retail	7%	14%
Restaurant	10%	8%
Cinema/Entertainment	0%	0%
Residential	0%	0%
Hotel	0%	0%

[1]Land Use Codes (LUCs) from *Trip Generation Manual* , published by the Institute of Transportation Engineers (ITE).
[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.
[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).
4Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mized-use project, manual adjustments must be made
5Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.
[6]Person-Trips
*Indicates computaton that has been rounded to the nearest whole number.
Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

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

Land Use	Table 7-A (D) Entering Trips			Table 7-A (O) Exiting Trips		
	Veh. Occ.[4]	Vehicle Trips	Person-Trips*	Veh. Occ.[4]	Vehicle Trips	Person-Trips*
Office	1.1	0	0	1.1	0	0
Retail	1.1	85	94	1.1	67	74
Restaurant	1.1	91	100	1.1	84	92
Cinema/Entertainment	1.1	0	0	1.1	0	0
Residential	1.1	0	0	1.1	0	0
Hotel	1.1	0	0	1.1	0	0

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	21		10	0	10	0
Restaurant	29	13		0	4	3
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		30	23	0	0	0
Retail	0		50	0	0	0
Restaurant	0	7		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	16	20	0		0
Hotel	0	4	6	0	0	

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

Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	% Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	7	87	94	79	0	0
Restaurant	10	90	100	82	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[2]	0	0	0	0	0	0

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

Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	% Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	10	64	74	58	0	0
Restaurant	7	85	92	77	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[2]	0	0	0	0	0	0

1Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.
[2]Person-Trips
[3]Total estimate for all other land uses at mixed use development site is not subject to internal capture computations in this estimator.
*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Jessie Commons	**Organization:**	Kimley-Horn
Project Location:	Apex, NC	**Perormed By:**	
Scenario Description:	Jessie Dr Ext. Full-Mvmt.	**Date:**	
Analysis Year:	2030	**Checked By:**	
Analysis Period:	**PM Peak Hour**	**Date:**	

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

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office		0	SF	0	0	0
Retail	822,848	40,000	SF	198	96	102
Restaurant	930,934	11,000	SF	244	128	116
Cinema/Entertainment		0	SF	0	0	0
Residential		0	units	0	0	0
Hotel		0	rooms	0	0	0
All Other Land Uses[2]		0	SF	0	0	0
				442	**224**	**218**

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.1	0%	0%	1.1	0%	0%
Retail	1.1	0%	0%	1.1	0%	0%
Restaurant	1.1	0%	0%	1.1	0%	0%
Cinema/Entertainment	1.1	0%	0%	1.1	0%	0%
Residential	1.1	0%	0%	1.1	0%	0%
Hotel	1.1	0%	0%	1.1	0%	0%
All Other Land Uses[2]	1.1	0%	0%	1.1	0%	0%

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

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

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		33	0	0	0
Restaurant	0	52		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	486	246	240
Internal Capture Percentage	35%	35%	35%
External Vehicle-Trips[5]	288	147	141
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

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

Land Use	Entering Trips	Exiting Trips
Office	0%	0%
Retail	49%	29%
Restaurant	23%	41%
Cinema/Entertainment	0%	0%
Residential	0%	0%
Hotel	0%	0%

[1]Land Use Codes (LUCs) from *Trip Generation Manual* , published by the Institute of Transportation Engineers (ITE).
[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.
[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual).*
[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mized-use project, manual adjustments must be made
[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.
[6]Person-Trips
*Indicates computaton that has been rounded to the nearest whole number.
Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

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

Land Use	Table 7-P (D) Entering Trips			Table 7-P (O) Exiting Trips		
	Veh. Occ.[4]	Vehicle Trips	Person-Trips*	Veh. Occ.[4]	Vehicle Trips	Person-Trips*
Office	1.1	0	0	1.1	0	0
Retail	1.1	96	106	1.1	102	112
Restaurant	1.1	128	141	1.1	116	128
Cinema/Entertainment	1.1	0	0	1.1	0	0
Residential	1.1	0	0	1.1	0	0
Hotel	1.1	0	0	1.1	0	0

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	2		33	4	29	6
Restaurant	4	52		10	23	9
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		8	3	0	0	0
Retail	0		41	0	0	0
Restaurant	0	53		0	0	0
Cinema/Entertainment	0	4	4		0	0
Residential	0	11	20	0		0
Hotel	0	2	7	0	0	

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

Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	% Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	52	54	106	49	0	0
Restaurant	33	108	141	98	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[2]	0	0	0	0	0	0

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

Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	% Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	33	79	112	72	0	0
Restaurant	52	76	128	69	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[2]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.
[2]Person-Trips
[3]Total estimate for all other land uses at mixed use development site is not subject to internal capture computations in this estimator.
*Indicates computation that has been rounded to the nearest whole number.

Internal Capture Reduction Calculations

Methodology for A.M. Peak Hour and P.M. Peak Hour
based on the *Trip Generation Handbook* , 3rd Edition, published by the Institute of Transportation Engineers

Methodology for Daily
based on the average of the Unconstrained Rates for the A.M. Peak Hour and P.M. Peak Hour

SUMMARY

GROSS TRIP GENERATION

INPUT

Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit	Enter	Exit
Office	0	0	0	0	0	0
Retail	926	926	85	67	96	102
Restaurant	1,799	1,799	91	84	128	116
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
	2,725	2,725	176	151	224	218

INTERNAL TRIPS

OUTPUT

Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit	Enter	Exit
Office	0	0	0	0	0	0
Retail	269	194	7	9	48	30
Restaurant	194	269	9	7	30	48
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
	463	463	16	16	78	78
% Reduction	17.0%		9.8%		35.3%	

EXTERNAL TRIPS

OUTPUT

Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit	Enter	Exit
Office	0	0	0	0	0	0
Retail	657	732	78	58	48	72
Restaurant	1,605	1,530	82	77	98	68
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
	2,262	2,262	160	135	146	140

Jessie Commons

Table 3 - Trip Generation (12th Edition): E Pod Industrial

Land Use	Intensity	Daily			AM Peak Hour			PM Peak Hour		
		Total	In	Out	Total	In	Out	Total	In	Out
110 General Light Industrial	300,000 s.f.	1,080	540	540	144	124	20	147	35	112
Total Net New External Trips: East Pod		**1,080**	**540**	**540**	**144**	**124**	**20**	**147**	**35**	**112**

Jessie Commons TIA Area Approved Development Assumptions					
Adjacent Project Name	Location	Uses	Committed Improvements at Study Intersections	Occupancy Assumptions	
				Existing Occupancy	2030 Study Year Occupancy
Aqualine	West of NC 55 at Pristine Water Drive	280 mid-rise apts., 50k SF movie theater, 50k SF fitness club, 35k SF supermarket, 15k SF parmacy	None at study intersections	0%	100%
Veridea East Village	Along NC 55 north of NC 55 Business/Technology Drive	320 single-family, 770 low-rise, 1,500 mid-rise, ~166k SF retail, 18k SF office, 2,400-student community college	Imps. at US 1/NC 55 Ramps	0%	100%
NCC Phase 1	Northwest of NC 540 at Veridea Parkway	504-bed hospital, 75-bed behvioral health, 210k SF POB, 350k SF MOB, 150-room Ronald McDonald House	None at study intersections	0%	50%

Appendix B:
Traffic Count Data

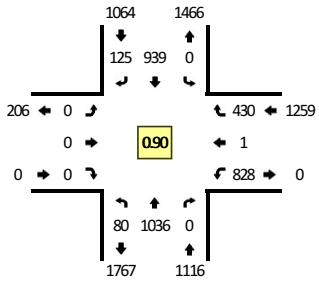
Type of peak hour being reported: Intersection Peak

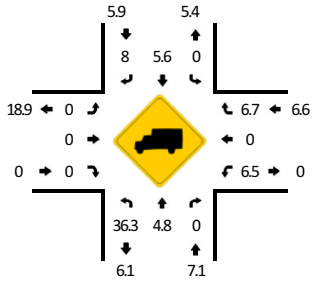
Method for determining peak hour: Total Entering Volume

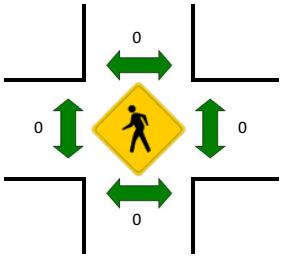
LOCATION: NC 55 -- US 1 SB Ramps
CITY/STATE: Apex, NC

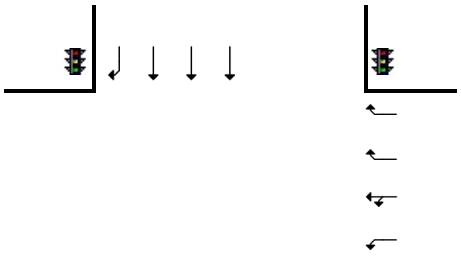
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DATE: Tue, May 20 2025

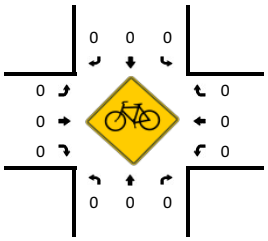
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

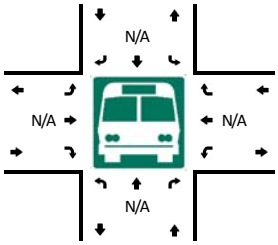


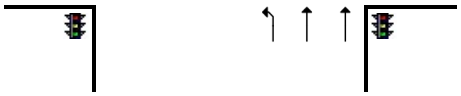


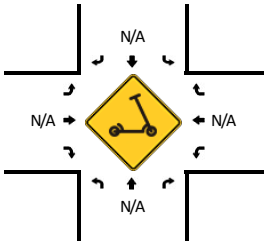












15-Min Count Period Beginning At	NC 55 (Northbound)				NC 55 (Southbound)				US 1 SB Ramps (Eastbound)				US 1 SB Ramps (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	15	273	0	0	0	208	31	0	0	0	0	0	167	0	73	0	767	
7:15 AM	17	231	0	0	0	215	36	0	0	0	0	0	228	1	99	0	827	
7:30 AM	20	261	0	0	0	257	24	0	0	0	0	0	204	0	109	0	875	
7:45 AM	21	280	0	0	0	245	41	0	0	0	0	0	242	0	122	0	951	3420
8:00 AM	22	264	0	0	0	222	24	0	0	0	0	0	154	0	100	0	786	3439
8:15 AM	23	202	0	0	0	215	34	0	0	0	0	0	193	0	88	0	755	3367
8:30 AM	23	256	0	0	0	195	32	0	0	0	0	0	170	1	94	0	771	3263
8:45 AM	21	265	0	0	0	217	23	0	0	0	0	0	200	1	117	0	844	3156

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	84	1120	0	0	0	980	164	0	0	0	0	0	968	0	488	0	3804
Heavy Trucks	8	76	0		0	72	20		0	0	0		48	0	28		252
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 1/30/2026 9:50 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

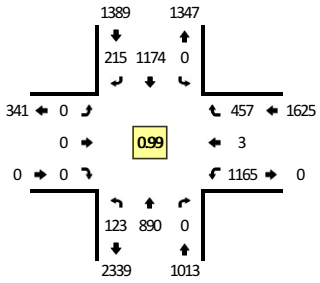
Type of peak hour being reported: Intersection Peak

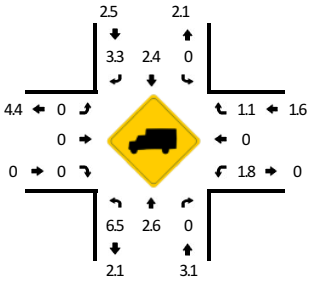
Method for determining peak hour: Total Entering Volume

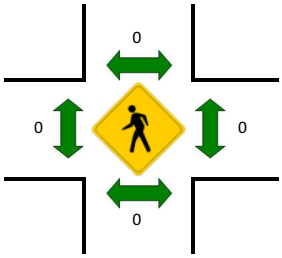
LOCATION: NC 55 -- US 1 SB Ramps
CITY/STATE: Apex, NC

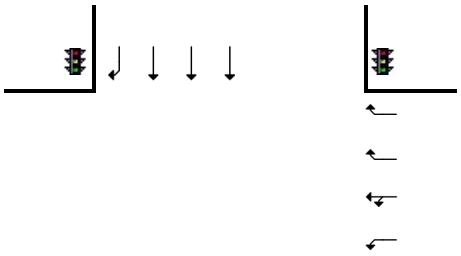
QC JOB #: 17434802
DATE: Tue, May 20 2025

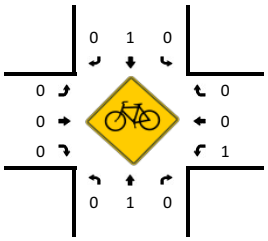
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

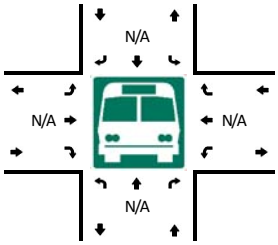




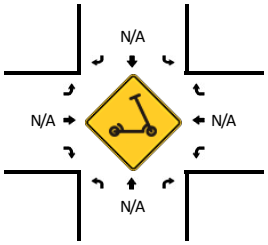












15-Min Count Period Beginning At	NC 55 (Northbound)				NC 55 (Southbound)				US 1 SB Ramps (Eastbound)				US 1 SB Ramps (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	27	191	0	0	0	268	45	0	0	0	0	0	307	0	116	0	954	
4:15 PM	23	194	0	0	0	282	48	0	0	0	0	0	287	0	106	0	940	
4:30 PM	28	190	0	1	0	307	44	0	0	0	0	0	311	0	95	0	976	
4:45 PM	28	194	0	0	0	313	57	0	0	0	0	0	297	0	129	0	1018	3888
5:00 PM	31	227	0	0	0	289	48	0	0	0	0	0	304	0	103	0	1002	3936
5:15 PM	37	257	0	0	0	280	59	0	0	0	0	0	272	1	113	0	1019	4015
5:30 PM	27	212	0	0	0	292	51	0	0	0	0	0	292	2	112	0	988	4027
5:45 PM	25	184	0	2	0	272	42	0	0	0	0	0	278	0	120	0	923	3932

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	148	1028	0	0	0	1120	236	0	0	0	0	0	1088	4	452	0	4076
Heavy Trucks	8	52	0		0	16	8		0	0	0		20	0	8		112
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	4	0		0	0	0		0	0	0		4
Scooters																	

Comments:

Report generated on 1/30/2026 9:50 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

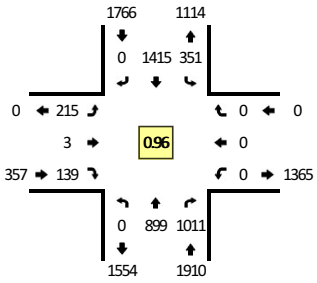
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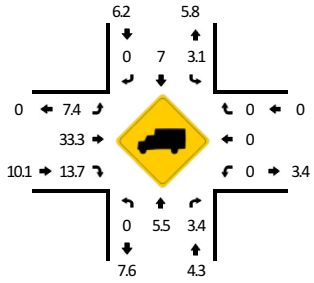
Method for determining peak hour: Total Entering Volume

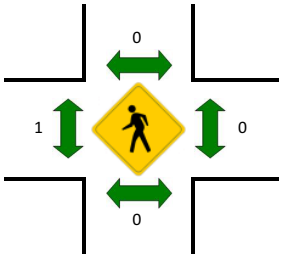
LOCATION: NC 55 -- US 1 NB Ramps
CITY/STATE: Apex, NC

QC JOB #: 17434803
DATE: Tue, May 20 2025

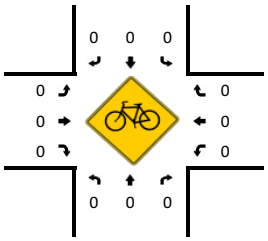
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

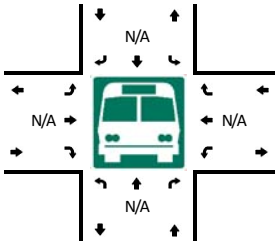


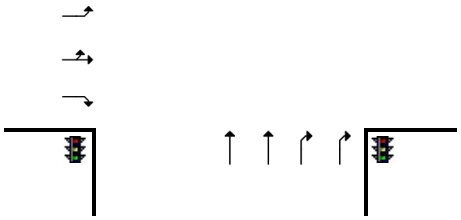


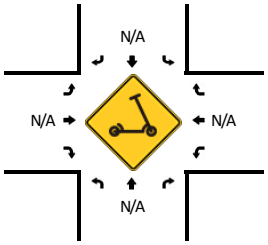












15-Min Count Period Beginning At	NC 55 (Northbound)				NC 55 (Southbound)				US 1 NB Ramps (Eastbound)				US 1 NB Ramps (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	241	298	0	76	294	0	0	41	1	34	0	0	0	0	0	985	
7:15 AM	0	208	270	0	100	349	0	0	44	0	28	0	0	0	0	0	999	
7:30 AM	0	227	257	0	99	371	0	0	49	2	41	0	0	0	0	0	1046	
7:45 AM	0	223	186	0	76	401	0	0	81	0	36	0	0	0	0	0	1003	4033
8:00 AM	0	229	198	0	76	303	0	0	48	1	42	0	0	0	0	0	897	3945
8:15 AM	0	194	233	0	108	301	0	0	44	0	30	0	0	0	0	0	910	3856
8:30 AM	0	247	276	0	54	317	0	0	28	0	30	0	0	0	0	0	952	3762
8:45 AM	0	264	239	0	96	330	0	0	36	0	32	0	0	0	0	0	997	3756

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	908	1028	0	396	1484	0	0	196	8	164	0	0	0	0	0	4184
Heavy Trucks	0	36	32		8	116	0		8	0	16		0	0	0		216
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 1/30/2026 9:50 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

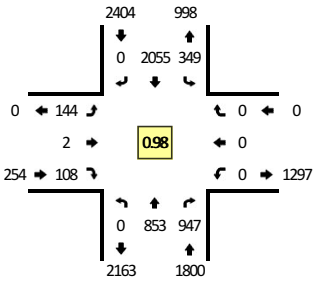
Type of peak hour being reported: Intersection Peak

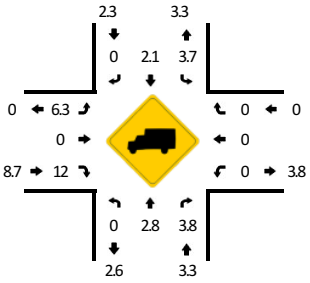
Method for determining peak hour: Total Entering Volume

LOCATION: NC 55 -- US 1 NB Ramps
CITY/STATE: Apex, NC

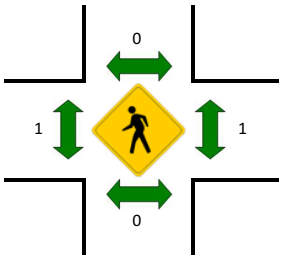
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Peak 15-Min: 4:45 PM -- 5:00 PM

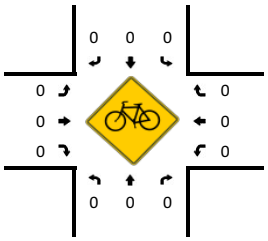


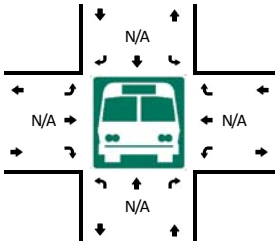


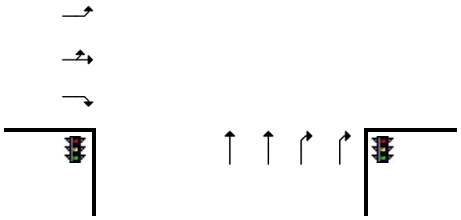
TRUE DATA TO IMPROVE MOBILITY

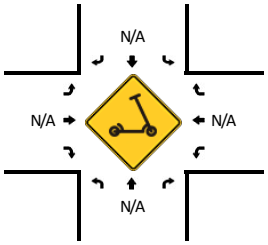












15-Min Count Period Beginning At	NC 55 (Northbound)				NC 55 (Southbound)				US 1 NB Ramps (Eastbound)				US 1 NB Ramps (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	189	245	0	82	497	0	0	27	0	16	0	0	0	0	0	1056	
4:15 PM	0	193	230	0	66	515	0	0	26	0	24	0	0	0	0	0	1054	
4:30 PM	0	187	245	0	86	547	0	0	34	0	29	0	0	0	0	0	1128	
4:45 PM	0	201	248	0	88	537	0	0	29	1	30	0	0	0	0	0	1134	4372
5:00 PM	0	228	194	0	90	501	0	1	44	1	16	0	0	0	0	0	1075	4391
5:15 PM	0	237	260	0	84	470	0	0	37	0	33	0	0	0	0	0	1121	4458
5:30 PM	0	201	255	0	94	491	0	0	26	2	22	0	0	0	0	0	1091	4421
5:45 PM	0	193	253	0	99	470	0	0	28	0	26	0	0	0	0	0	1069	4356

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	804	992	0	352	2148	0	0	116	4	120	0	0	0	0	0	4536
Heavy Trucks	0	12	36		16	52	0		0	0	20		0	0	0		136
Buses																	
Pedestrians		0				0				0				4			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 1/30/2026 9:50 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Appendix C:
Approved Development Data

Traffic Impact Analysis

Aquiline

Apex, NC

Prepared for:

Aquiline Apex Owner, LLC

Kimley»Horn

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Traffic Impact Analysis for

Aquiline

Apex, North Carolina

Prepared for:

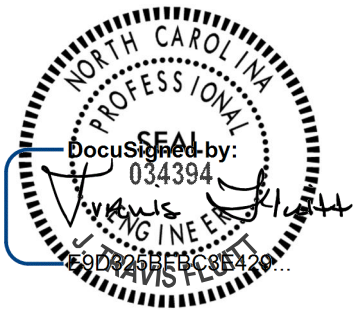
Aquiline Apex Owner LLC

New York, NY

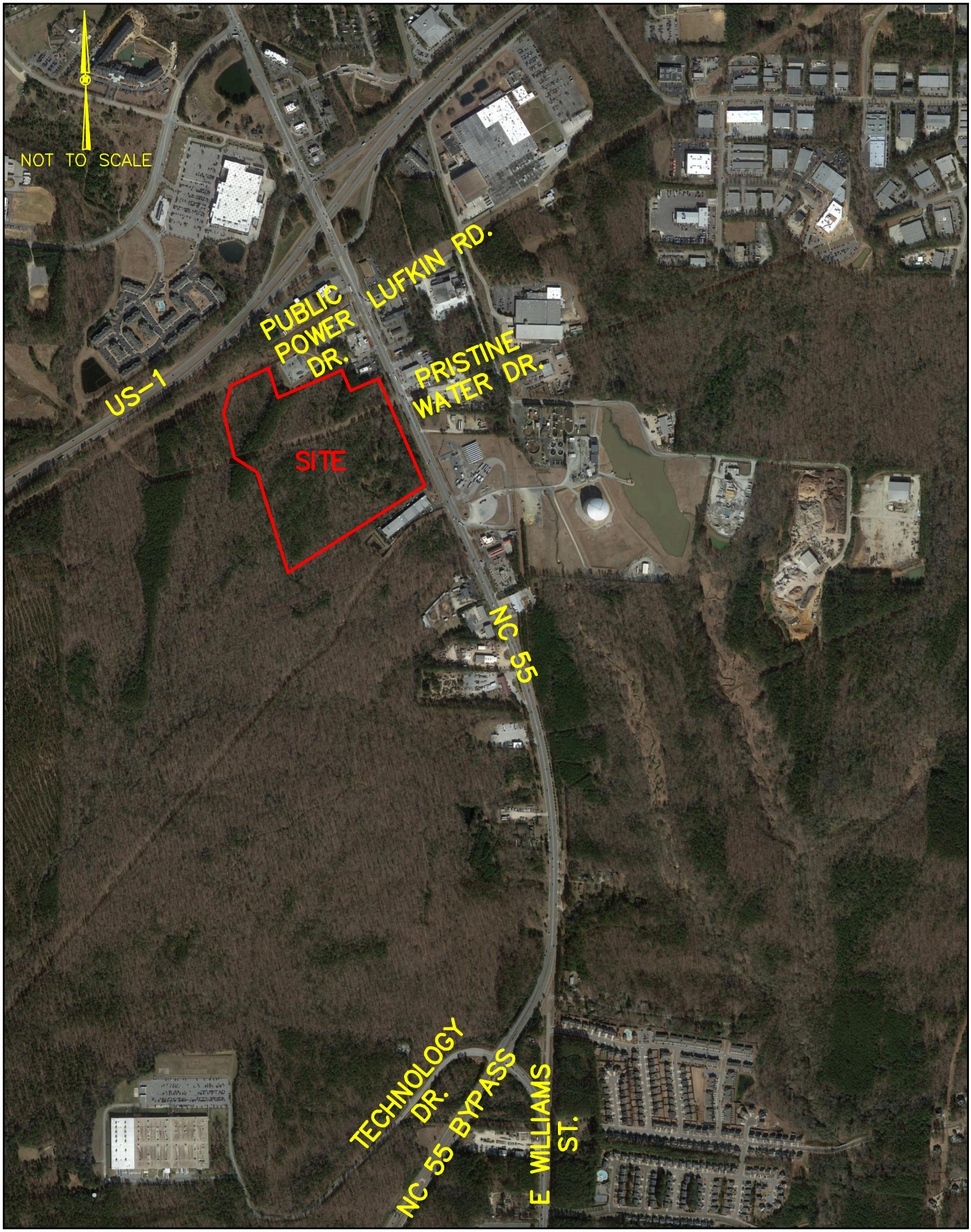
Prepared by:

Kimley-Horn and Associates, Inc.

NC License #F-0102
421 Fayetteville Street, Suite 600
Raleigh, NC 27601
(919) 677-2000

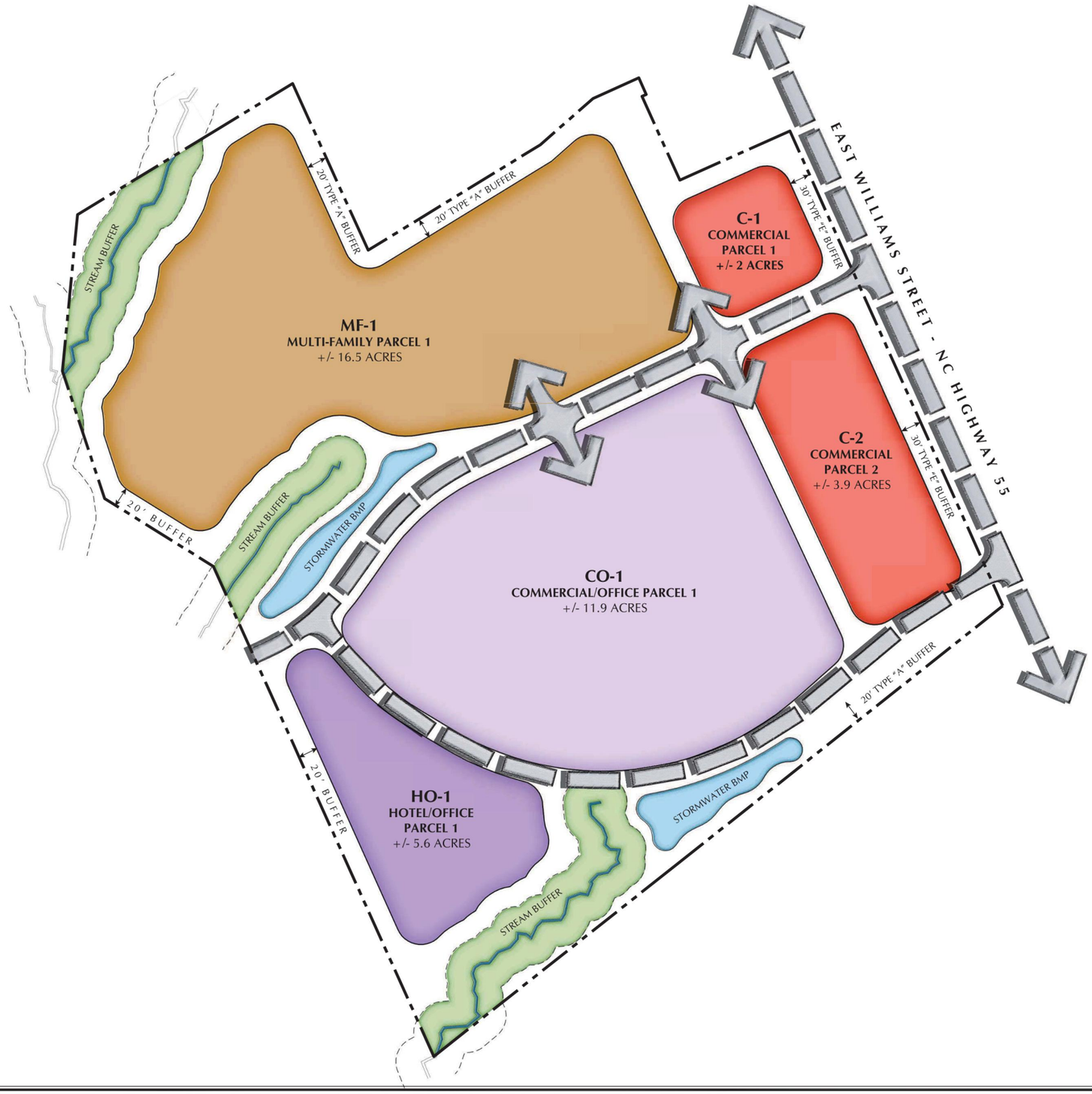


March 2020
014124000



Kimley»Horn	AQUILINE DEVELOPMENT APEX, NC TRAFFIC IMPACT ANALYSIS	SITE LOCATION	FIGURE 2.1

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY KIMLEY-HORN AND ASSOCIATES, INC. SHALL BE WITHOUT LIABILITY TO KIMLEY-HORN AND ASSOCIATES, INC.



LEGEND

- COMMERCIAL (-/- 5.9 ACRES)
- MULTI-FAMILY RESIDENTIAL (+/- 16.5 ACRES)
- COMMERICAL/OFFICE (+/- 11.9 ACRES)
- HOTEL/OFFICE (+/- 5.6 ACRES)
- OPEN SPACE/BMP AREA (+/- 4.2 ACRES)

NOTES:

- THERE SHALL BE A MINIMUM 10' TYPE C BUFFER BETWEEN INTERNAL USES.

- FINAL WETLAND AND BUFFER DETERMINATIONS SHALL BE COMPLETED PRIOR TO THE SUBMITTAL OF THE FIRST SITE OR SUBDIVISION PLAN.

- WATER SERVICE SHALL BE MADE BY CONNECTION TO THE EXISTING MAIN IN NC - 55. A 12" MAIN SHALL BE EXTENDED ALONG THE CENTRAL SPINE ROAD TO THE WEST.

- SEWER SERVICE SHALL BE PROVIDED BY A SINGLE TEMPORARY PUMP STATION THAT CAN BE REMOVED WITH DEVELOPMENT TO THE WEST. FINAL LOCATION SHALL ENSURE NO DEEP GRAVITY SEWER ON-SITE. FINAL FORCE MAIN ROUTING SHALL BE DETERMINED WITH THE FIRST SITE PLAN SUBMITTAL.

WITHERS & RAVENEL
ENGINEERS | PLANNERS | SURVEYORS
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PRELIMINARY LAYOUT PLAN

AQUILINE PROPERTY
Wake County
Town of Apex
North Carolina

No.	Revision	Date	By

Designer: W&R
Drawn By: CJL
Checked By: W&R
Scale: 1" = 100'
Date: 08/16/24
Project No.: 019090584.1

Sheet No.: 2

FIGURE 2.2

CONCEPTUAL SITE PLAN

AQUILINE DEVELOPMENT
APEX, NC
TRAFFIC IMPACT ANALYSIS

Kimley»Horn

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY KIMLEY-HORN AND ASSOCIATES, INC. SHALL BE WITHOUT LIABILITY TO KIMLEY-HORN AND ASSOCIATES, INC.

K:\RAL_TPTO_Traffic\014124000 Aquiline TIA\T5 - Report-Submittals\Figures\Aquiline TIA Figures.dwg

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3.0 Traffic Generation

The traffic generation potential of the proposed development was determined using the traffic generation rates published in *Trip Generation* (Institute of Transportation Engineers, Tenth Edition, 2017) and confirmed with NCDOT and the Town of Apex. The project is proposed to be constructed in two phases.

Phase 1 of the development is planned on the northern portion of the site and was assumed to include approximately 280 apartments and a 15,000 SF pharmacy with drive-through window.

As shown in Table 3.1, Phase 1 of the proposed development has the potential to generate 150 new trips during the AM peak hour and 155 new trips during the PM peak hour on a typical weekday.

Table 3.1
ITE Traffic Generation (Vehicles) – Phase 1

Land Use Code	Land Use	Intensity		AM Peak Hour		PM Peak Hour	
				In	Out	In	Out
221	Multifamily Housing (Mid-Rise)	280	d.u.	24	70	73	46
881	Pharmacy/Drugstore with Drive-Through Window	15,000	s.f.	31	27	77	77
Subtotal				**55**	**97**	**150**	**123**
Internal Capture				***1***	***1***	***28***	***28***
Pass-by Capture				***0***	***0***	***34***	***28***
Net New External Trips – Phase 1				**54**	**96**	**88**	**67**

Full build-out of the development is envisioned to include additional commercial space on the southern portion of the site and was assumed to include a 50,000 SF multiplex movie theater, a 50,000 SF health/fitness club, and a 35,000 SF supermarket in addition to uses assumed in Phase 1.

As shown in Table 3.2, at Full build-out the proposed development has the potential to generate 350 new trips during the AM peak hour and 708 new trips during the PM peak hour on a typical weekday.

Table 3.2
ITE Traffic Generation (Vehicles) – Full Build-out

Land Use Code	Land Use	Intensity		AM Peak Hour		PM Peak Hour	
				In	Out	In	Out
221	Multifamily Housing (Mid-Rise)	280	d.u.	24	70	73	46
445	Multiplex Movie Theater	50,000	s.f.	-	-	153	93
492	Health/Fitness Club	50,000	s.f.	34	32	90	68
850	Supermarket	35,000	s.f.	80	54	182	175
881	Pharmacy/Drugstore with Drive-Through Window	15,000	s.f.	31	27	77	77
Subtotal				**169**	**183**	**575**	**459**
Internal Capture				***1***	***1***	***76***	***76***
Pass-by Capture				***0***	***0***	***91***	***83***
Net New External Trips – Full Build-out				**168**	**182**	**408**	**300**

Internally captured trips are trips that begin and end on the project site and do not access the external roadway network. Pass-by trips are trips already on the roadway network that will make a trip to the site as they pass by on the adjacent street and are assigned based on existing traffic patterns. ITE methodology was used to determine internal capture and pass-by capture for both Phase 1 and Full build-out for this site and confirmed with the Town and NCDOT.

Detailed trip generation calculations are included in the Appendix of this report.

4.0 Site Traffic Distribution

The projected site-generated trips were assigned to the surrounding roadway network. The directional distribution and assignment for this development were based on a review of surrounding land uses and existing traffic patterns. Since additional site access is proposed with each phase, separate trip assignments were developed for the residential uses, the commercial portion of Phase 1, and the commercial portion at Full build-out.

The following overall distribution was used for the residential portion of the development:

- 30% to/from the northeast on US 1
- 25% to/from the south on NC 55
- 20% to/from the southwest on US 1
- 15% to/from the north on E. Williams Street
- 10% to/from the southeast on E. Williams Street

The following distribution was used for the commercial uses in Phase 1:

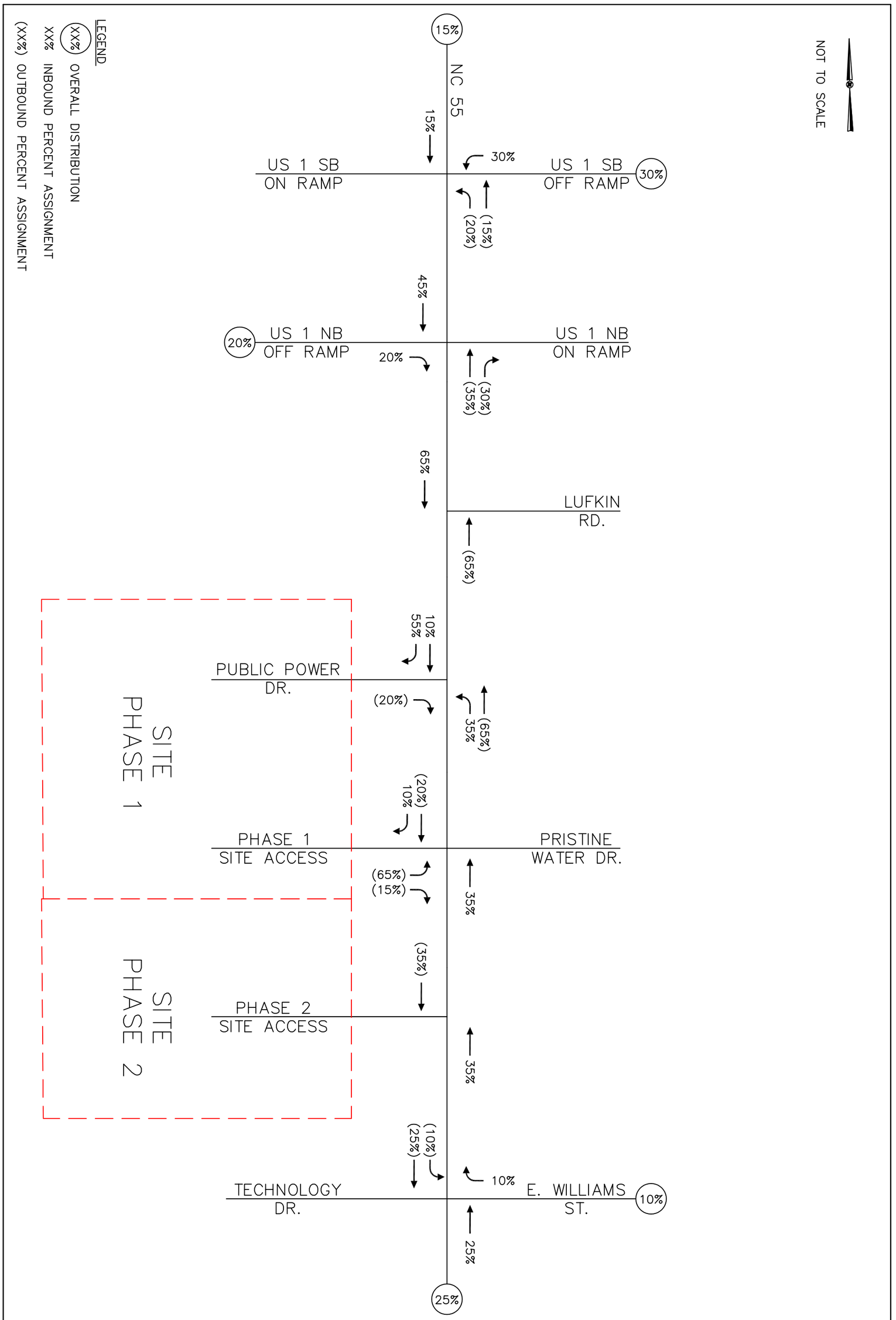
- 35% to/from the southeast on E. Williams Street
- 20% to/from the north on E. Williams Street
- 20% to/from the northeast on US 1
- 15% to/from the south on NC 55
- 10% to/from the southwest on US 1

The following distribution was used for the commercial uses at Full build-out (including the pharmacy constructed in Phase 1):

- 25% to/from the southeast on E. Williams Street
- 25% to/from the south on NC 55
- 20% to/from the northeast on US 1
- 20% to/from the north on E. Williams Street
- 10% to/from the southwest on US 1

Figure 4.1 shows the residential site traffic distribution and percent assignment, while **Figures 4.2** and **4.3** show the commercial site traffic distribution and percent assignment for Phase 1 and Full build-out, respectively.

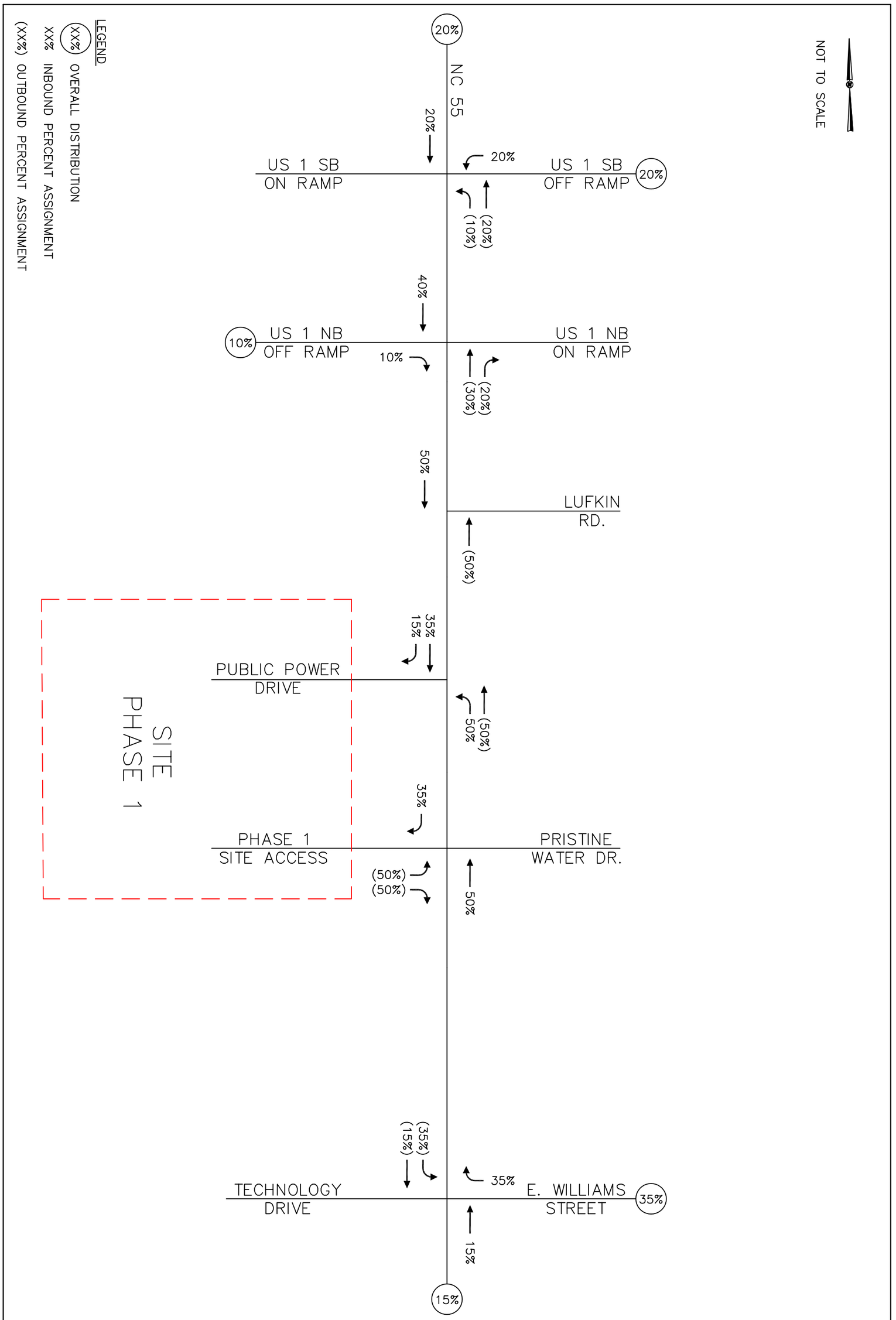
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Kimley»Horn	AQUILINE DEVELOPMENT APEX, NC TRAFFIC IMPACT ANALYSIS	SITE TRAFFIC DISTRIBUTION AND PERCENT ASSIGNMENT – RESIDENTIAL SITE TRAFFIC (PH. 1 & 2)	FIGURE 4.1

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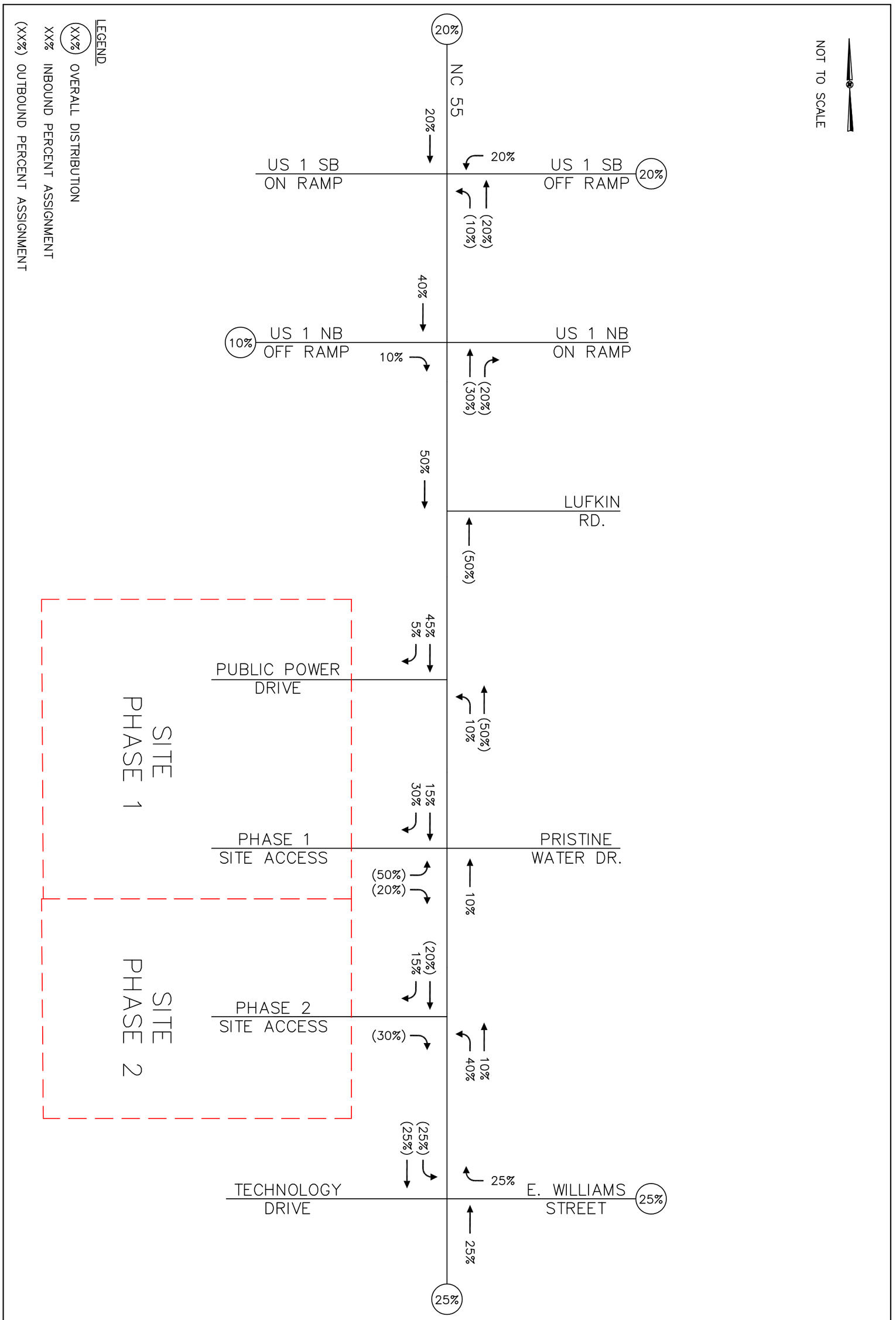
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Kimley»Horn	AQUILINE DEVELOPMENT APEX, NC TRAFFIC IMPACT ANALYSIS	SITE TRAFFIC DISTRIBUTION AND PERCENT ASSIGNMENT – PHASE 1 COMMERCIAL SITE TRAFFIC	FIGURE 4.2

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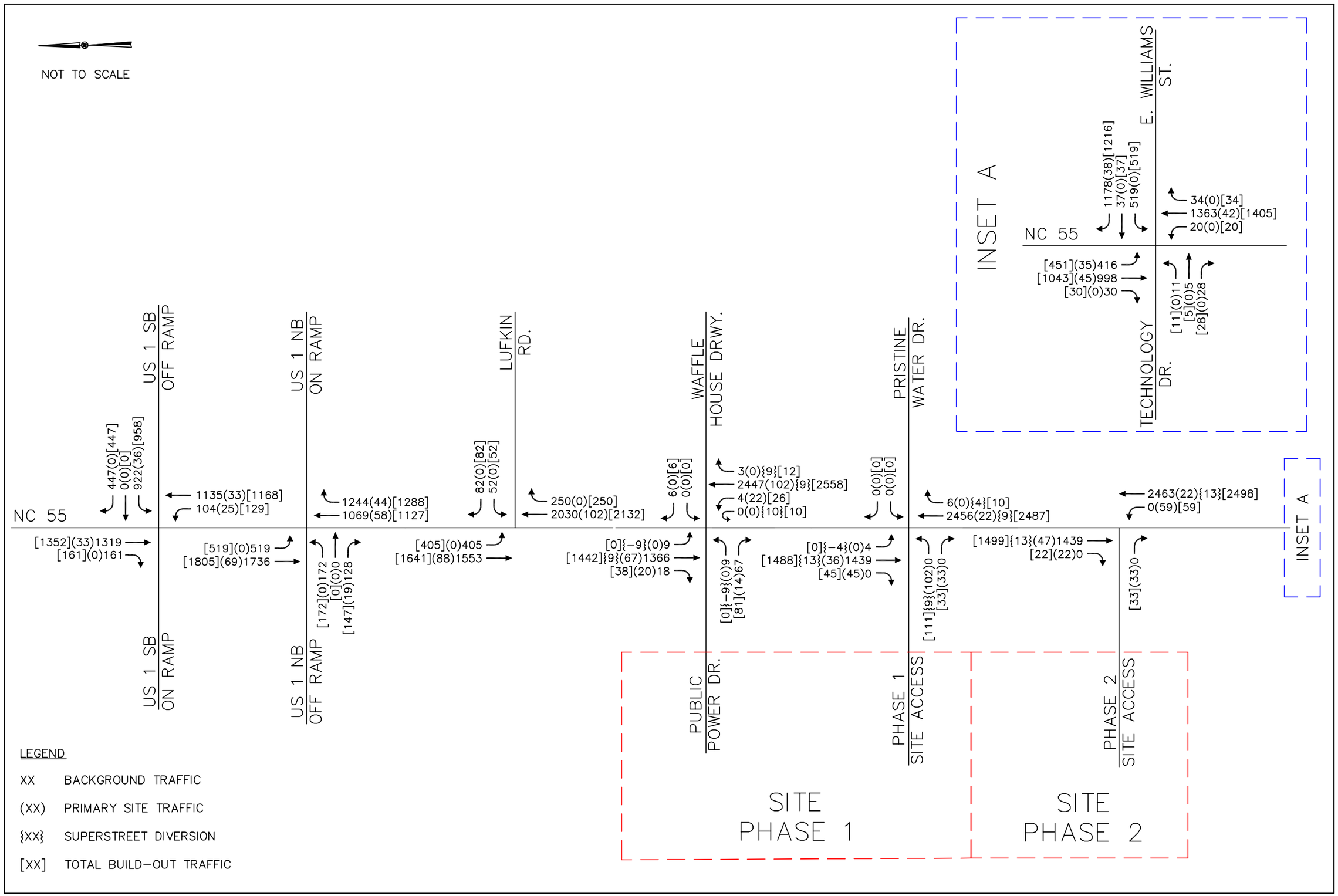
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Kimley»Horn	AQUILINE DEVELOPMENT APEX, NC TRAFFIC IMPACT ANALYSIS	SITE TRAFFIC DISTRIBUTION AND PERCENT ASSIGNMENT – FULL BUILD-OUT COMMERCIAL SITE TRAFFIC	FIGURE 4.3

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NOT TO SCALE



LEGEND

XX BACKGROUND TRAFFIC

(XX) PRIMARY SITE TRAFFIC

{XX} SUPERSTREET DIVERSION

[XX] TOTAL BUILD-OUT TRAFFIC

FIGURE 5.4

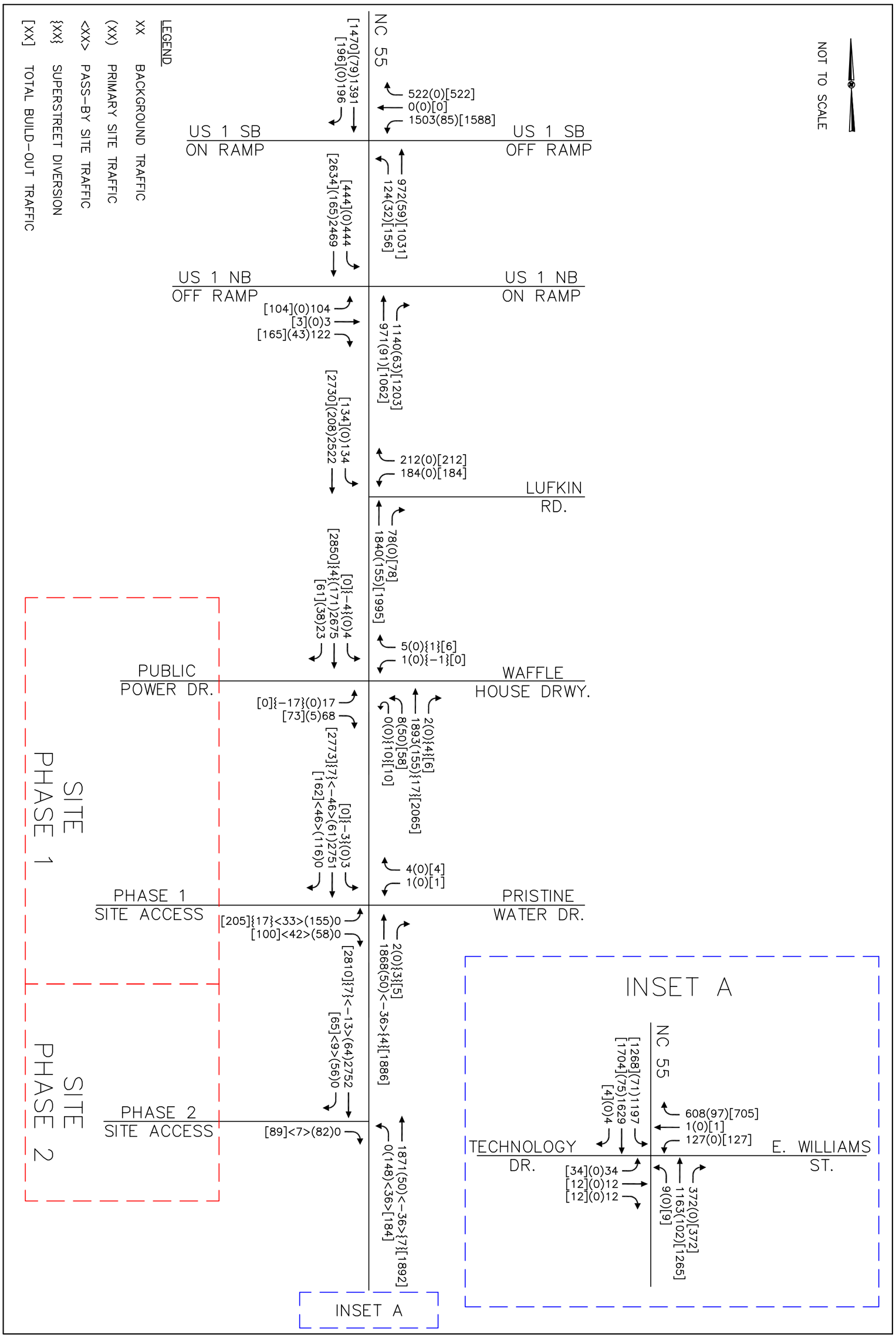
PROJECTED (2025) FULL BUILD
BUILD-OUT AM PEAK HOUR
TRAFFIC VOLUMES

AQUILINE DEVELOPMENT
APEX, NC
TRAFFIC IMPACT ANALYSIS

Kimley»Horn

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Kimley»Horn	AQUILINE DEVELOPMENT APEX, NC TRAFFIC IMPACT ANALYSIS	PROJECTED (2025) FULL BUILD BUILD-OUT PM PEAK HOUR TRAFFIC VOLUMES	FIGURE 5.5

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Veridea Phase 1 - East Village

Table 1 - Trip Generation: Full Build

Land Use	Intensity		Daily			AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out	Total	In	Out
210 Single Family Detached Housing	320	d.u.	2,942	1,471	1,471	215	56	159	297	187	110
220 Multifamily Housing (Low-Rise, Not Close to Rail)	770	d.u.	5,012	2,506	2,506	262	63	199	352	222	130
221 Multifamily Housing (Mid-Rise, Not Close to Rail)	1,500	d.u.	7,110	3,555	3,555	648	149	499	585	357	228
540 Community College	2,400	students	4,840	2,420	2,420	494	400	94	447	250	197
710 General Office Building	18,000	s.f.	262	131	131	38	33	5	40	6	34
820 Shopping Plaza (>150k)	165,860	s.f.	10,194	5,097	5,097	231	143	88	812	390	422
Subtotal			**30,360**	**15,180**	**15,180**	**1,888**	**844**	**1,044**	**2,533**	**1,412**	**1,121**
Internal Capture											
210 Single Family Detached Housing			341	199	142	3	1	2	37	27	10
220 Multifamily Housing (Low-Rise, Not Close to Rail)			582	340	242	3	1	2	44	32	12
221 Multifamily Housing (Mid-Rise, Not Close to Rail)			826	483	343	9	3	6	71	51	20
710 General Office Building			95	62	33	3	2	1	13	5	8
820 Shopping Plaza (>150k)			1,761	719	1,042	16	10	6	158	46	112
Internal Capture Total			*3,605*	*1,803*	*1,802*	*34*	*17*	*17*	*323*	*161*	*162*
Total External Trips			**26,755**	**13,377**	**13,378**	**1,854**	**827**	**1,027**	**2,210**	**1,251**	**959**
Pass-By Traffic (ITE)	AM	PM									
820 Shopping Plaza (>150k)	0%	29%	*2,386*	*1,193*	*1,193*	*0*	*0*	*0*	*190*	*100*	*90*
Total Net New External Trips			**24,369**	**12,184**	**12,185**	**1,854**	**827**	**1,027**	**2,020**	**1,151**	**869**

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INTERSECTION ANALYSIS SHEET

Project:	**Veridea Phase 1 - East Village**
Location:	**Apex, NC**
Ct. Date	**March 29, 2022**
Ct. Peaks	**AM: 7:30-8:30; PM: 4:45-5:45**
N/S Street:	**NC 55**
E/W Street:	**Forest Light Way/Williams Street**

	AM In	AM Out	PM In	PM Out
Residential Net New Trips:	263	847	656	426
Commercial Net New Trips:	164	86	245	246
Commercial Pass-by Trips:	0	0	100	90
Comm. College Net New Trips:	400	94	250	197
Annual Growth Rate:	0.0%	**Existing Year:**		2022
Growth Factor:	0	**Buildout Year:**		2030

AM PEAK HOUR
AM PHF = 0.95

Description	Forest Light Way **Eastbound**			Williams Street **Westbound**			NC 55 **Northbound**			NC 55 **Southbound**		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Residential Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	5%	30%	10%	0%	0%	0%	0%
Inbound Project Traffic	0	0	0	0	0	13	79	26	0	0	0	0
Percent Assignment Outbound	0%	0%	30%	0%	0%	0%	0%	15%	5%	0%	30%	0%
Outbound Project Traffic	0	0	254	0	0	0	0	127	42	0	254	0
Residential Project Traffic	0	0	254	0	0	13	79	153	42	0	254	0
Commercial Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	20%	20%	10%	0%	0%	0%	10%
Inbound Project Traffic	0	0	0	0	0	33	33	16	0	0	0	16
Percent Assignment Outbound	0%	0%	15%	0%	0%	0%	0%	30%	0%	10%	45%	0%
Outbound Project Traffic	0	0	13	0	0	0	0	26	0	9	39	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Total Pass-By Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Commercial Project Traffic	0	0	13	0	0	33	33	42	0	9	39	16
Community College Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	10%	35%	0%	0%	0%	0%	40%
Inbound Project Traffic	0	0	0	0	0	40	140	0	0	0	0	160
Percent Assignment Outbound	0%	0%	75%	0%	0%	0%	0%	30%	10%	0%	0%	0%
Outbound Project Traffic	0	0	71	0	0	0	0	28	9	0	0	0
Comm. College Project Traffic	0	0	71	0	0	40	140	28	9	0	0	160
Total Project Traffic	0	0	338	0	0	86	252	223	51	9	293	176

PM PEAK HOUR

Description	Forest Light Way **Eastbound**			Williams Street **Westbound**			NC 55 **Northbound**			NC 55 **Southbound**		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Residential Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	5%	30%	10%	0%	0%	0%	0%
Inbound Project Traffic	0	0	0	0	0	33	197	66	0	0	0	0
Percent Assignment Outbound	0%	0%	30%	0%	0%	0%	0%	15%	5%	0%	30%	0%
Outbound Project Traffic	0	0	128	0	0	0	0	64	21	0	128	0
Residential Project Traffic	0	0	128	0	0	33	197	130	21	0	128	0
Commercial Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	20%	20%	10%	0%	0%	0%	10%
Inbound Project Traffic	0	0	0	0	0	49	49	25	0	0	0	25
Percent Assignment Outbound	0%	0%	15%	0%	0%	0%	0%	30%	0%	10%	45%	0%
Outbound Project Traffic	0	0	37	0	0	0	0	74	0	25	111	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	-40	0	0	-60	0
Pass-By Capture Assignment	0	0	27	0	0	0	25	51	0	0	63	0
Total Pass-By Traffic	0	0	27	0	0	0	25	11	0	0	3	0
Commercial Project Traffic	0	0	64	0	0	49	74	110	0	25	114	25
Community College Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	10%	35%	0%	0%	0%	0%	40%
Inbound Project Traffic	0	0	0	0	0	25	88	0	0	0	0	100
Percent Assignment Outbound	0%	0%	75%	0%	0%	0%	0%	30%	10%	0%	0%	0%
Outbound Project Traffic	0	0	148	0	0	0	0	59	20	0	0	0
Comm. College Project Traffic	0	0	148	0	0	25	88	59	20	0	0	100
Total Project Traffic	0	0	340	0	0	107	359	299	41	25	242	125

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INTERSECTION ANALYSIS SHEET

Project:	**Veridea Phase 1 - East Village**
Location:	**Apex, NC**
Ct. Date	**March 29, 2022**
Ct. Peaks	**AM: 7:30-8:30; PM: 4:45-5:45**
N/S Street:	**NC 55**
E/W Street:	**U-Turn North of Williams**

	AM In	AM Out	PM In	PM Out
Residential Net New Trips:	263	847	656	426
Commercial Net New Trips:	164	86	245	246
Commercial Pass-by Trips:	0	0	100	90
Comm. College Net New Trips:	400	94	250	197
Annual Growth Rate:	0.0%	**Existing Year:**		2022
Growth Factor:	0	**Buildout Year:**		2030

AM PEAK HOUR
AM PHF = 0.95

Description	U-Turn North of Williams **Eastbound**			U-Turn North of Williams **Westbound**			NC 55 **Northbound**			NC 55 **Southbound**		
	Left	Through	Right	Left	Through	Right	U-Turn	Through	Right	Left	Through	Right
Residential Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	15%	0%	0%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	39	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	15%	0%	0%	30%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	127	0	0	254	0
Residential Project Traffic	0	0	0	0	0	0	0	166	0	0	254	0
Commercial Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	10%	20%	0%	0%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	16	33	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	65%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	26	0	0	56	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Total Pass-By Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Commercial Project Traffic	0	0	0	0	0	0	16	59	0	0	56	0
Community College Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%	30%	0%
Inbound Project Traffic	0	0	0	0	0	0	40	0	0	0	120	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	28	0	0	0	0
Comm. College Project Traffic	0	0	0	0	0	0	40	28	0	0	120	0
Total Project Traffic	0	0	0	0	0	0	56	253	0	0	430	0

PM PEAK HOUR

Description	U-Turn North of Williams **Eastbound**			U-Turn North of Williams **Westbound**			NC 55 **Northbound**			NC 55 **Southbound**		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Residential Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	15%	0%	0%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	98	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	15%	0%	0%	30%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	64	0	0	128	0
Residential Project Traffic	0	0	0	0	0	0	0	162	0	0	128	0
Commercial Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	10%	20%	0%	0%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	25	49	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	65%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	74	0	0	160	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	-40	0	0	-60	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	51	0	0	63	0
Total Pass-By Traffic	0	0	0	0	0	0	0	11	0	0	3	0
Commercial Project Traffic	0	0	0	0	0	0	25	134	0	0	163	0
Community College Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%	30%	0%
Inbound Project Traffic	0	0	0	0	0	0	25	0	0	0	75	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	59	0	0	0	0
Comm. College Project Traffic	0	0	0	0	0	0	25	59	0	0	75	0
Total Project Traffic	0	0	0	0	0	0	50	355	0	0	366	0

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INTERSECTION ANALYSIS SHEET

Project:	**Veridea Phase 1 - East Village**
Location:	**Apex, NC**
Ct. Date	**March 29, 2022**
Ct. Peaks	**AM: 7:30-8:30; PM: 4:45-5:45**
N/S Street:	**NC 55**
E/W Street:	**U-Turn South of Technology**

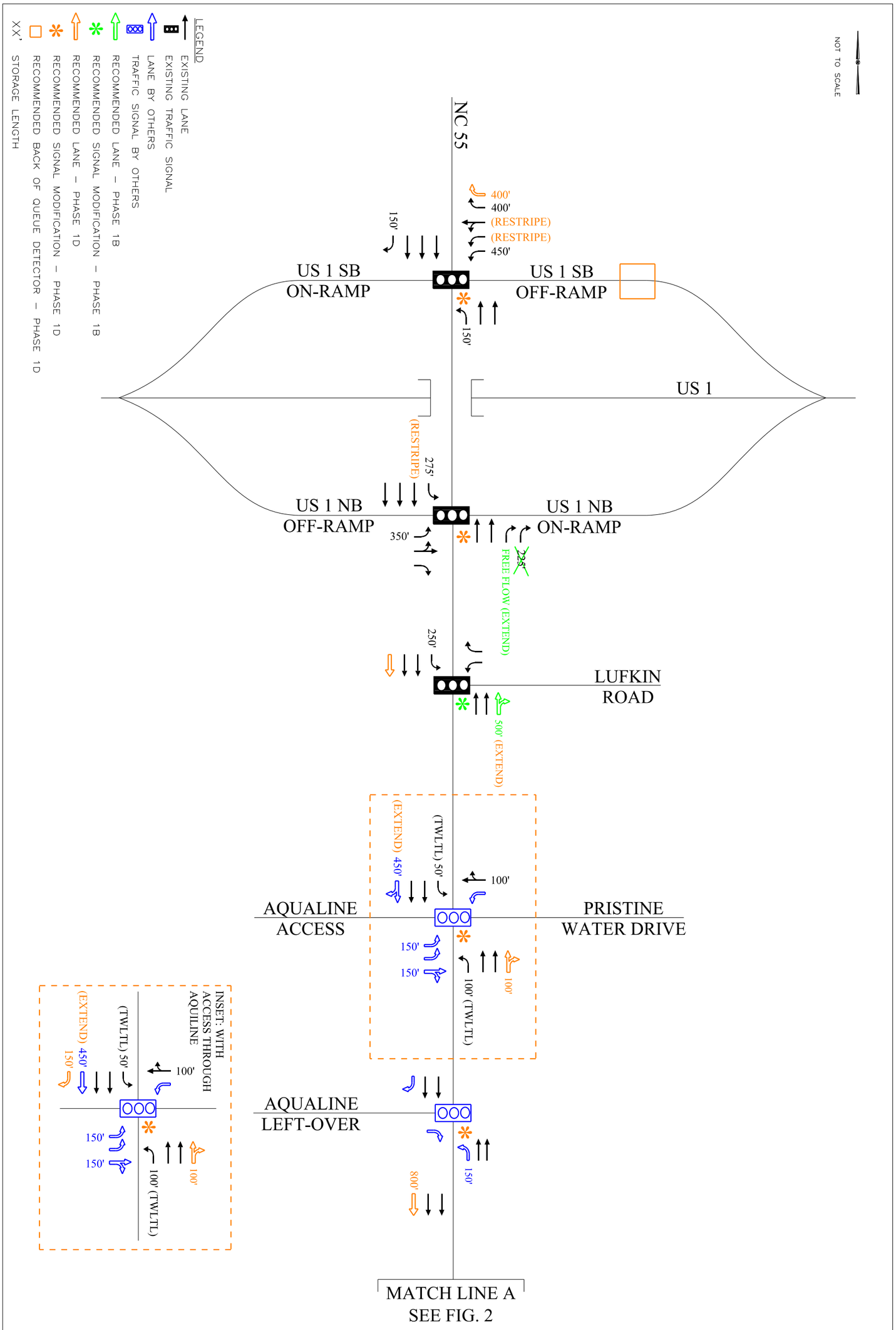
	AM In	AM Out	PM In	PM Out
Residential Net New Trips:	263	847	656	426
Commercial Net New Trips:	164	86	245	246
Commercial Pass-by Trips:	0	0	100	90
Comm. College Net New Trips:	400	94	250	197
Annual Growth Rate:	0.0%	**Existing Year:**		2022
Growth Factor:	0	**Buildout Year:**		2030

AM PEAK HOUR
AM PHF = 0.95

Description	U-Turn South of Technology **Eastbound**			U-Turn South of Technology **Westbound**			NC 55 **Northbound**			NC 55 **Southbound**		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	U-Turn	Through	Right
Residential Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	40%	0%	0%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	105	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	40%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	0	0	169	339	0
Residential Project Traffic	0	0	0	0	0	0	0	105	0	169	339	0
Commercial Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	49	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	30%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	0	0	26	26	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Total Pass-By Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Commercial Project Traffic	0	0	0	0	0	0	0	49	0	26	26	0
Community College Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	40%	0%	0%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	160	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	40%	35%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	0	0	38	33	0
Comm. College Project Traffic	0	0	0	0	0	0	0	160	0	38	33	0
Total Project Traffic	0	0	0	0	0	0	0	314	0	233	398	0

PM PEAK HOUR

Description	U-Turn South of Technology **Eastbound**			U-Turn South of Technology **Westbound**			NC 55 **Northbound**			NC 55 **Southbound**		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	U-Turn	Through	Right
Residential Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	40%	0%	0%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	262	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	40%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	0	0	85	170	0
Residential Project Traffic	0	0	0	0	0	0	0	262	0	85	170	0
Commercial Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	74	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	30%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	0	0	74	74	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	-40	0	0	-60	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	40	0	36	54	0
Total Pass-By Traffic	0	0	0	0	0	0	0	0	0	36	-6	0
Commercial Project Traffic	0	0	0	0	0	0	0	74	0	110	68	0
Community College Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	40%	0%	0%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	100	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	40%	35%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	0	0	79	69	0
Comm. College Project Traffic	0	0	0	0	0	0	0	100	0	79	69	0
Total Project Traffic	0	0	0	0	0	0	0	436	0	274	307	0



Kimley»Horn	VERIDEA PHASE 1 APEX, NC TRAFFIC IMPACT ANALYSIS	PHASING ANALYSIS COMMITTED AND RECOMMENDED ROADWAY LANEAGE (STUDY AREA NORTH)	FIGURE 1

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Updated Traffic Impact Analysis

NC Children's Hospital Phase 1

Apex, NC

Prepared for:

NC Children's

Kimley»Horn

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Updated Traffic Impact Analysis

NC Children's Hospital – Phase 1

Apex, North Carolina

Prepared for:

NC Children's

Apex, NC

Prepared by:

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December 2025

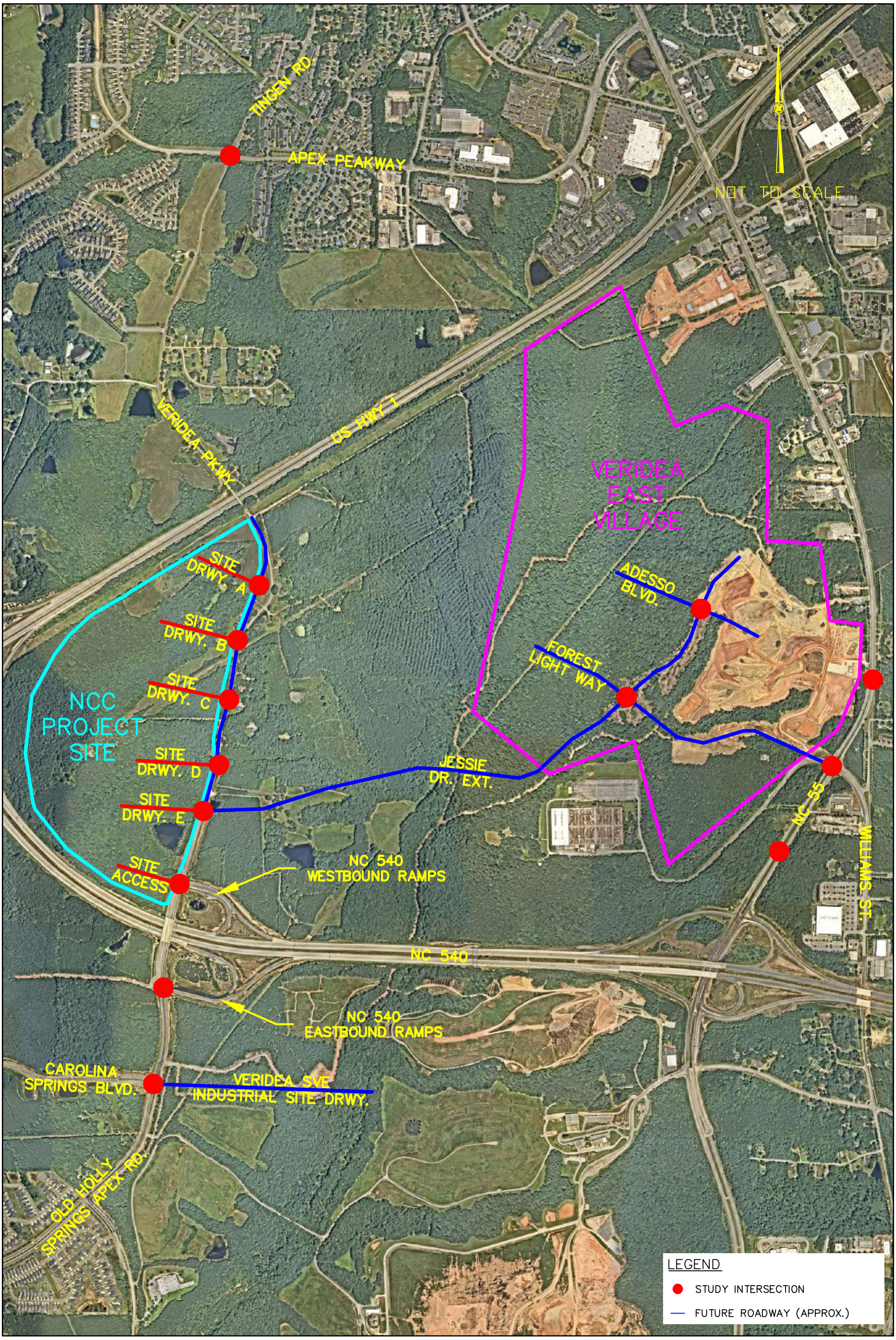
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Kimley»Horn	NORTH CAROLINA CHILDREN'S HOSPITAL APEX, NC TRAFFIC IMPACT ANALYSIS	SITE LOCATION	FIGURE 2.1

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FIGURE 2.2

CONCEPTUAL SITE PLAN

NORTH CAROLINA CHILDREN'S HOSPITAL
APEX, NC
TRAFFIC IMPACT ANALYSIS

Kimley»Horn

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY KIMLEY-HORN AND ASSOCIATES, INC. SHALL BE WITHOUT LIABILITY TO KIMLEY-HORN AND ASSOCIATES, INC.

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3.0 Traffic Generation

Trip generation calculations for this development were performed using a combination of data from the ITE *Trip Generation Manual* (Eleventh Edition, 2021) as well as alternative trip generation rates based on data collected at large medical office building facilities. For this study, traffic for the physician's office building (POB) was generated using data for the hospital land use since that space is for hospital staff and physician use only with no patients being seen in that building.

Trip generation calculations for the site are summarized below in Table 3.1.

Table 3.1
Traffic Generation (Vehicles)

Land Use Code	Land Use	Intensity		Daily	AM Peak Hour		PM Peak Hour	
				Total	In	Out	In	Out
310	Hotel: Ronald McDonald House	150	rooms	1,202	38	30	42	41
610	Hospital: Main Building	504	beds	9,296	649	253	281	571
610	Hospital: Behavioral Health	75	beds	4,020	96	38	42	85
610	Hospital: POB/Admin.	210,000	SF	4,580	206	101	104	193
720	Medical Office Building – within Hospital Campus	350,000	SF	12,330	770	180	158	472
Total New Net External Trips				**31,428**	**1,759**	**602**	**627**	**1,362**

As shown in Table 3.1, the development has the potential to generate 31,428 net new trips on a typical weekday, with 2,361 new trips during the AM peak hour and 1,989 new trips during the PM peak hour.

Detailed trip generation calculations are included in the Appendix of this report.

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4.0 Site Traffic Distribution

The projected site-generated trips were assigned to the surrounding roadway network based on a review of surrounding land uses and discussions with the Town and NCDOT. Based on the surrounding roadway network and access configurations surrounding the site, separate distributions were developed for the hospital/behavioral health/MOB uses and the Ronald McDonald House use.

The following distribution was used for hospital/behavioral health/MOB space site trips:

- 35% to/from the east on NC 540
- 35% to/from the west on NC 540
- 10% to/from the north on NC 55
- 5% to/from the south on NC 55
- 5% to/from the east on Adesso Boulevard
- 4% to/from the south on Old Holly Springs Apex Road
- 2% to/from the west on Apex Peakway
- 2% to/from the north on Tingen Road
- 1% to/from the east on Apex Peakway
- 1% to/from the west on Carolina Springs Boulevard

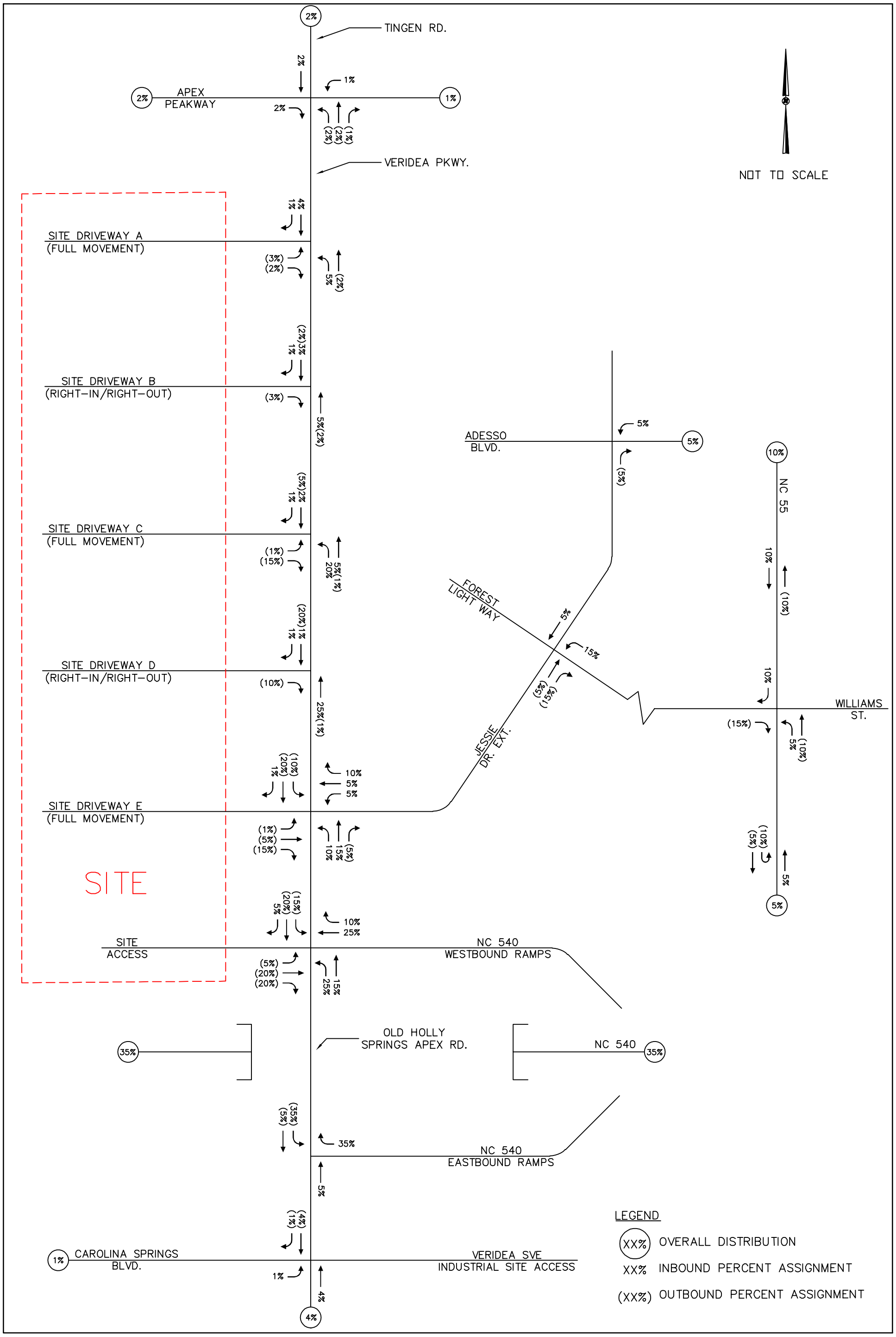
The site traffic distribution and percent assignment for the hospital/behavioral health/MOB space is depicted on **Figure 4.1.** While no changes were made to overall site traffic distribution from the original TIA, adjustments were made to the percent assignment of site traffic based on the updated site access configuration.

The following distribution was used for Ronald McDonald House site trips:

- 75% to/from the hospital (not assigned to the external network)
- 10% to/from the north on NC 55
- 5% to/from the north on Veridea Parkway
- 5% to/from the east on NC 540
- 5% to/from the west on NC 540

The site traffic distribution and percent assignment for the Ronald McDonald House is depicted on **Figure 4.2.**

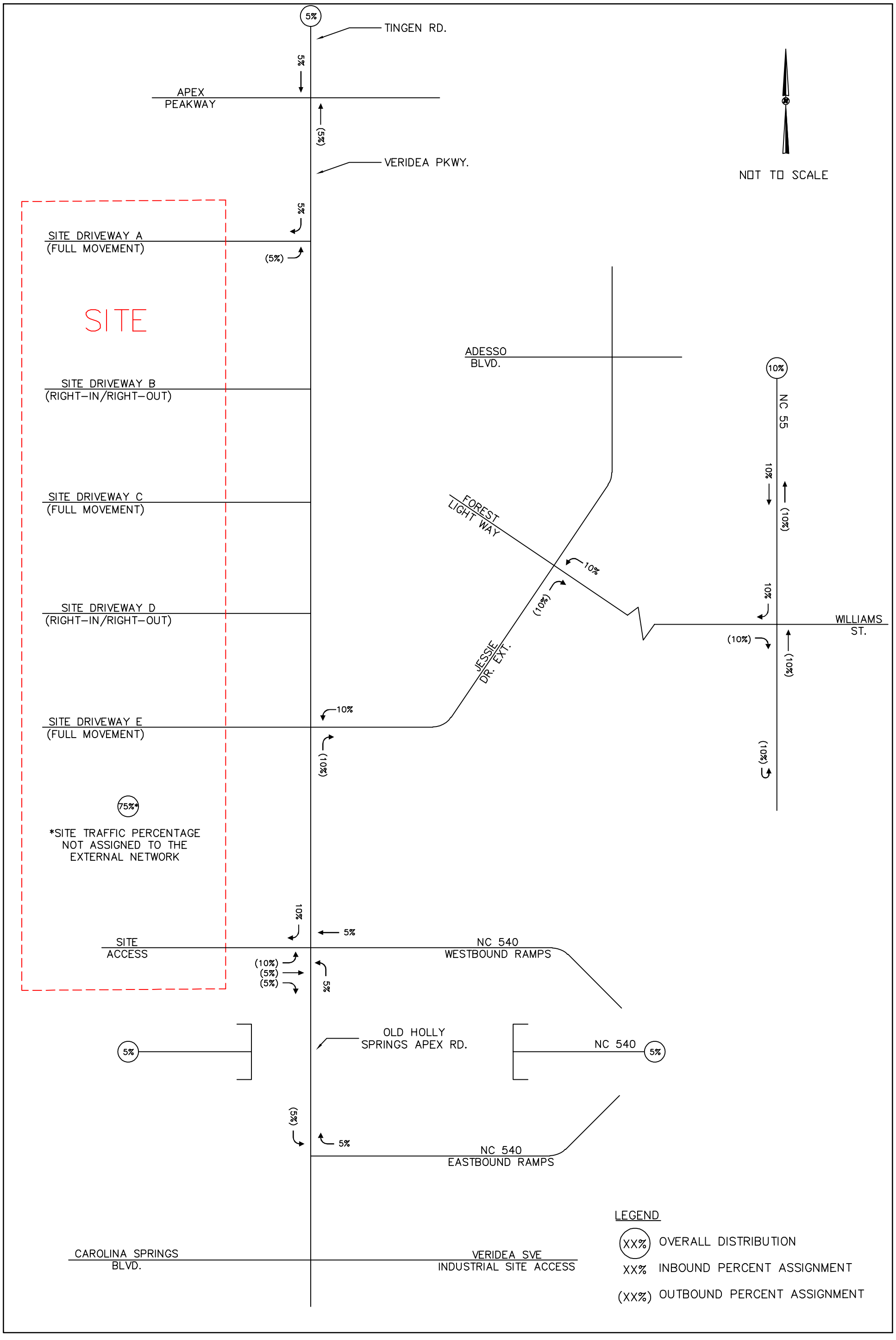
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Kimley»Horn	NORTH CAROLINA CHILDREN'S HOSPITAL APEX, NC TRAFFIC IMPACT ANALYSIS	SITE TRAFFIC DISTRIBUTION & PERCENT ASSIGNMENT (RONALD MCDONALD HOUSE)	FIGURE 4.2

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INTERSECTION ANALYSIS SHEET

Project:	**NCC @ Veridea - Phase 1**
Location:	**Apex, NC**
Ct. Date	**2030 Forecast Traffic From Veridea Phase 1 TIA**
N/S Street:	**NC 55**
E/W Street:	**Forest Light Way/Williams Street**

	AM In	AM Out	PM In	PM Out
Ronald McDonald House:	38	30	42	41
Hospital+AC/MOB+POB Trips:	1,721	572	585	1,321
Annual Growth Rate:	1.0%	**Forecast Year:**		2030
Growth Factor:	0.030301	**Buildout Year:**		2033

*Note: growth from 2030 since using 2030 forecast vols

AM PEAK HOUR
AM PHF = 0.90

Description	Forest Light Way Eastbound			Williams Street Westbound			NC 55 Northbound			NC 55 Southbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2030 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2030 Forecast Traffic w/ HL-007 Reconfig.	0	0	37	0	0	1156	38	1589	127	308	1527	36
Growth Factor (0.01 per year)	0.000	0.000	0.000	0.030	0.000	0.030	0.000	0.030	0.030	0.030	0.030	0.000
2033 Background Growth	0	0	0	0	0	35	0	48	4	9	46	0
Committed Projects (See App. For Breakouts)												
Veridea SVE Industrial	0	0	0	0	0	0	0	0	0	0	0	0
Veridea East Village	0	0	338	0	0	86	252	223	51	9	293	176
Duke Ops Center/Town Fire	0	0	0	0	0	0	0	0	0	0	0	0
Carolina Springs	0	0	0	0	0	0	0	0	0	0	0	0
Goodwin (Yield North) - Ph. 1 + Ph. 2	0	0	0	0	0	0	0	0	0	0	0	0
Friendship Dev Master Plan - Ph. 1 & 2	0	0	0	0	0	0	0	0	0	0	0	0
Hopson Gateway	0	0	0	0	0	0	0	0	0	0	0	0
GRACE Christian School ("Option A")	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	338	0	0	86	252	223	51	9	293	176
2033 Background Traffic	0	0	375	0	0	1277	290	1860	182	326	1866	212
2033 Background PHF	#DIV/0!	#DIV/0!	0.90	#DIV/0!	#DIV/0!	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Project Traffic												
RMH												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%
Inbound Project Traffic	0	0	0	0	0	0	0	0	0	0	0	4
Percent Assignment Outbound	0%	0%	10%	0%	0%	0%	0%	10%	0%	0%	0%	0%
Outbound Project Traffic	0	0	3	0	0	0	0	3	0	0	0	0
Hospital, Behav., MOB/ASC, POB												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%	10%
Inbound Project Traffic	0	0	0	0	0	0	86	0	0	0	0	172
Percent Assignment Outbound	0%	0%	15%	0%	0%	0%	0%	10%	0%	0%	0%	0%
Outbound Project Traffic	0	0	86	0	0	0	0	57	0	0	0	0
Total Project Traffic	0	0	89	0	0	0	86	60	0	0	0	176
2033 Buildout Total	0	0	464	0	0	1277	376	1920	182	326	1866	388
2033 Build-out PHF	#DIV/0!	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Impact (Approach)		19.2%			0.0%			5.9%			6.8%	

Overall Percent Impact 6.0%

PM PEAK HOUR
PM PHF = 0.90

Description	Forest Light Way Eastbound			Williams Street Westbound			NC 55 Northbound			NC 55 Southbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2030 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2030 Forecast Traffic w/ HL-007 Reconfig.	0	0	74	0	0	615	23	1436	287	965	1970	25
Growth Factor (0.01 per year)	0.000	0.000	0.000	0.030	0.000	0.030	0.000	0.030	0.030	0.030	0.030	0.000
2033 Background Growth	0	0	0	0	0	19	0	44	9	29	60	0
Committed Projects (See App. For Breakouts)												
Veridea SVE Industrial	0	0	0	0	0	0	0	0	0	0	0	0
Veridea East Village	0	0	340	0	0	107	359	299	41	25	242	125
Duke Ops Center/Town Fire	0	0	0	0	0	0	0	0	0	0	0	0
Carolina Springs	0	0	0	0	0	0	0	0	0	0	0	0
Goodwin (Yield North) - Ph. 1 + Ph. 2	0	0	0	0	0	0	0	0	0	0	0	0
Friendship Dev Master Plan - Ph. 1 & 2	0	0	0	0	0	0	0	0	0	0	0	0
Hopson Gateway	0	0	0	0	0	0	0	0	0	0	0	0
GRACE Christian School ("Option A")	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	340	0	0	107	359	299	41	25	242	125
2033 Background Traffic	0	0	414	0	0	741	382	1779	337	1019	2272	150
Project Traffic												
RMH												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%
Inbound Project Traffic	0	0	0	0	0	0	0	0	0	0	0	4
Percent Assignment Outbound	0%	0%	10%	0%	0%	0%	0%	10%	0%	0%	0%	0%
Outbound Project Traffic	0	0	4	0	0	0	0	4	0	0	0	0
Hospital, Behav., MOB/ASC, POB												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%	10%
Inbound Project Traffic	0	0	0	0	0	0	29	0	0	0	0	59
Percent Assignment Outbound	0%	0%	15%	0%	0%	0%	0%	10%	0%	0%	0%	0%
Outbound Project Traffic	0	0	198	0	0	0	0	132	0	0	0	0
Total Project Traffic	0	0	202	0	0	0	29	136	0	0	0	63
2033 Buildout Total	0	0	616	0	0	741	411	1915	337	1019	2272	213
Percent Impact (Approach)		32.8%			0.0%			6.2%			1.8%	

Overall Percent Impact 5.7%

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INTERSECTION ANALYSIS SHEET

Project:	**NCC @ Veridea - Phase 1**
Location:	**Apex, NC**
Ct. Date	**2030 Forecast Traffic From Veridea Phase 1 TIA**
N/S Street:	**NC 55**
E/W Street:	**U-Turn North of Williams Street**

	AM In	AM Out	PM In	PM Out
Ronald McDonald House:	38	30	42	41
Hospital+AC/MOB+POB Trips:	1,721	572	585	1,321
Annual Growth Rate:	1.0%	**Forecast Year:**		2030
Growth Factor:	0.030301	**Buildout Year:**		2033

*Note: growth from 2030 since using 2030 forecast vols

AM PEAK HOUR
AM PHF =

Description	- Eastbound			U-Turn North of Williams Street Westbound			NC 55 Northbound			NC 55 Southbound		
	Left	Through	Right	Left	Through	Right	U-Turn	Through	Right	Left	Through	Right
2030 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2030 Forecast Traffic w/ HL-007 Reconfig.	0	0	0	0	0	0	301	2453	0	0	1570	0
Growth Factor (0.01 per year)	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030
2033 Background Growth	0	0	0	0	0	0	9	74	0	0	48	0
Committed Projects (See App. For Breakouts)												
Veridea SVE Industrial	0	0	0	0	0	0	0	0	0	0	0	0
Veridea East Village	0	0	0	0	0	0	56	253	0	0	430	0
Duke Ops Center/Town Fire	0	0	0	0	0	0	0	0	0	0	0	0
Carolina Springs	0	0	0	0	0	0	0	0	0	0	0	0
Goodwin (Yield North) - Ph. 1 + Ph. 2	0	0	0	0	0	0	0	0	0	0	0	0
Friendship Dev Master Plan - Ph. 1 & 2	0	0	0	0	0	0	0	0	0	0	0	0
Hopson Gateway	0	0	0	0	0	0	0	0	0	0	0	0
GRACE Christian School ("Option A")	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	56	253	0	0	430	0
2033 Background Traffic	0	0	0	0	0	0	366	2780	0	0	2048	0
2033 Background PHF	#DIV/0!	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	#DIV/0!
Project Traffic												
RMH												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	0	0	0	4	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	3	0	0	0	0
Hospital, Behav., MOB/ASC, POB												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	0	0	0	172	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	57	0	0	0	0
Total Project Traffic	0	0	0	0	0	0	0	60	0	0	176	0
2033 Buildout Total	0	0	0	0	0	0	366	2840	0	0	2224	0
2033 Build-out PHF	#DIV/0!	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	#DIV/0!
Percent Impact (Approach)		-			-			1.9%			7.9%	

Overall Percent Impact 4.3%

PM PEAK HOUR
PM PHF =

Description	- Eastbound			U-Turn North of Williams Street Westbound			NC 55 Northbound			NC 55 Southbound		
	Left	Through	Right	Left	Through	Right	U-Turn	Through	Right	Left	Through	Right
2030 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2030 Forecast Traffic w/ HL-007 Reconfig.	0	0	0	0	0	0	154	1897	0	0	2806	0
Growth Factor (0.01 per year)	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030
2033 Background Growth	0	0	0	0	0	0	5	57	0	0	85	0
Committed Projects (See App. For Breakouts)												
Veridea SVE Industrial	0	0	0	0	0	0	0	0	0	0	0	0
Veridea East Village	0	0	0	0	0	0	50	355	0	0	366	0
Duke Ops Center/Town Fire	0	0	0	0	0	0	0	0	0	0	0	0
Carolina Springs	0	0	0	0	0	0	0	0	0	0	0	0
Goodwin (Yield North) - Ph. 1 + Ph. 2	0	0	0	0	0	0	0	0	0	0	0	0
Friendship Dev Master Plan - Ph. 1 & 2	0	0	0	0	0	0	0	0	0	0	0	0
Hopson Gateway	0	0	0	0	0	0	0	0	0	0	0	0
GRACE Christian School ("Option A")	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	50	355	0	0	366	0
2033 Background Traffic	0	0	0	0	0	0	209	2309	0	0	3257	0
Project Traffic												
RMH												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	0	0	0	4	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	4	0	0	0	0
Hospital, Behav., MOB/ASC, POB												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	0	0	0	59	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	132	0	0	0	0
Total Project Traffic	0	0	0	0	0	0	0	136	0	0	63	0
2033 Buildout Total	0	0	0	0	0	0	209	2445	0	0	3320	0
Percent Impact (Approach)		-			-			5.1%			1.9%	

Overall Percent Impact 3.3%

Docusign Envelope ID: DFDAAE9E-E327-494D-9513-B02DF3DFCA31

INTERSECTION ANALYSIS SHEET

Project:	**NCC @ Veridea - Phase 1**
Location:	**Apex, NC**
Ct. Date	**2030 Forecast Traffic From Veridea Phase 1 TIA**
N/S Street:	**NC 55**
E/W Street:	**U-Turn South of Forest Light Way**

	AM In	AM Out	PM In	PM Out
Ronald McDonald House:	38	30	42	41
Hospital+AC/MOB+POB Trips:	1,721	572	585	1,321
Annual Growth Rate:	1.0%	**Forecast Year:**		2030
Growth Factor:	0.030301	**Buildout Year:**		2033

*Note: growth from 2030 since using 2030 forecast vols

AM PEAK HOUR
AM PHF =

Description	U-Turn South of Forest Light Way Eastbound Left	Through	Right	- Westbound Left	Through	Right	NC 55 Northbound Left	Through	Right	NC 55 Southbound U-Turn	Through	Right
2030 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2030 Forecast Traffic w/ HL-007 Reconfig.	0	0	0	0	0	0	0	1745	0	18	1546	0
Growth Factor (0.01 per year)	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.000	0.030	0.030
2033 Background Growth	0	0	0	0	0	0	0	53	0	0	47	0
Committed Projects (See App. For Breakouts)												
Veridea SVE Industrial	0	0	0	0	0	0	0	0	0	0	0	0
Veridea East Village	0	0	0	0	0	0	0	314	0	233	398	0
Duke Ops Center/Town Fire	0	0	0	0	0	0	0	0	0	0	0	0
Carolina Springs	0	0	0	0	0	0	0	0	0	0	0	0
Goodwin (Yield North) - Ph. 1 + Ph. 2	0	0	0	0	0	0	0	0	0	0	0	0
Friendship Dev Master Plan - Ph. 1 & 2	0	0	0	0	0	0	0	0	0	0	0	0
Hopson Gateway	0	0	0	0	0	0	0	0	0	0	0	0
GRACE Christian School ("Option A")	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	314	0	233	398	0
2033 Background Traffic	0	0	0	0	0	0	0	2112	0	251	1991	0
2033 Background PHF	#DIV/0!	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	#DIV/0!
Project Traffic												
RMH												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	0	0	3	0	0
Hospital, Behav., MOB/ASC, POB												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	86	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	5%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	0	0	57	29	0
Total Project Traffic	0	0	0	0	0	0	0	86	0	60	29	0
2033 Buildout Total	0	0	0	0	0	0	0	2198	0	311	2020	0
2033 Build-out PHF	#DIV/0!	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	#DIV/0!
Percent Impact (Approach)		-			-			3.9%			3.8%	

Overall Percent Impact 3.9%

PM PEAK HOUR
PM PHF =

Description	U-Turn South of Forest Light Way Eastbound Left	Through	Right	- Westbound Left	Through	Right	NC 55 Northbound Left	Through	Right	NC 55 Southbound U-Turn	Through	Right
2030 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2030 Forecast Traffic w/ HL-007 Reconfig.	0	0	0	0	0	0	0	1709	0	37	2007	0
Growth Factor (0.01 per year)	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.000	0.030	0.030
2033 Background Growth	0	0	0	0	0	0	0	52	0	0	61	0
Committed Projects (See App. For Breakouts)												
Veridea SVE Industrial	0	0	0	0	0	0	0	0	0	0	0	0
Veridea East Village	0	0	0	0	0	0	0	436	0	274	307	0
Duke Ops Center/Town Fire	0	0	0	0	0	0	0	0	0	0	0	0
Carolina Springs	0	0	0	0	0	0	0	0	0	0	0	0
Goodwin (Yield North) - Ph. 1 + Ph. 2	0	0	0	0	0	0	0	0	0	0	0	0
Friendship Dev Master Plan - Ph. 1 & 2	0	0	0	0	0	0	0	0	0	0	0	0
Hopson Gateway	0	0	0	0	0	0	0	0	0	0	0	0
GRACE Christian School ("Option A")	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	436	0	274	307	0
2033 Background Traffic	0	0	0	0	0	0	0	2197	0	311	2375	0
Project Traffic												
RMH												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	0	0	4	0	0
Hospital, Behav., MOB/ASC, POB												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	29	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	5%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	0	0	132	66	0
Total Project Traffic	0	0	0	0	0	0	0	29	0	136	66	0
2033 Buildout Total	0	0	0	0	0	0	0	2226	0	447	2441	0
Percent Impact (Approach)		-			-			1.3%			7.0%	

Overall Percent Impact 4.5%

Appendix D:
Trip Generation

Jessie Commons

Table 1 - Trip Generation (12th Edition): NE Retail Pod

Land Use	Intensity		Daily			AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out	Total	In	Out
821 Shopping Plaza (40K-150K) w/ supermarket	71,000	s.f.	7,006	3,503	3,503	247	148	99	597	293	304
912 Drive-In Bank	3,000	s.f.	298	149	149	30	17	13	63	32	31
937 Coffee/Donut Shop with Drive-Through Window	3,000	s.f.	1,802	901	901	256	131	125	117	59	58
945 Convenience Store/Gas Station (5.5-10k SF Market)	16	f.p.	3,254	1,627	1,627	371	186	185	337	169	168
Subtotal			**12,360**	**6,180**	**6,180**	**904**	**482**	**422**	**1,113**	**551**	**562**
Internal Capture											
821 Shopping Plaza (40K-150K) w/ supermarket			400	164	236	20	7	13	24	14	10
912 Drive-In Bank			17	7	10	3	1	2	3	2	1
937 Coffee/Donut Shop with Drive-Through Window			604	356	248	57	39	18	41	17	24
945 Convenience Store/Gas Station (5.5-10k SF Market)			187	77	110	34	10	24	14	8	6
	AM Peak	**PM Peak**									
Internal Capture Total	12.61%	7.37%	*1,208*	*604*	*604*	*114*	*57*	*57*	*82*	*41*	*41*
Total External Trips			**11,152**	**5,576**	**5,576**	**790**	**425**	**365**	**1,031**	**510**	**521**
Pass-By Capture	AM	PM									
821 Shopping Plaza (40K-150K)	0%	40%	1,322	661	661	0	0	0	230	112	118
912 Drive-In Bank	29%	35%	90	45	45	8	5	3	22	11	11
937 Coffee/Donut Shop with Drive-Through Window	83%	81%	982	491	491	165	76	89	62	34	28
945 Convenience Store/Gas Station	76%	75%	2,316	1158	1,158	256	134	122	243	121	122
	AM Peak	**PM Peak**									
Pass-By Capture Total	*47.46%*	*50.04%*	*4,710*	*2,355*	*2,355*	*429*	*215*	*214*	*557*	*278*	*279*
Total Net New External Trips: NE Pod			**6,442**	**3,221**	**3,221**	**361**	**210**	**151**	**474**	**232**	**242**

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Jessie Commons	**Organization:**	Kimley-Horn
Project Location:	Apex, NC	**Perormed By:**	
Scenario Description:	Jessie Dr Ext. Full-Mvmt.	**Date:**	
Analysis Year:	2030	**Checked By:**	
Analysis Period:	**AM Peak Hour**	**Date:**	

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

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office		0	SF	0	0	0
Retail	821,912,945	74,016	SF	648	351	297
Restaurant	937	3,000	SF	256	131	125
Cinema/Entertainment		0	SF	0	0	0
Residential		0	units	0	0	0
Hotel		0	rooms	0	0	0
All Other Land Uses[2]		0	SF	0	0	0
				904	**482**	**422**

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.1	0%	0%	1.1	0%	0%
Retail	1.1	0%	0%	1.1	0%	0%
Restaurant	1.1	0%	0%	1.1	0%	0%
Cinema/Entertainment	1.1	0%	0%	1.1	0%	0%
Residential	1.1	0%	0%	1.1	0%	0%
Hotel	1.1	0%	0%	1.1	0%	0%
All Other Land Uses[2]	1.1	0%	0%	1.1	0%	0%

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

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

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		42	0	0	0
Restaurant	0	19		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	994	530	464
Internal Capture Percentage	12%	12%	13%
External Vehicle-Trips[5]	794	427	367
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

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

Land Use	Entering Trips	Exiting Trips
Office	0%	0%
Retail	5%	13%
Restaurant	29%	14%
Cinema/Entertainment	0%	0%
Residential	0%	0%
Hotel	0%	0%

[1]Land Use Codes (LUCs) from *Trip Generation Manual* , published by the Institute of Transportation Engineers (ITE).
[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.
[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).
4Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mized-use project, manual adjustments must be made
5Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.
[6]Person-Trips
*Indicates computaton that has been rounded to the nearest whole number.
Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

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

Land Use	Table 7-A (D) Entering Trips			Table 7-A (O) Exiting Trips		
	Veh. Occ.[4]	Vehicle Trips	Person-Trips*	Veh. Occ.[4]	Vehicle Trips	Person-Trips*
Office	1.1	0	0	1.1	0	0
Retail	1.1	351	386	1.1	297	327
Restaurant	1.1	131	144	1.1	125	138
Cinema/Entertainment	1.1	0	0	1.1	0	0
Residential	1.1	0	0	1.1	0	0
Hotel	1.1	0	0	1.1	0	0

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	95		42	0	46	0
Restaurant	43	19		0	6	4
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		124	33	0	0	0
Retail	0		72	0	0	0
Restaurant	0	31		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	66	29	0		0
Hotel	0	15	9	0	0	

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

Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	% Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	19	367	386	334	0	0
Restaurant	42	102	144	93	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[2]	0	0	0	0	0	0

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

Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	% Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	42	285	327	259	0	0
Restaurant	19	119	138	108	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[2]	0	0	0	0	0	0

1Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.
[2]Person-Trips
[3]Total estimate for all other land uses at mixed use development site is not subject to internal capture computations in this estimator.
*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Jessie Commons	**Organization:**	Kimley-Horn
Project Location:	Apex, NC	**Perormed By:**	
Scenario Description:	Jessie Dr Ext. Full-Mvmt.	**Date:**	
Analysis Year:	2030	**Checked By:**	
Analysis Period:	**PM Peak Hour**	**Date:**	

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

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office		0	SF	0	0	0
Retail	821,912,945	74,016	SF	996	492	504
Restaurant	937	3,000	SF	117	59	58
Cinema/Entertainment		0	SF	0	0	0
Residential		0	units	0	0	0
Hotel		0	rooms	0	0	0
All Other Land Uses[2]		0	SF	0	0	0
				1,113	**551**	**562**

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.1	0%	0%	1.1	0%	0%
Retail	1.1	0%	0%	1.1	0%	0%
Restaurant	1.1	0%	0%	1.1	0%	0%
Cinema/Entertainment	1.1	0%	0%	1.1	0%	0%
Residential	1.1	0%	0%	1.1	0%	0%
Hotel	1.1	0%	0%	1.1	0%	0%
All Other Land Uses[2]	1.1	0%	0%	1.1	0%	0%

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

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

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		19	0	0	0
Restaurant	0	26		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	1,224	606	618
Internal Capture Percentage	7%	7%	7%
External Vehicle-Trips[5]	1,031	510	521
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

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

Land Use	Entering Trips	Exiting Trips
Office	0%	0%
Retail	5%	3%
Restaurant	29%	41%
Cinema/Entertainment	0%	0%
Residential	0%	0%
Hotel	0%	0%

[1]Land Use Codes (LUCs) from *Trip Generation Manual* , published by the Institute of Transportation Engineers (ITE).
[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.
[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual).*
[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mized-use project, manual adjustments must be made
[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.
[6]Person-Trips
*Indicates computaton that has been rounded to the nearest whole number.
Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

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

Land Use	Table 7-P (D) Entering Trips			Table 7-P (O) Exiting Trips		
	Veh. Occ.[4]	Vehicle Trips	Person-Trips*	Veh. Occ.[4]	Vehicle Trips	Person-Trips*
Office	1.1	0	0	1.1	0	0
Retail	1.1	492	541	1.1	504	554
Restaurant	1.1	59	65	1.1	58	64
Cinema/Entertainment	1.1	0	0	1.1	0	0
Residential	1.1	0	0	1.1	0	0
Hotel	1.1	0	0	1.1	0	0

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	11		161	22	144	28
Restaurant	2	26		5	11	4
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		43	1	0	0	0
Retail	0		19	0	0	0
Restaurant	0	271		0	0	0
Cinema/Entertainment	0	22	2		0	0
Residential	0	54	9	0		0
Hotel	0	11	3	0	0	

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

Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	% Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	26	515	541	468	0	0
Restaurant	19	46	65	42	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[2]	0	0	0	0	0	0

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

Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	% Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	19	535	554	486	0	0
Restaurant	26	38	64	35	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[2]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.
[2]Person-Trips
[3]Total estimate for all other land uses at mixed use development site is not subject to internal capture computations in this estimator.
*Indicates computation that has been rounded to the nearest whole number.

Internal Capture Reduction Calculations

Methodology for A.M. Peak Hour and P.M. Peak Hour
based on the *Trip Generation Handbook* , 3rd Edition, published by the Institute of Transportation Engineers

Methodology for Daily
based on the average of the Unconstrained Rates for the A.M. Peak Hour and P.M. Peak Hour

SUMMARY

GROSS TRIP GENERATION

INPUT

Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit	Enter	Exit
Office	0	0	0	0	0	0
Retail	5,279	5,279	351	297	492	504
Restaurant	901	901	131	125	59	58
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
	6,180	6,180	482	422	551	562

INTERNAL TRIPS

OUTPUT

Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit	Enter	Exit
Office	0	0	0	0	0	0
Retail	248	356	18	39	24	17
Restaurant	356	248	39	18	17	24
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
	604	604	57	57	41	41
% Reduction	9.8%		12.6%		7.4%	

EXTERNAL TRIPS

OUTPUT

Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit	Enter	Exit
Office	0	0	0	0	0	0
Retail	5,031	4,923	333	258	468	487
Restaurant	545	653	92	107	42	34
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
	5,576	5,576	425	365	510	521

Jessie Commons

Table 2 - Trip Generation (12th Edition): SE Retail Pod

Land Use	Intensity		Daily			AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out	Total	In	Out
822 Strip Retail Plaza (<40K) - South	35,000	s.f.	1,708	854	854	138	76	62	179	89	90
848 Tire Store	5,000	s.f.	144	72	72	14	9	5	19	8	11
930 Fast Casual Restaurant	6,000	s.f.	1,356	678	678	9	6	3	86	46	40
934 Fast-Food Restaurant with Drive-Through Window	5,000	s.f.	2,242	1,121	1,121	166	85	81	158	82	76
Subtotal			**5,450**	**2,725**	**2,725**	**327**	**176**	**151**	**442**	**224**	**218**
Internal Capture											
822 Strip Retail Plaza (<40K) - South			427	248	179	14	6	8	50	31	19
848 Tire Store			36	21	15	2	1	1	5	3	2
930 Fast Casual Restaurant			174	73	101	2	1	1	19	8	11
934 Fast-Food Restaurant with Drive-Through Window			289	121	168	14	8	6	36	13	23
	AM Peak	**PM Peak**									
Internal Capture Total	9.79%	25.00%	*926*	*463*	*463*	*32*	*16*	*16*	*111*	*55*	*55*
Total External Trips			**4,524**	**2,262**	**2,262**	**295**	**160**	**135**	**332**	**169**	**163**
Pass-By Capture	AM	PM									
822 Strip Retail Plaza (<40K) - South	0%	40%	256	128	128	0	0	0	51	23	28
848 Tire Store	0%	25%	14	7	7	0	0	0	3	1	2
934 Fast-Food Restaurant with Drive-Through Window	50%	55%	1,026	513	513	77	39	38	67	38	29
	AM Peak	**PM Peak**									
Pass-By Capture Total	*23.55%*	*27.38%*	*1,296*	*648*	*648*	*77*	*39*	*38*	*121*	*62*	*59*
Total Net New External Trips: SE Pod			**3,228**	**1,614**	**1,614**	**218**	**121**	**97**	**211**	**107**	**104**

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Jessie Commons	**Organization:**	Kimley-Horn
Project Location:	Apex, NC	**Perormed By:**	
Scenario Description:	Jessie Dr Ext. Full-Mvmt.	**Date:**	
Analysis Year:	2030	**Checked By:**	
Analysis Period:	**AM Peak Hour**	**Date:**	

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

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office		0	SF	0	0	0
Retail	822,848	40,000	SF	152	85	67
Restaurant	930,934	11,000	SF	175	91	84
Cinema/Entertainment		0	SF	0	0	0
Residential		0	units	0	0	0
Hotel		0	rooms	0	0	0
All Other Land Uses[2]		0	SF	0	0	0
				327	**176**	**151**

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.1	0%	0%	1.1	0%	0%
Retail	1.1	0%	0%	1.1	0%	0%
Restaurant	1.1	0%	0%	1.1	0%	0%
Cinema/Entertainment	1.1	0%	0%	1.1	0%	0%
Residential	1.1	0%	0%	1.1	0%	0%
Hotel	1.1	0%	0%	1.1	0%	0%
All Other Land Uses[2]	1.1	0%	0%	1.1	0%	0%

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

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

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		10	0	0	0
Restaurant	0	7		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	360	194	166
Internal Capture Percentage	9%	9%	10%
External Vehicle-Trips[5]	296	161	135
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

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

Land Use	Entering Trips	Exiting Trips
Office	0%	0%
Retail	7%	14%
Restaurant	10%	8%
Cinema/Entertainment	0%	0%
Residential	0%	0%
Hotel	0%	0%

[1]Land Use Codes (LUCs) from *Trip Generation Manual* , published by the Institute of Transportation Engineers (ITE).
[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.
[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).
4Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mized-use project, manual adjustments must be made
5Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.
[6]Person-Trips
*Indicates computaton that has been rounded to the nearest whole number.
Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

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

Land Use	Table 7-A (D) Entering Trips			Table 7-A (O) Exiting Trips		
	Veh. Occ.[4]	Vehicle Trips	Person-Trips*	Veh. Occ.[4]	Vehicle Trips	Person-Trips*
Office	1.1	0	0	1.1	0	0
Retail	1.1	85	94	1.1	67	74
Restaurant	1.1	91	100	1.1	84	92
Cinema/Entertainment	1.1	0	0	1.1	0	0
Residential	1.1	0	0	1.1	0	0
Hotel	1.1	0	0	1.1	0	0

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	21		10	0	10	0
Restaurant	29	13		0	4	3
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		30	23	0	0	0
Retail	0		50	0	0	0
Restaurant	0	7		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	16	20	0		0
Hotel	0	4	6	0	0	

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

Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	% Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	7	87	94	79	0	0
Restaurant	10	90	100	82	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[2]	0	0	0	0	0	0

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

Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	% Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	10	64	74	58	0	0
Restaurant	7	85	92	77	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[2]	0	0	0	0	0	0

1Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.
[2]Person-Trips
[3]Total estimate for all other land uses at mixed use development site is not subject to internal capture computations in this estimator.
*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Jessie Commons	**Organization:**	Kimley-Horn
Project Location:	Apex, NC	**Perormed By:**	
Scenario Description:	Jessie Dr Ext. Full-Mvmt.	**Date:**	
Analysis Year:	2030	**Checked By:**	
Analysis Period:	**PM Peak Hour**	**Date:**	

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

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office		0	SF	0	0	0
Retail	822,848	40,000	SF	198	96	102
Restaurant	930,934	11,000	SF	244	128	116
Cinema/Entertainment		0	SF	0	0	0
Residential		0	units	0	0	0
Hotel		0	rooms	0	0	0
All Other Land Uses[2]		0	SF	0	0	0
				442	**224**	**218**

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.1	0%	0%	1.1	0%	0%
Retail	1.1	0%	0%	1.1	0%	0%
Restaurant	1.1	0%	0%	1.1	0%	0%
Cinema/Entertainment	1.1	0%	0%	1.1	0%	0%
Residential	1.1	0%	0%	1.1	0%	0%
Hotel	1.1	0%	0%	1.1	0%	0%
All Other Land Uses[2]	1.1	0%	0%	1.1	0%	0%

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

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

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		33	0	0	0
Restaurant	0	52		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	486	246	240
Internal Capture Percentage	35%	35%	35%
External Vehicle-Trips[5]	288	147	141
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

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

Land Use	Entering Trips	Exiting Trips
Office	0%	0%
Retail	49%	29%
Restaurant	23%	41%
Cinema/Entertainment	0%	0%
Residential	0%	0%
Hotel	0%	0%

[1]Land Use Codes (LUCs) from *Trip Generation Manual* , published by the Institute of Transportation Engineers (ITE).
[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.
[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual).*
[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mized-use project, manual adjustments must be made
[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.
[6]Person-Trips
*Indicates computaton that has been rounded to the nearest whole number.
Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

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

Land Use	Table 7-P (D) Entering Trips			Table 7-P (O) Exiting Trips		
	Veh. Occ.[4]	Vehicle Trips	Person-Trips*	Veh. Occ.[4]	Vehicle Trips	Person-Trips*
Office	1.1	0	0	1.1	0	0
Retail	1.1	96	106	1.1	102	112
Restaurant	1.1	128	141	1.1	116	128
Cinema/Entertainment	1.1	0	0	1.1	0	0
Residential	1.1	0	0	1.1	0	0
Hotel	1.1	0	0	1.1	0	0

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	2		33	4	29	6
Restaurant	4	52		10	23	9
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		8	3	0	0	0
Retail	0		41	0	0	0
Restaurant	0	53		0	0	0
Cinema/Entertainment	0	4	4		0	0
Residential	0	11	20	0		0
Hotel	0	2	7	0	0	

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

Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	% Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	52	54	106	49	0	0
Restaurant	33	108	141	98	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[2]	0	0	0	0	0	0

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

Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	% Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	33	79	112	72	0	0
Restaurant	52	76	128	69	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[2]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.
[2]Person-Trips
[3]Total estimate for all other land uses at mixed use development site is not subject to internal capture computations in this estimator.
*Indicates computation that has been rounded to the nearest whole number.

Internal Capture Reduction Calculations

Methodology for A.M. Peak Hour and P.M. Peak Hour
based on the *Trip Generation Handbook* , 3rd Edition, published by the Institute of Transportation Engineers

Methodology for Daily
based on the average of the Unconstrained Rates for the A.M. Peak Hour and P.M. Peak Hour

SUMMARY

GROSS TRIP GENERATION

INPUT

Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit	Enter	Exit
Office	0	0	0	0	0	0
Retail	926	926	85	67	96	102
Restaurant	1,799	1,799	91	84	128	116
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
	2,725	2,725	176	151	224	218

INTERNAL TRIPS

OUTPUT

Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit	Enter	Exit
Office	0	0	0	0	0	0
Retail	269	194	7	9	48	30
Restaurant	194	269	9	7	30	48
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
	463	463	16	16	78	78
% Reduction	17.0%		9.8%		35.3%	

EXTERNAL TRIPS

OUTPUT

Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit	Enter	Exit
Office	0	0	0	0	0	0
Retail	657	732	78	58	48	72
Restaurant	1,605	1,530	82	77	98	68
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
	2,262	2,262	160	135	146	140

Jessie Commons

Table 3 - Trip Generation (12th Edition): E Pod Industrial

Land Use	Intensity	Daily			AM Peak Hour			PM Peak Hour		
		Total	In	Out	Total	In	Out	Total	In	Out
110 General Light Industrial	300,000 s.f.	1,080	540	540	144	124	20	147	35	112
Total Net New External Trips: East Pod		**1,080**	**540**	**540**	**144**	**124**	**20**	**147**	**35**	**112**

Appendix E:
Intersection Spreadsheets –
Access Scenario 1

INTERSECTION ANALYSIS SHEET

Project:	Jessie Commons
Location:	Apex, NC
Scenario:	Jessie Dr Ext. Full-Mvmt.
Ct. Date	5/20/2025
Ct. Peaks	7:15 - 8:15 AM; 4:45 - 5:45 PM
E/W Street:	US 1 SB On-Ramp/US 1 SB Off-Ramp
N/S Street:	NC 55

	AM In	AM Out	PM In	PM Out
Industrial (E Pod) New Trips:	124	20	35	112
NE Retail Pod New Trips:	210	151	232	242
NE Retail Pod Pass-By Trips:	215	214	278	279
SE Retail Pod New Trips:	121	97	107	104
SE Retail Pod Pass-By Trips:	39	38	62	59

Annual Growth Rate:	3.0%	**Existing Year:**	2026 0
Growth Factor:	0.126	**Buildout Year:**	2030 0

AM PEAK HOUR

PHF = 0.90

Description	US 1 SB On-Ramp Eastbound U-Turn	Left	Through	Right	US 1 SB Off-Ramp Westbound U-Turn	Left	Through	Right	NC 55 Northbound U-Turn	Left	Through	Right	NC 55 Southbound U-Turn	Left	Through	Right
2026 Traffic Count	0	0	0	0	0	828	1	430	0	80	1036	0	0	0	939	125
3% Growth to 2026	0	0	0	0	0	25	0	13	0	2	31	0	0	0	28	4
2026 Existing Traffic	0	0	0	0	0	853	1	443	0	82	1067	0	0	0	967	129
Growth Factor (0.03 per year)	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126
2030 Background Growth	0	0	0	0	0	107	0	56	0	10	134	0	0	0	121	16
Committed Projects																
Aqualine (Assume 100% Built-out)	0	0	0	0	0	36	0	0	0	25	33	0	0	0	33	0
Veridina East Village (Assume 100% Bu	0	0	0	0	0	179	0	0	0	0	77	0	0	0	74	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	70	0	0	0	0	6	0	0	0	18	0
Total Committed Traffic	0	0	0	0	0	285	0	0	0	25	116	0	0	0	125	0
2030 Background Traffic	0	0	0	0	0	1245	1	499	0	117	1317	0	0	0	1213	145
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(15%)	(10%)	(0%)	(0%)	(0%)	(0%)	(0%)
Industrial Project Traffic	0	0	0	0	0	31	0	0	0	3	2	0	0	0	12	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	15%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(5%)	(15%)	(0%)	(0%)	(0%)	(0%)	(0%)
NE Retail Pod Project Traffic	0	0	0	0	0	11	0	0	0	8	23	0	0	0	32	0
Total NE Pod Project Traffic	0	0	0	0	0	11	0	0	0	8	23	0	0	0	32	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	15%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(5%)	(15%)	(0%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	0	0	0	0	6	0	0	0	5	15	0	0	0	18	0
Total SE Pod Project Traffic	0	0	0	0	0	6	0	0	0	5	15	0	0	0	18	0
Total Project Traffic	0	0	0	0	0	48	0	0	0	16	40	0	0	0	62	0
2030 Buildout Total	0	0	0	0	0	1293	1	499	0	133	1357	0	0	0	1275	145
Approach Percent Impact		-				2.68%				3.76%				4.37%		

Overall Percent Impact (vs. Buildout) 3.5%

PM PEAK HOUR

PHF = 0.99

Description	US 1 SB On-Ramp Eastbound U-Turn	Left	Through	Right	US 1 SB Off-Ramp Westbound U-Turn	Left	Through	Right	NC 55 Northbound U-Turn	Left	Through	Right	NC 55 Southbound U-Turn	Left	Through	Right
2026 Traffic Count	0	0	0	0	0	1165	0	457	0	123	890	0	0	0	1174	215
3% Growth to 2026	0	0	0	0	0	35	0	14	0	4	27	0	0	0	35	6
2026 Existing Traffic	0	0	0	0	0	1200	0	471	0	127	917	0	0	0	1209	221
Growth Factor (0.03 per year)	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126
2030 Background Growth	0	0	0	0	0	151	0	59	0	16	115	0	0	0	152	28
Committed Projects																
Aqualine (Assume 100% Built-out)	0	0	0	0	0	85	0	0	0	32	59	0	0	0	79	0
Veridina East Village (Assume 100% Bu	0	0	0	0	0	263	0	0	0	0	75	0	0	0	96	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	25	0	0	0	0	14	0	0	0	6	0
Total Committed Traffic	0	0	0	0	0	373	0	0	0	32	148	0	0	0	181	0
2030 Background Traffic	0	0	0	0	0	1724	0	530	0	175	1180	0	0	0	1542	249
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(15%)	(10%)	(0%)	(0%)	(0%)	(0%)	(0%)
Industrial Project Traffic	0	0	0	0	0	9	0	0	0	17	11	0	0	0	4	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	15%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(5%)	(15%)	(0%)	(0%)	(0%)	(0%)	(0%)
NE Retail Pod Project Traffic	0	0	0	0	0	12	0	0	0	12	36	0	0	0	35	0
Total NE Pod Project Traffic	0	0	0	0	0	12	0	0	0	12	36	0	0	0	35	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	15%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(5%)	(15%)	(0%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	0	0	0	0	5	0	0	0	5	16	0	0	0	16	0
Total SE Pod Project Traffic	0	0	0	0	0	5	0	0	0	5	16	0	0	0	16	0
Total Project Traffic	0	0	0	0	0	26	0	0	0	34	63	0	0	0	55	0
2030 Buildout Total	0	0	0	0	0	1750	0	530	0	209	1243	0	0	0	1597	249
Approach Percent Impact		-				1.14%				6.68%				2.98%		

Overall Percent Impact (vs. Buildout) 3.2%

INTERSECTION ANALYSIS SHEET

Project:	Jessie Commons
Location:	Apex, NC
Scenario:	Jessie Dr Ext. Full-Mvmt.
Ct. Date	5/20/2025
Ct. Peaks	7:00 - 8:00 AM; 4:30 - 5:30 PM
E/W Street:	US 1 NB Off-Ramp/US 1 NB On-Ramp
N/S Street:	NC 55

	AM In	AM Out	PM In	PM Out
Industrial (E Pod) New Trips:	124	20	35	112
NE Retail Pod New Trips:	210	151	232	242
NE Retail Pod Pass-By Trips:	215	214	278	279
SE Retail Pod New Trips:	121	97	107	104
SE Retail Pod Pass-By Trips:	39	38	62	59

Annual Growth Rate:	3.0%	**Existing Year:**	2026 0
Growth Factor:	0.126	**Buildout Year:**	2030 0

AM PEAK HOUR

PHF = 0.96

Description	US 1 NB Off-Ramp Eastbound U-Turn	Left	Through	Right	US 1 NB On-Ramp Westbound U-Turn	Left	Through	Right	NC 55 Northbound U-Turn	Left	Through	Right	NC 55 Southbound U-Turn	Left	Through	Right
2026 Traffic Count	0	215	3	139	0	0	0	0	0	0	899	1011	0	351	1415	0
3% Growth to 2026	0	6	0	4	0	0	0	0	0	0	27	30	0	11	42	0
2026 Existing Traffic	0	221	3	143	0	0	0	0	0	0	926	1041	0	362	1457	0
Growth Factor (0.03 per year)	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126
2030 Background Growth	0	28	0	18	0	0	0	0	0	0	116	131	0	45	183	0
Committed Projects																
Aqualine	0	0	0	19	0	0	0	0	0	0	58	44	0	0	69	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	77	248	0	0	253	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	6	24	0	0	88	0
Total Committed Traffic	0	0	0	19	0	0	0	0	0	0	141	316	0	0	410	0
2030 Background Traffic	0	249	3	180	0	0	0	0	0	0	1183	1488	0	407	2050	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	15%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(25%)	(25%)	(0%)	(0%)	(0%)	(0%)
Industrial Project Traffic	0	0	0	19	0	0	0	0	0	0	5	5	0	0	43	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(20%)	(5%)	(0%)	(0%)	(0%)	(0%)
NE Retail Pod Project Traffic	0	0	0	11	0	0	0	0	0	0	30	8	0	0	42	0
Total NE Pod Project Traffic	0	0	0	11	0	0	0	0	0	0	30	8	0	0	42	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(20%)	(5%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	0	0	6	0	0	0	0	0	0	19	5	0	0	24	0
Total SE Pod Project Traffic	0	0	0	6	0	0	0	0	0	0	19	5	0	0	24	0
Total Project Traffic	0	0	0	36	0	0	0	0	0	0	54	18	0	0	109	0
2030 Buildout Total	0	249	3	216	0	0	0	0	0	0	1237	1506	0	407	2159	0
Approach Percent Impact		7.69%				-				2.62%				4.25%		

Overall Percent Impact (vs. Buildout) 3.8%

PM PEAK HOUR

PHF = 0.98

Description	US 1 NB Off-Ramp Eastbound U-Turn	Left	Through	Right	US 1 NB On-Ramp Westbound U-Turn	Left	Through	Right	NC 55 Northbound U-Turn	Left	Through	Right	NC 55 Southbound U-Turn	Left	Through	Right
2026 Traffic Count	0	144	2	108	0	0	0	0	0	0	853	947	0	349	2055	0
3% Growth to 2026	0	4	0	3	0	0	0	0	0	0	26	28	0	10	62	0
2026 Existing Traffic	0	148	2	111	0	0	0	0	0	0	879	975	0	359	2117	0
Growth Factor (0.03 per year)	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126
2030 Background Growth	0	19	0	14	0	0	0	0	0	0	110	122	0	45	266	0
Committed Projects																
Aqualine	0	0	0	43	0	0	0	0	0	0	91	63	0	0	165	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	75	195	0	0	359	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	14	54	0	0	32	0
Total Committed Traffic	0	0	0	43	0	0	0	0	0	0	180	312	0	0	556	0
2030 Background Traffic	0	167	2	168	0	0	0	0	0	0	1169	1409	0	404	2939	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	15%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(25%)	(25%)	(0%)	(0%)	(0%)	(0%)
Industrial Project Traffic	0	0	0	5	0	0	0	0	0	0	28	28	0	0	12	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(20%)	(5%)	(0%)	(0%)	(0%)	(0%)
NE Retail Pod Project Traffic	0	0	0	12	0	0	0	0	0	0	48	12	0	0	46	0
Total NE Pod Project Traffic	0	0	0	12	0	0	0	0	0	0	48	12	0	0	46	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(20%)	(5%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	0	0	5	0	0	0	0	0	0	21	5	0	0	21	0
Total SE Pod Project Traffic	0	0	0	5	0	0	0	0	0	0	21	5	0	0	21	0
Total Project Traffic	0	0	0	22	0	0	0	0	0	0	97	45	0	0	79	0
2030 Buildout Total	0	167	2	190	0	0	0	0	0	0	1266	1454	0	404	3018	0
Approach Percent Impact		6.13%				-				5.22%				2.31%		

Overall Percent Impact (vs. Buildout) 3.7%

INTERSECTION ANALYSIS SHEET

Project:	**Jessie Commons**
Location:	**Apex, NC**
Scenario:	**Jessie Dr Ext. Full-Mvmt.**
Ct. Date	**2030 Forecast Vols with HL-0007**
Ct. Peaks	**N/A**
E/W Street:	**-/U-Turn North of Williams Street**
N/S Street:	**NC 55**

	AM In	AM Out	PM In	PM Out
Industrial (E Pod) New Trips:	124	20	35	112
NE Retail Pod New Trips:	210	151	232	242
NE Retail Pod Pass-By Trips:	215	214	278	279
SE Retail Pod New Trips:	121	97	107	104
SE Retail Pod Pass-By Trips:	39	38	62	59

Annual Growth Rate:	3.0%	**Existing Year:**	2026 0
Growth Factor:	0.126	**Buildout Year:**	2030 0

AM PEAK HOUR
PHF =

	-				U-Turn North of Williams Street				NC 55				NC 55			
	Eastbound				**Westbound**				**Northbound**				**Southbound**			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	301	0	2453	0	0	0	1570	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	80	0	0	0	80	0
Veridina East Village	0	0	0	0	0	0	0	0	56	0	253	0	0	0	430	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	30	0	0	0	88	0
Total Committed Traffic	0	0	0	0	0	0	0	0	56	0	363	0	0	0	598	0
2030 Background Traffic	0	0	0	0	0	0	0	0	357	0	2816	0	0	0	2168	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(50%)	(0%)
Industrial Project Traffic	0	0	0	0	0	0	0	0	0	0	62	0	0	0	10	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	57%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(57%)	(0%)
NE Retail Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	120	0	0	0	86	0
Total NE Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	120	0	0	0	86	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	57%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(57%)	(0%)
SE Retail Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	69	0	0	0	55	0
Total SE Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	69	0	0	0	55	0
Total Project Traffic	0	0	0	0	0	0	0	0	0	0	251	0	0	0	151	0
2030 Buildout Total	0	0	0	0	0	0	0	0	357	0	3067	0	0	0	2319	0
Approach Percent Impact		-				-				7.33%				6.51%		

Overall Percent Impact (vs. Buildout) 7.0%

PM PEAK HOUR
PHF =

	-				U-Turn North of Williams Street				NC 55				NC 55			
	Eastbound				**Westbound**				**Northbound**				**Southbound**			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	154	0	1897	0	0	0	2806	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	199	0	0	0	146	0
Veridina East Village	0	0	0	0	0	0	0	0	50	0	355	0	0	0	366	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	68	0	0	0	32	0
Total Committed Traffic	0	0	0	0	0	0	0	0	50	0	622	0	0	0	544	0
2030 Background Traffic	0	0	0	0	0	0	0	0	204	0	2519	0	0	0	3350	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(50%)	(0%)
Industrial Project Traffic	0	0	0	0	0	0	0	0	0	0	18	0	0	0	56	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	57%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(57%)	(0%)
NE Retail Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	132	0	0	0	138	0
Total NE Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	132	0	0	0	138	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	57%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(57%)	(0%)
SE Retail Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	61	0	0	0	59	0
Total SE Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	61	0	0	0	59	0
Total Project Traffic	0	0	0	0	0	0	0	0	0	0	211	0	0	0	253	0
2030 Buildout Total	0	0	0	0	0	0	0	0	204	0	2730	0	0	0	3603	0
Approach Percent Impact		-				-				7.19%				7.02%		

Overall Percent Impact (vs. Buildout) 7.1%

INTERSECTION ANALYSIS SHEET

Project:	Jessie Commons
Location:	Apex, NC
Scenario:	Jessie Dr Ext. Full-Mvmt.
Ct. Date	2030 Forecast Vols with HL-0007
Ct. Peaks	N/A
E/W Street:	Forest Light Way/Williams Street
N/S Street:	NC 55

	AM In	AM Out	PM In	PM Out
Industrial (E Pod) New Trips:	124	20	35	112
NE Retail Pod New Trips:	210	151	232	242
NE Retail Pod Pass-By Trips:	215	214	278	279
SE Retail Pod New Trips:	121	97	107	104
SE Retail Pod Pass-By Trips:	39	38	62	59

Annual Growth Rate:	3.0%	**Existing Year:**	2026 0
Growth Factor:	0.126	**Buildout Year:**	2030 0

AM PEAK HOUR
PHF =

Description	Forest Light Way Eastbound U-Turn	Left	Through	Right	Williams Street Westbound U-Turn	Left	Through	Right	NC 55 Northbound U-Turn	Left	Through	Right	NC 55 Southbound U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	37	0	0	0	1156	0	38	1589	127	0	308	1527	36
Committed Projects																
Aqualine	0	0	0	0	0	0	0	38	0	0	42	0	0	35	45	0
Veridina East Village	0	0	0	338	0	0	0	86	0	252	223	51	0	9	293	176
NCC Phase 1 (Assume 50% Built-out)	0	0	0	45	0	0	0	0	0	43	30	0	0	0	0	88
Total Committed Traffic	0	0	0	383	0	0	0	124	0	295	295	51	0	44	338	264
2030 Background Traffic	0	0	0	420	0	0	0	1280	0	333	1884	178	0	352	1865	300
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	5%	0%	0%	0%	10%	0%	0%	40%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(10%)	(35%)	(5%)
Industrial Project Traffic	0	0	0	6	0	0	0	12	0	0	50	0	0	2	7	1
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	12%	0%	0%	0%	20%	0%	0%	37%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(20%)	(25%)	(12%)
NE Retail Pod Project Traffic	0	0	0	25	0	0	0	42	0	0	78	0	0	30	38	18
Total NE Pod Project Traffic	0	0	0	25	0	0	0	42	0	0	78	0	0	30	38	18
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	12%	0%	0%	0%	20%	0%	0%	37%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(20%)	(25%)	(12%)
SE Retail Pod Project Traffic	0	0	0	15	0	0	0	24	0	0	45	0	0	19	24	12
Total SE Pod Project Traffic	0	0	0	15	0	0	0	24	0	0	45	0	0	19	24	12
Total Project Traffic	0	0	0	46	0	0	0	78	0	0	173	0	0	51	69	31
2030 Buildout Total	0	0	0	466	0	0	0	1358	0	333	2057	178	0	403	1934	331
Approach Percent Impact		9.88%				5.74%				6.74%				5.66%		

Overall Percent Impact (vs. Buildout) 6.3%

PM PEAK HOUR
PHF =

Description	Forest Light Way Eastbound U-Turn	Left	Through	Right	Williams Street Westbound U-Turn	Left	Through	Right	NC 55 Northbound U-Turn	Left	Through	Right	NC 55 Southbound U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	74	0	0	0	615	0	23	1436	287	0	965	1970	25
Committed Projects																
Aqualine	0	0	0	0	0	0	0	97	0	0	102	0	0	71	75	0
Veridina East Village	0	0	0	340	0	0	0	107	0	359	299	41	0	25	242	125
NCC Phase 1 (Assume 50% Built-out)	0	0	0	101	0	0	0	0	0	15	68	0	0	0	0	32
Total Committed Traffic	0	0	0	441	0	0	0	204	0	374	469	41	0	96	317	157
2030 Background Traffic	0	0	0	515	0	0	0	819	0	397	1905	328	0	1061	2287	182
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	5%	0%	0%	0%	10%	0%	0%	40%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(10%)	(35%)	(5%)
Industrial Project Traffic	0	0	0	2	0	0	0	4	0	0	14	0	0	11	39	6
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	12%	0%	0%	0%	20%	0%	0%	37%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(20%)	(25%)	(12%)
NE Retail Pod Project Traffic	0	0	0	28	0	0	0	46	0	0	86	0	0	48	61	29
Total NE Pod Project Traffic	0	0	0	28	0	0	0	46	0	0	86	0	0	48	61	29
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	12%	0%	0%	0%	20%	0%	0%	37%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(20%)	(25%)	(12%)
SE Retail Pod Project Traffic	0	0	0	13	0	0	0	21	0	0	39	0	0	21	26	12
Total SE Pod Project Traffic	0	0	0	13	0	0	0	21	0	0	39	0	0	21	26	12
Total Project Traffic	0	0	0	43	0	0	0	71	0	0	139	0	0	80	126	47
2030 Buildout Total	0	0	0	558	0	0	0	890	0	397	2044	328	0	1141	2413	229
Approach Percent Impact		7.71%				7.98%				5.02%				6.69%		

Overall Percent Impact (vs. Buildout) 6.3%

INTERSECTION ANALYSIS SHEET

Project:	**Jessie Commons**
Location:	**Apex, NC**
Scenario:	**Jessie Dr Ext. Full-Mvmt.**
Ct. Date	**2030 Forecast Vols with HL-0007**
Ct. Peaks	**N/A**
E/W Street:	**U-Turn South of Forest Light Way/-**
N/S Street:	**NC 55**

	AM In	AM Out	PM In	PM Out
Industrial (E Pod) New Trips:	124	20	35	112
NE Retail Pod New Trips:	210	151	232	242
NE Retail Pod Pass-By Trips:	215	214	278	279
SE Retail Pod New Trips:	121	97	107	104
SE Retail Pod Pass-By Trips:	39	38	62	59

Annual Growth Rate:	3.0%	**Existing Year:**	2026 0
Growth Factor:	0.126	**Buildout Year:**	2030 0

AM PEAK HOUR
PHF =

Description	U-Turn South of Forest Light Way Eastbound U-Turn	Left	Through	Right	- Westbound U-Turn	Left	Through	Right	NC 55 Northbound U-Turn	Left	Through	Right	NC 55 Southbound U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	1745	0	18	0	1546	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	42	0	0	0	45	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	314	0	233	0	398	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	43	0	30	0	15	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	399	0	263	0	458	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	2144	0	281	0	2004	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%	5%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(35%)	(0%)
Industrial Project Traffic	0	0	0	0	0	0	0	0	0	0	43	0	6	0	7	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	0%	12%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(25%)	(0%)
NE Retail Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	53	0	25	0	38	0
Total NE Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	53	0	25	0	38	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	0%	12%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(25%)	(0%)
SE Retail Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	30	0	15	0	24	0
Total SE Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	30	0	15	0	24	0
Total Project Traffic	0	0	0	0	0	0	0	0	0	0	126	0	46	0	69	0
2030 Buildout Total	0	0	0	0	0	0	0	0	0	0	2270	0	327	0	2073	0
Approach Percent Impact		-				-				5.55%				4.79%		

Overall Percent Impact (vs. Buildout) 5.2%

PM PEAK HOUR
PHF =

Description	U-Turn South of Forest Light Way Eastbound U-Turn	Left	Through	Right	- Westbound U-Turn	Left	Through	Right	NC 55 Northbound U-Turn	Left	Through	Right	NC 55 Southbound U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	1709	0	37	0	2007	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	102	0	0	0	75	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	436	0	274		307	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	15	0	68	0	33	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	553	0	342	0	415	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	2262	0	379	0	2422	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%	5%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(35%)	(0%)
Industrial Project Traffic	0	0	0	0	0	0	0	0	0	0	12	0	2	0	39	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	0%	12%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(25%)	(0%)
NE Retail Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	58	0	28	0	61	0
Total NE Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	58	0	28	0	61	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	0%	12%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(25%)	(0%)
SE Retail Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	27	0	13	0	26	0
Total SE Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	27	0	13	0	26	0
Total Project Traffic	0	0	0	0	0	0	0	0	0	0	97	0	43	0	126	0
2030 Buildout Total	0	0	0	0	0	0	0	0	0	0	2359	0	422	0	2548	0
Approach Percent Impact		-				-				4.11%				5.69%		

Overall Percent Impact (vs. Buildout) 5.0%

INTERSECTION ANALYSIS SHEET

Project:	Jessie Commons
Location:	Apex, NC
Scenario:	Jessie Dr Ext. Full-Mvmt.
Ct. Date	2030 Forecast Vols with HL-0007
Ct. Peaks	N/A
E/W Street:	-/Jessie Drive Extension
N/S Street:	NC 55

	AM In	AM Out	PM In	PM Out
Industrial (E Pod) New Trips:	124	20	35	112
NE Retail Pod New Trips:	210	151	232	242
NE Retail Pod Pass-By Trips:	215	214	278	279
SE Retail Pod New Trips:	121	97	107	104
SE Retail Pod Pass-By Trips:	39	38	62	59
Annual Growth Rate:	3.0%	**Existing Year:**	2026	0
Growth Factor:	0.126	**Buildout Year:**	2030	0

AM PEAK HOUR
PHF =

Description	- Eastbound				Jessie Drive Extension Westbound				NC 55 Northbound				NC 55 Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	2453	0	0	0	1570	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	80	0	0	0	80	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	266	0	0	0	277	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	30	0	0	0	88	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	376	0	0	0	445	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	2829	0	0	0	2015	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	50%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(50%)	(0%)	(50%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
Industrial Project Traffic	0	0	0	0	0	10	0	10	0	0	0	62	0	62	0	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	22%	35%	0%	35%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(57%)	(0%)	(20%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
NE Retail Pod Project Traffic	0	0	0	0	0	86	0	30	0	0	46	74	0	74	0	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	-129	0	0	0	-86	0
Pass-By Capture Assignment	0	0	0	0	0	86	0	21	0	0	108	22	0	86	0	0
Total NE Pod Pass-By Traffic	0	0	0	0	0	86	0	21	0	0	-21	22	0	86	-86	0
Total NE Pod Project Traffic	0	0	0	0	0	172	0	51	0	0	25	96	0	160	-86	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	57%	0%	35%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(57%)	(0%)	(35%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	0	0	0	0	55	0	34	0	0	0	69	0	42	0	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	-23	0	0	0	-16	0
Pass-By Capture Assignment	0	0	0	0	0	15	0	23	0	0	0	23	0	16	0	0
Total SE Pod Pass-By Traffic	0	0	0	0	0	15	0	23	0	0	-23	23	0	16	-16	0
Total SE Pod Project Traffic	0	0	0	0	0	70	0	57	0	0	-23	92	0	58	-16	0
Total Project Traffic	0	0	0	0	0	252	0	118	0	0	2	250	0	280	-102	0
2030 Buildout Total	0	0	0	0	0	252	0	118	0	0	2831	250	0	280	1913	0
Approach Percent Impact		-				100.00%				8.18%				8.12%		

Overall Percent Impact (vs. Buildout) 14.2%

PM PEAK HOUR
PHF =

Description	- Eastbound				Jessie Drive Extension Westbound				NC 55 Northbound				NC 55 Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	1897	0	0	0	2806	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	199	0	0	0	146	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	236	0	0	0	333	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	68	0	0	0	32	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	503	0	0	0	511	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	2400	0	0	0	3317	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	50%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(50%)	(0%)	(50%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
Industrial Project Traffic	0	0	0	0	0	56	0	56	0	0	0	18	0	18	0	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	22%	35%	0%	35%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(57%)	(0%)	(20%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
NE Retail Pod Project Traffic	0	0	0	0	0	138	0	48	0	0	51	81	0	81	0	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	-111	0	0	0	-167	0
Pass-By Capture Assignment	0	0	0	0	0	167	0	28	0	0	83	28	0	167	0	0
Total NE Pod Pass-By Traffic	0	0	0	0	0	167	0	28	0	0	-28	28	0	167	-167	0
Total NE Pod Project Traffic	0	0	0	0	0	305	0	76	0	0	23	109	0	248	-167	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	57%	0%	35%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(57%)	(0%)	(35%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	0	0	0	0	59	0	36	0	0	0	61	0	37	0	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	-25	0	0	0	-37	0
Pass-By Capture Assignment	0	0	0	0	0	35	0	24	0	0	0	25	0	37	0	0
Total SE Pod Pass-By Traffic	0	0	0	0	0	35	0	24	0	0	-25	25	0	37	-37	0
Total SE Pod Project Traffic	0	0	0	0	0	94	0	60	0	0	-25	86	0	74	-37	0
Total Project Traffic	0	0	0	0	0	455	0	192	0	0	-2	213	0	340	-204	0
2030 Buildout Total	0	0	0	0	0	455	0	192	0	0	2398	213	0	340	3113	0
Approach Percent Impact		-				100.00%				8.08%				3.94%		

Overall Percent Impact (vs. Buildout) 14.8%

INTERSECTION ANALYSIS SHEET

Project:	Jessie Commons
Location:	Apex, NC
Scenario:	Jessie Dr Ext. Full-Mvmt.
Ct. Date	2030 Forecast Vols with HL-0007
Ct. Peaks	N/A
E/W Street:	-/Site Access A (RIRO)
N/S Street:	NC 55

	AM In	AM Out	PM In	PM Out
Industrial (E Pod) New Trips:	124	20	35	112
NE Retail Pod New Trips:	210	151	232	242
NE Retail Pod Pass-By Trips:	215	214	278	279
SE Retail Pod New Trips:	121	97	107	104
SE Retail Pod Pass-By Trips:	39	38	62	59

Annual Growth Rate:	3.0%	**Existing Year:**	2026 0
Growth Factor:	0.126	**Buildout Year:**	2030 0

AM PEAK HOUR
PHF =

Description	- Eastbound				Site Access A (RIRO) Westbound				NC 55 Northbound				NC 55 Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	2453	0	0	0	1570	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	80	0	0	0	80	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	266	0	0	0	277	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	30	0	0	0	88	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	376	0	0	0	445	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	2829	0	0	0	2015	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(50%)	(0%)	(0%)	(0%)	(0%)	(0%)
Industrial Project Traffic	0	0	0	0	0	0	0	0	0	0	10	0	0	0	62	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	22%	0%	0%	35%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(15%)	(0%)	(0%)	(20%)	(0%)	(0%)	(0%)	(0%)	(0%)
NE Retail Pod Project Traffic	0	0	0	0	0	0	0	23	0	0	30	46	0	0	74	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	-129	0	0	0	-86	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	107	0	0	21	108	0	0	86	0
Total NE Pod Pass-By Traffic	0	0	0	0	0	0	0	107	0	0	-108	108	0	0	0	0
Total NE Pod Project Traffic	0	0	0	0	0	0	0	130	0	0	-78	154	0	0	74	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(35%)	(0%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	34	0	0	0	42	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total SE Pod Pass-By Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total SE Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	34	0	0	0	42	0
Total Project Traffic	0	0	0	0	0	0	0	130	0	0	-34	154	0	0	178	0
2030 Buildout Total	0	0	0	0	0	0	0	130	0	0	2795	154	0	0	2193	0
Approach Percent Impact		-				100.00%				4.07%				8.12%		

Overall Percent Impact (vs. Buildout) 8.1%

PM PEAK HOUR
PHF =

Description	- Eastbound				Site Access A (RIRO) Westbound				NC 55 Northbound				NC 55 Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	1897	0	0	0	2806	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	199	0	0	0	146	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	236	0	0	0	333	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	68	0	0	0	32	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	503	0	0	0	511	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	2400	0	0	0	3317	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(50%)	(0%)	(0%)	(0%)	(0%)	(0%)
Industrial Project Traffic	0	0	0	0	0	0	0	0	0	0	56	0	0	0	18	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	22%	0%	0%	35%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(15%)	(0%)	(0%)	(20%)	(0%)	(0%)	(0%)	(0%)	(0%)
NE Retail Pod Project Traffic	0	0	0	0	0	0	0	36	0	0	48	51	0	0	81	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	-111	0	0	0	-167	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	84	0	0	28	83	0	0	167	0
Total NE Pod Pass-By Traffic	0	0	0	0	0	0	0	84	0	0	-83	83	0	0	0	0
Total NE Pod Project Traffic	0	0	0	0	0	0	0	120	0	0	-35	134	0	0	81	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(35%)	(0%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	36	0	0	0	37	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total SE Pod Pass-By Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total SE Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	36	0	0	0	37	0
Total Project Traffic	0	0	0	0	0	0	0	120	0	0	57	134	0	0	136	0
2030 Buildout Total	0	0	0	0	0	0	0	120	0	0	2457	134	0	0	3453	0
Approach Percent Impact		-				100.00%				7.37%				3.94%		

Overall Percent Impact (vs. Buildout) 7.3%

INTERSECTION ANALYSIS SHEET

Project:	Jessie Commons
Location:	Apex, NC
Scenario:	Jessie Dr Ext. Full-Mvmt.
Ct. Date	2030 Forecast Vols with HL-0007
Ct. Peaks	N/A
E/W Street:	Jessie Drive Extension
N/S Street:	Site Access B (RIRO)

	AM In	AM Out	PM In	PM Out
Industrial (E Pod) New Trips:	124	20	35	112
NE Retail Pod New Trips:	210	151	232	242
NE Retail Pod Pass-By Trips:	215	214	278	279
SE Retail Pod New Trips:	121	97	107	104
SE Retail Pod Pass-By Trips:	39	38	62	59

Annual Growth Rate:	3.0%	**Existing Year:**	2026 0
Growth Factor:	0.126	**Buildout Year:**	2030 0

AM PEAK HOUR
PHF =

Description	Jessie Drive Extension Eastbound				Jessie Drive Extension Westbound				Site Access B (RIRO) Northbound				Site Access B (RIRO) Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(100%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
Industrial Project Traffic	0	0	124	0	0	0	20	0	0	0	0	0	0	0	0	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	70%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(47%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(30%)
NE Retail Pod Project Traffic	0	0	147	0	0	0	71	0	0	0	0	0	0	0	0	45
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	108	0	0	0	21	0	0	0	0	0	0	0	0	86
Total NE Pod Pass-By Traffic	0	0	108	0	0	0	21	0	0	0	0	0	0	0	0	86
Total NE Pod Project Traffic	0	0	255	0	0	0	92	0	0	0	0	0	0	0	0	131
SE Retail Pod																
Percent Assignment Inbound	0%	0%	37%	55%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(92%)	(0%)	(0%)	(0%)	(0%)	(22%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	0	45	67	0	0	89	0	0	0	0	21	0	0	0	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	4	35	0	0	38	0	0	0	0	15	0	0	0	0
Total SE Pod Pass-By Traffic	0	0	4	35	0	0	38	0	0	0	0	15	0	0	0	0
Total SE Pod Project Traffic	0	0	49	102	0	0	127	0	0	0	0	36	0	0	0	0
Total Project Traffic	0	0	428	102	0	0	239	0	0	0	0	36	0	0	0	131
2030 Buildout Total	0	0	428	102	0	0	239	0	0	0	0	36	0	0	0	131
Approach Percent Impact			100.00%				100.00%				100.00%				100.00%	

Overall Percent Impact (vs. Buildout) 100.0%

PM PEAK HOUR
PHF =

Description	Jessie Drive Extension Eastbound				Jessie Drive Extension Westbound				Site Access B (RIRO) Northbound				Site Access B (RIRO) Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(100%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
Industrial Project Traffic	0	0	35	0	0	0	112	0	0	0	0	0	0	0	0	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	70%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(47%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(30%)
NE Retail Pod Project Traffic	0	0	162	0	0	0	114	0	0	0	0	0	0	0	0	73
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	195	0	0	0	98	0	0	0	0	0	0	0	0	98
Total NE Pod Pass-By Traffic	0	0	195	0	0	0	98	0	0	0	0	0	0	0	0	98
Total NE Pod Project Traffic	0	0	357	0	0	0	212	0	0	0	0	0	0	0	0	171
SE Retail Pod																
Percent Assignment Inbound	0%	0%	37%	55%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(92%)	(0%)	(0%)	(0%)	(0%)	(22%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	0	39	59	0	0	95	0	0	0	0	23	0	0	0	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	25	37	0	0	59	0	0	0	0	24	0	0	0	0
Total SE Pod Pass-By Traffic	0	0	25	37	0	0	59	0	0	0	0	24	0	0	0	0
Total SE Pod Project Traffic	0	0	64	96	0	0	154	0	0	0	0	47	0	0	0	0
Total Project Traffic	0	0	456	96	0	0	478	0	0	0	0	47	0	0	0	171
2030 Buildout Total	0	0	456	96	0	0	478	0	0	0	0	47	0	0	0	171
Approach Percent Impact			100.00%				100.00%				100.00%				100.00%	

Overall Percent Impact (vs. Buildout) 100.0%

INTERSECTION ANALYSIS SHEET

Project:	Jessie Commons
Location:	Apex, NC
Scenario:	Jessie Dr Ext. Full-Mvmt.
Ct. Date	2030 Forecast Vols with HL-0007
Ct. Peaks	N/A
E/W Street:	Jessie Drive Extension
N/S Street:	Site Access C (Full-Movement)

	AM In	AM Out	PM In	PM Out
Industrial (E Pod) New Trips:	124	20	35	112
NE Retail Pod New Trips:	210	151	232	242
NE Retail Pod Pass-By Trips:	215	214	278	279
SE Retail Pod New Trips:	121	97	107	104
SE Retail Pod Pass-By Trips:	39	38	62	59

Annual Growth Rate:	3.0%	**Existing Year:**	2026 0
Growth Factor:	0.126	**Buildout Year:**	2030 0

AM PEAK HOUR
PHF =

Description	Jessie Drive Extension Eastbound				Jessie Drive Extension Westbound				Site Access C (Full-Movement) Northbound				Site Access C (Full-Movement) Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(100%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
Industrial Project Traffic	0	0	124	0	0	0	20	0	0	0	0	0	0	0	0	0
NE Retail Pod																
Percent Assignment Inbound	0%	70%	0%	0%	0%	0%	0%	3%	0%	0%	5%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(3%)	(5%)	(47%)
NE Retail Pod Project Traffic	0	147	0	0	0	0	0	6	0	0	11	0	0	5	8	71
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	108	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Total NE Pod Pass-By Traffic	0	108	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Total NE Pod Project Traffic	0	255	0	0	0	0	0	6	0	0	11	0	0	5	8	92
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	37%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%
Percent Assignment Outbound	(22%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(70%)	(5%)	(3%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	21	0	0	45	0	4	0	0	0	68	5	3	0	0	6	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	15	0	0	4	0	0	0	0	0	23	0	0	0	0	0	0
Total SE Pod Pass-By Traffic	15	0	0	4	0	0	0	0	0	23	0	0	0	0	0	0
Total SE Pod Project Traffic	36	0	0	49	0	4	0	0	0	91	5	3	0	0	6	0
Total Project Traffic	36	255	124	49	0	4	20	6	0	91	16	3	0	5	14	92
2030 Buildout Total	36	255	124	49	0	4	20	6	0	91	16	3	0	5	14	92
Approach Percent Impact		100.00%				100.00%				100.00%				100.00%		

Overall Percent Impact (vs. Buildout) 100.0%

PM PEAK HOUR
PHF =

Description	Jessie Drive Extension Eastbound				Jessie Drive Extension Westbound				Site Access C (Full-Movement) Northbound				Site Access C (Full-Movement) Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(100%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
Industrial Project Traffic	0	0	35	0	0	0	112	0	0	0	0	0	0	0	0	0
NE Retail Pod																
Percent Assignment Inbound	0%	70%	0%	0%	0%	0%	0%	3%	0%	0%	5%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(3%)	(5%)	(47%)
NE Retail Pod Project Traffic	0	162	0	0	0	0	0	7	0	0	12	0	0	7	12	114
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	195	0	0	0	0	0	0	0	0	0	0	0	0	0	98
Total NE Pod Pass-By Traffic	0	195	0	0	0	0	0	0	0	0	0	0	0	0	0	98
Total NE Pod Project Traffic	0	357	0	0	0	0	0	7	0	0	12	0	0	7	12	212
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	37%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%
Percent Assignment Outbound	(22%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(70%)	(5%)	(3%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	23	0	0	39	0	3	0	0	0	73	5	3	0	0	5	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	24	0	0	25	0	0	0	0	0	35	0	0	0	0	0	0
Total SE Pod Pass-By Traffic	24	0	0	25	0	0	0	0	0	35	0	0	0	0	0	0
Total SE Pod Project Traffic	47	0	0	64	0	3	0	0	0	108	5	3	0	0	5	0
Total Project Traffic	47	357	35	64	0	3	112	7	0	108	17	3	0	7	17	212
2030 Buildout Total	47	357	35	64	0	3	112	7	0	108	17	3	0	7	17	212
Approach Percent Impact		100.00%				100.00%				100.00%				100.00%		

Overall Percent Impact (vs. Buildout) 100.0%

INTERSECTION ANALYSIS SHEET

Project:	Jessie Commons
Location:	Apex, NC
Scenario:	Jessie Dr Ext. Full-Mvmt.
Ct. Date	2030 Forecast Vols with HL-0007
Ct. Peaks	N/A
E/W Street:	Jessie Drive Extension /Jessie Drive Extension
N/S Street:	-/Site Access D (RO)

	AM In	AM Out	PM In	PM Out
Industrial (E Pod) New Trips:	124	20	35	112
NE Retail Pod New Trips:	210	151	232	242
NE Retail Pod Pass-By Trips:	215	214	278	279
SE Retail Pod New Trips:	121	97	107	104
SE Retail Pod Pass-By Trips:	39	38	62	59
Annual Growth Rate:	3.0%	**Existing Year:**	2026	0
Growth Factor:	0.126	**Buildout Year:**	2030	0

AM PEAK HOUR
PHF =

Description	Jessie Drive Extension Eastbound				Jessie Drive Extension Westbound				- Northbound				Site Access D (RO) Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(50%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(50%)
Industrial Project Traffic	0	0	124	0	0	0	10	0	0	0	0	0	0	0	0	10
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Percent Assignment Outbound	(0%)	(0%)	(3%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
NE Retail Pod Project Traffic	0	0	5	0	0	0	4	0	0	0	0	0	0	0	0	2
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NE Pod Pass-By Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NE Pod Project Traffic	0	0	5	0	0	0	4	0	0	0	0	0	0	0	0	2
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Percent Assignment Outbound	(0%)	(0%)	(3%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	1
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total SE Pod Pass-By Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total SE Pod Project Traffic	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	1
Total Project Traffic	0	0	132	0	0	0	16	0	0	0	0	0	0	0	0	13
2030 Buildout Total	0	0	132	0	0	0	16	0	0	0	0	0	0	0	0	13
Approach Percent Impact			100.00%				100.00%				-				100.00%	

Overall Percent Impact (vs. Buildout) 100.0%

PM PEAK HOUR
PHF =

Description	Jessie Drive Extension Eastbound				Jessie Drive Extension Westbound				- Northbound				Site Access D (RO) Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(50%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(50%)
Industrial Project Traffic	0	0	35	0	0	0	56	0	0	0	0	0	0	0	0	56
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Percent Assignment Outbound	(0%)	(0%)	(3%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
NE Retail Pod Project Traffic	0	0	7	0	0	0	5	0	0	0	0	0	0	0	0	2
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NE Pod Pass-By Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NE Pod Project Traffic	0	0	7	0	0	0	5	0	0	0	0	0	0	0	0	2
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Percent Assignment Outbound	(0%)	(0%)	(3%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	1
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total SE Pod Pass-By Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total SE Pod Project Traffic	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	1
Total Project Traffic	0	0	45	0	0	0	63	0	0	0	0	0	0	0	0	59
2030 Buildout Total	0	0	45	0	0	0	63	0	0	0	0	0	0	0	0	59
Approach Percent Impact			100.00%				100.00%				-				100.00%	

Overall Percent Impact (vs. Buildout) 100.0%

INTERSECTION ANALYSIS SHEET

Project:	Jessie Commons
Location:	Apex, NC
Scenario:	Jessie Dr Ext. Full-Mvmt.
Ct. Date	2030 Forecast Vols with HL-0007
Ct. Peaks	N/A
E/W Street:	Jessie Drive Extension
N/S Street:	Site Access E (Full-Movement)

	AM In	AM Out	PM In	PM Out
Industrial (E Pod) New Trips:	124	20	35	112
NE Retail Pod New Trips:	210	151	232	242
NE Retail Pod Pass-By Trips:	215	214	278	279
SE Retail Pod New Trips:	121	97	107	104
SE Retail Pod Pass-By Trips:	39	38	62	59

Annual Growth Rate:	3.0%	**Existing Year:**	2026 0
Growth Factor:	0.126	**Buildout Year:**	2030 0

AM PEAK HOUR
PHF =

Description	Jessie Drive Extension Eastbound				Jessie Drive Extension Westbound				Site Access E (Full-Movement) Northbound				Site Access E (Full-Movement) Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	65%	0%	35%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(35%)	(0%)	(0%)	(0%)	(0%)	(0%)	(15%)
Industrial Project Traffic	0	81	0	43	0	0	0	0	0	7	0	0	0	0	0	3
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%
Percent Assignment Outbound	(0%)	(2%)	(0%)	(1%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
NE Retail Pod Project Traffic	0	3	0	2	0	0	0	0	0	2	0	0	0	0	0	2
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NE Pod Pass-By Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NE Pod Project Traffic	0	3	0	2	0	0	0	0	0	2	0	0	0	0	0	2
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%
Percent Assignment Outbound	(0%)	(2%)	(0%)	(1%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	2	0	1	0	0	0	0	0	1	0	0	0	0	0	1
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total SE Pod Pass-By Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total SE Pod Project Traffic	0	2	0	1	0	0	0	0	0	1	0	0	0	0	0	1
Total Project Traffic	0	86	0	46	0	0	0	0	0	10	0	0	0	0	0	6
2030 Buildout Total	0	86	0	46	0	0	0	0	0	10	0	0	0	0	0	6
Approach Percent Impact		100.00%				-				100.00%				100.00%		

Overall Percent Impact (vs. Buildout) 100.0%

PM PEAK HOUR
PHF =

Description	Jessie Drive Extension Eastbound				Jessie Drive Extension Westbound				Site Access E (Full-Movement) Northbound				Site Access E (Full-Movement) Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	65%	0%	35%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(35%)	(0%)	(0%)	(0%)	(0%)	(0%)	(15%)
Industrial Project Traffic	0	23	0	12	0	0	0	0	0	39	0	0	0	0	0	17
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%
Percent Assignment Outbound	(0%)	(2%)	(0%)	(1%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
NE Retail Pod Project Traffic	0	5	0	2	0	0	0	0	0	2	0	0	0	0	0	2
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NE Pod Pass-By Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NE Pod Project Traffic	0	5	0	2	0	0	0	0	0	2	0	0	0	0	0	2
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%
Percent Assignment Outbound	(0%)	(2%)	(0%)	(1%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	2	0	1	0	0	0	0	0	1	0	0	0	0	0	1
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total SE Pod Pass-By Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total SE Pod Project Traffic	0	2	0	1	0	0	0	0	0	1	0	0	0	0	0	1
Total Project Traffic	0	30	0	15	0	0	0	0	0	42	0	0	0	0	0	20
2030 Buildout Total	0	30	0	15	0	0	0	0	0	42	0	0	0	0	0	20
Approach Percent Impact		100.00%				-				100.00%				100.00%		

Overall Percent Impact (vs. Buildout) 100.0%

Appendix F:
Intersection Spreadsheets –
Access Scenario 2

INTERSECTION ANALYSIS SHEET

Project:	Jessie Commons
Location:	Apex, NC
Scenario:	Jessie Dr Ext. Full-Mvmt.
Ct. Date	5/20/2025
Ct. Peaks	7:15 - 8:15 AM; 4:45 - 5:45 PM
E/W Street:	US 1 SB On-Ramp/US 1 SB Off-Ramp
N/S Street:	NC 55

	AM In	AM Out	PM In	PM Out
Industrial (E Pod) New Trips:	124	20	35	112
NE Retail Pod New Trips:	210	151	232	242
NE Retail Pod Pass-By Trips:	215	214	278	279
SE Retail Pod New Trips:	121	97	107	104
SE Retail Pod Pass-By Trips:	39	38	62	59

Annual Growth Rate:	3.0%	**Existing Year:**	2026 0
Growth Factor:	0.126	**Buildout Year:**	2030 0

AM PEAK HOUR

PHF = 0.90

Description	US 1 SB On-Ramp Eastbound U-Turn	Left	Through	Right	US 1 SB Off-Ramp Westbound U-Turn	Left	Through	Right	NC 55 Northbound U-Turn	Left	Through	Right	NC 55 Southbound U-Turn	Left	Through	Right
2026 Traffic Count	0	0	0	0	0	828	1	430	0	80	1036	0	0	0	939	125
3% Growth to 2026	0	0	0	0	0	25	0	13	0	2	31	0	0	0	28	4
2026 Existing Traffic	0	0	0	0	0	853	1	443	0	82	1067	0	0	0	967	129
Growth Factor (0.03 per year)	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126
2030 Background Growth	0	0	0	0	0	107	0	56	0	10	134	0	0	0	121	16
Committed Projects																
Aqualine (Assume 100% Built-out)	0	0	0	0	0	36	0	0	0	25	33	0	0	0	33	0
Veridina East Village (Assume 100% Bu	0	0	0	0	0	179	0	0	0	0	77	0	0	0	74	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	70	0	0	0	0	6	0	0	0	18	0
Total Committed Traffic	0	0	0	0	0	285	0	0	0	25	116	0	0	0	125	0
2030 Background Traffic	0	0	0	0	0	1245	1	499	0	117	1317	0	0	0	1213	145
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(15%)	(10%)	(0%)	(0%)	(0%)	(0%)	(0%)
Industrial Project Traffic	0	0	0	0	0	31	0	0	0	3	2	0	0	0	12	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	15%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(5%)	(15%)	(0%)	(0%)	(0%)	(0%)	(0%)
NE Retail Pod Project Traffic	0	0	0	0	0	11	0	0	0	8	23	0	0	0	32	0
Total NE Pod Project Traffic	0	0	0	0	0	11	0	0	0	8	23	0	0	0	32	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	15%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(5%)	(15%)	(0%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	0	0	0	0	6	0	0	0	5	15	0	0	0	18	0
Total SE Pod Project Traffic	0	0	0	0	0	6	0	0	0	5	15	0	0	0	18	0
Total Project Traffic	0	0	0	0	0	48	0	0	0	16	40	0	0	0	62	0
2030 Buildout Total	0	0	0	0	0	1293	1	499	0	133	1357	0	0	0	1275	145
Approach Percent Impact		-				2.68%				3.76%				4.37%		

Overall Percent Impact (vs. Buildout) 3.5%

PM PEAK HOUR

PHF = 0.99

Description	US 1 SB On-Ramp Eastbound U-Turn	Left	Through	Right	US 1 SB Off-Ramp Westbound U-Turn	Left	Through	Right	NC 55 Northbound U-Turn	Left	Through	Right	NC 55 Southbound U-Turn	Left	Through	Right
2026 Traffic Count	0	0	0	0	0	1165	0	457	0	123	890	0	0	0	1174	215
3% Growth to 2026	0	0	0	0	0	35	0	14	0	4	27	0	0	0	35	6
2026 Existing Traffic	0	0	0	0	0	1200	0	471	0	127	917	0	0	0	1209	221
Growth Factor (0.03 per year)	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126
2030 Background Growth	0	0	0	0	0	151	0	59	0	16	115	0	0	0	152	28
Committed Projects																
Aqualine (Assume 100% Built-out)	0	0	0	0	0	85	0	0	0	32	59	0	0	0	79	0
Veridina East Village (Assume 100% Bu	0	0	0	0	0	263	0	0	0	0	75	0	0	0	96	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	25	0	0	0	0	14	0	0	0	6	0
Total Committed Traffic	0	0	0	0	0	373	0	0	0	32	148	0	0	0	181	0
2030 Background Traffic	0	0	0	0	0	1724	0	530	0	175	1180	0	0	0	1542	249
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(15%)	(10%)	(0%)	(0%)	(0%)	(0%)	(0%)
Industrial Project Traffic	0	0	0	0	0	9	0	0	0	17	11	0	0	0	4	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	15%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(5%)	(15%)	(0%)	(0%)	(0%)	(0%)	(0%)
NE Retail Pod Project Traffic	0	0	0	0	0	12	0	0	0	12	36	0	0	0	35	0
Total NE Pod Project Traffic	0	0	0	0	0	12	0	0	0	12	36	0	0	0	35	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	15%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(5%)	(15%)	(0%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	0	0	0	0	5	0	0	0	5	16	0	0	0	16	0
Total SE Pod Project Traffic	0	0	0	0	0	5	0	0	0	5	16	0	0	0	16	0
Total Project Traffic	0	0	0	0	0	26	0	0	0	34	63	0	0	0	55	0
2030 Buildout Total	0	0	0	0	0	1750	0	530	0	209	1243	0	0	0	1597	249
Approach Percent Impact		-				1.14%				6.68%				2.98%		

Overall Percent Impact (vs. Buildout) 3.2%

INTERSECTION ANALYSIS SHEET

Project:	Jessie Commons
Location:	Apex, NC
Scenario:	Jessie Dr Ext. Full-Mvmt.
Ct. Date	5/20/2025
Ct. Peaks	7:00 - 8:00 AM; 4:30 - 5:30 PM
E/W Street:	US 1 NB Off-Ramp/US 1 NB On-Ramp
N/S Street:	NC 55

	AM In	AM Out	PM In	PM Out
Industrial (E Pod) New Trips:	124	20	35	112
NE Retail Pod New Trips:	210	151	232	242
NE Retail Pod Pass-By Trips:	215	214	278	279
SE Retail Pod New Trips:	121	97	107	104
SE Retail Pod Pass-By Trips:	39	38	62	59

Annual Growth Rate:	3.0%	**Existing Year:**	2026 0
Growth Factor:	0.126	**Buildout Year:**	2030 0

AM PEAK HOUR

PHF = 0.96

Description	US 1 NB Off-Ramp Eastbound U-Turn	Left	Through	Right	US 1 NB On-Ramp Westbound U-Turn	Left	Through	Right	NC 55 Northbound U-Turn	Left	Through	Right	NC 55 Southbound U-Turn	Left	Through	Right
2026 Traffic Count	0	215	3	139	0	0	0	0	0	0	899	1011	0	351	1415	0
3% Growth to 2026	0	6	0	4	0	0	0	0	0	0	27	30	0	11	42	0
2026 Existing Traffic	0	221	3	143	0	0	0	0	0	0	926	1041	0	362	1457	0
Growth Factor (0.03 per year)	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126
2030 Background Growth	0	28	0	18	0	0	0	0	0	0	116	131	0	45	183	0
Committed Projects																
Aqualine	0	0	0	19	0	0	0	0	0	0	58	44	0	0	69	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	77	248	0	0	253	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	6	24	0	0	88	0
Total Committed Traffic	0	0	0	19	0	0	0	0	0	0	141	316	0	0	410	0
2030 Background Traffic	0	249	3	180	0	0	0	0	0	0	1183	1488	0	407	2050	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	15%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(25%)	(25%)	(0%)	(0%)	(0%)	(0%)
Industrial Project Traffic	0	0	0	19	0	0	0	0	0	0	5	5	0	0	43	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(20%)	(5%)	(0%)	(0%)	(0%)	(0%)
NE Retail Pod Project Traffic	0	0	0	11	0	0	0	0	0	0	30	8	0	0	42	0
Total NE Pod Project Traffic	0	0	0	11	0	0	0	0	0	0	30	8	0	0	42	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(20%)	(5%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	0	0	6	0	0	0	0	0	0	19	5	0	0	24	0
Total SE Pod Project Traffic	0	0	0	6	0	0	0	0	0	0	19	5	0	0	24	0
Total Project Traffic	0	0	0	36	0	0	0	0	0	0	54	18	0	0	109	0
2030 Buildout Total	0	249	3	216	0	0	0	0	0	0	1237	1506	0	407	2159	0
Approach Percent Impact		7.69%				-				2.62%				4.25%		

Overall Percent Impact (vs. Buildout) 3.8%

PM PEAK HOUR

PHF = 0.98

Description	US 1 NB Off-Ramp Eastbound U-Turn	Left	Through	Right	US 1 NB On-Ramp Westbound U-Turn	Left	Through	Right	NC 55 Northbound U-Turn	Left	Through	Right	NC 55 Southbound U-Turn	Left	Through	Right
2026 Traffic Count	0	144	2	108	0	0	0	0	0	0	853	947	0	349	2055	0
3% Growth to 2026	0	4	0	3	0	0	0	0	0	0	26	28	0	10	62	0
2026 Existing Traffic	0	148	2	111	0	0	0	0	0	0	879	975	0	359	2117	0
Growth Factor (0.03 per year)	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126
2030 Background Growth	0	19	0	14	0	0	0	0	0	0	110	122	0	45	266	0
Committed Projects																
Aqualine	0	0	0	43	0	0	0	0	0	0	91	63	0	0	165	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	75	195	0	0	359	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	14	54	0	0	32	0
Total Committed Traffic	0	0	0	43	0	0	0	0	0	0	180	312	0	0	556	0
2030 Background Traffic	0	167	2	168	0	0	0	0	0	0	1169	1409	0	404	2939	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	15%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(25%)	(25%)	(0%)	(0%)	(0%)	(0%)
Industrial Project Traffic	0	0	0	5	0	0	0	0	0	0	28	28	0	0	12	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(20%)	(5%)	(0%)	(0%)	(0%)	(0%)
NE Retail Pod Project Traffic	0	0	0	12	0	0	0	0	0	0	48	12	0	0	46	0
Total NE Pod Project Traffic	0	0	0	12	0	0	0	0	0	0	48	12	0	0	46	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(20%)	(5%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	0	0	5	0	0	0	0	0	0	21	5	0	0	21	0
Total SE Pod Project Traffic	0	0	0	5	0	0	0	0	0	0	21	5	0	0	21	0
Total Project Traffic	0	0	0	22	0	0	0	0	0	0	97	45	0	0	79	0
2030 Buildout Total	0	167	2	190	0	0	0	0	0	0	1266	1454	0	404	3018	0
Approach Percent Impact		6.13%				-				5.22%				2.31%		

Overall Percent Impact (vs. Buildout) 3.7%

INTERSECTION ANALYSIS SHEET

Project:	**Jessie Commons**
Location:	**Apex, NC**
Scenario:	**Jessie Dr Ext. Full-Mvmt.**
Ct. Date	**2030 Forecast Vols with HL-0007**
Ct. Peaks	**N/A**
E/W Street:	**-/U-Turn North of Williams Street**
N/S Street:	**NC 55**

	AM In	AM Out	PM In	PM Out
Industrial (E Pod) New Trips:	124	20	35	112
NE Retail Pod New Trips:	210	151	232	242
NE Retail Pod Pass-By Trips:	215	214	278	279
SE Retail Pod New Trips:	121	97	107	104
SE Retail Pod Pass-By Trips:	39	38	62	59

Annual Growth Rate:	3.0%	**Existing Year:**	2026 0
Growth Factor:	0.126	**Buildout Year:**	2030 0

AM PEAK HOUR
PHF =

	-				U-Turn North of Williams Street				NC 55				NC 55			
	Eastbound				**Westbound**				**Northbound**				**Southbound**			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	301	0	2453	0	0	0	1570	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	80	0	0	0	80	0
Veridina East Village	0	0	0	0	0	0	0	0	56	0	253	0	0	0	430	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	30	0	0	0	88	0
Total Committed Traffic	0	0	0	0	0	0	0	0	56	0	363	0	0	0	598	0
2030 Background Traffic	0	0	0	0	0	0	0	0	357	0	2816	0	0	0	2168	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(50%)	(0%)
Industrial Project Traffic	0	0	0	0	0	0	0	0	0	0	62	0	0	0	10	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	57%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(57%)	(0%)
NE Retail Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	120	0	0	0	86	0
Total NE Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	120	0	0	0	86	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	57%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(57%)	(0%)
SE Retail Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	69	0	0	0	55	0
Total SE Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	69	0	0	0	55	0
Total Project Traffic	0	0	0	0	0	0	0	0	0	0	251	0	0	0	151	0
2030 Buildout Total	0	0	0	0	0	0	0	0	357	0	3067	0	0	0	2319	0
Approach Percent Impact		-				-				7.33%				6.51%		

Overall Percent Impact (vs. Buildout) 7.0%

PM PEAK HOUR
PHF =

	-				U-Turn North of Williams Street				NC 55				NC 55			
	Eastbound				**Westbound**				**Northbound**				**Southbound**			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	154	0	1897	0	0	0	2806	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	199	0	0	0	146	0
Veridina East Village	0	0	0	0	0	0	0	0	50	0	355	0	0	0	366	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	68	0	0	0	32	0
Total Committed Traffic	0	0	0	0	0	0	0	0	50	0	622	0	0	0	544	0
2030 Background Traffic	0	0	0	0	0	0	0	0	204	0	2519	0	0	0	3350	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(50%)	(0%)
Industrial Project Traffic	0	0	0	0	0	0	0	0	0	0	18	0	0	0	56	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	57%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(57%)	(0%)
NE Retail Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	132	0	0	0	138	0
Total NE Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	132	0	0	0	138	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	57%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(57%)	(0%)
SE Retail Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	61	0	0	0	59	0
Total SE Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	61	0	0	0	59	0
Total Project Traffic	0	0	0	0	0	0	0	0	0	0	211	0	0	0	253	0
2030 Buildout Total	0	0	0	0	0	0	0	0	204	0	2730	0	0	0	3603	0
Approach Percent Impact		-				-				7.19%				7.02%		

Overall Percent Impact (vs. Buildout) 7.1%

INTERSECTION ANALYSIS SHEET

Project:	Jessie Commons
Location:	Apex, NC
Scenario:	Jessie Dr Ext. Full-Mvmt.
Ct. Date	2030 Forecast Vols with HL-0007
Ct. Peaks	N/A
E/W Street:	Forest Light Way/Williams Street
N/S Street:	NC 55

	AM In	AM Out	PM In	PM Out
Industrial (E Pod) New Trips:	124	20	35	112
NE Retail Pod New Trips:	210	151	232	242
NE Retail Pod Pass-By Trips:	215	214	278	279
SE Retail Pod New Trips:	121	97	107	104
SE Retail Pod Pass-By Trips:	39	38	62	59

Annual Growth Rate: 3.0% **Existing Year:** 2026 0
Growth Factor: 0.126 **Buildout Year:** 2030 0

AM PEAK HOUR
PHF =

Description	Forest Light Way Eastbound U-Turn	Left	Through	Right	Williams Street Westbound U-Turn	Left	Through	Right	NC 55 Northbound U-Turn	Left	Through	Right	NC 55 Southbound U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	37	0	0	0	1156	0	38	1589	127	0	308	1527	36
Committed Projects																
Aqualine	0	0	0	0	0	0	0	38	0	0	42	0	0	35	45	0
Veridina East Village	0	0	0	338	0	0	0	86	0	252	223	51	0	9	293	176
NCC Phase 1 (Assume 50% Built-out)	0	0	0	45	0	0	0	0	0	43	30	0	0	0	0	88
Total Committed Traffic	0	0	0	383	0	0	0	124	0	295	295	51	0	44	338	264
2030 Background Traffic	0	0	0	420	0	0	0	1280	0	333	1884	178	0	352	1865	300
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	5%	0%	0%	0%	10%	0%	0%	40%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(10%)	(35%)	(5%)
Industrial Project Traffic	0	0	0	6	0	0	0	12	0	0	50	0	0	2	7	1
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	12%	0%	0%	0%	20%	0%	0%	37%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(20%)	(25%)	(12%)
NE Retail Pod Project Traffic	0	0	0	25	0	0	0	42	0	0	78	0	0	30	38	18
Total NE Pod Project Traffic	0	0	0	25	0	0	0	42	0	0	78	0	0	30	38	18
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	12%	0%	0%	0%	20%	0%	0%	37%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(20%)	(25%)	(12%)
SE Retail Pod Project Traffic	0	0	0	15	0	0	0	24	0	0	45	0	0	19	24	12
Total SE Pod Project Traffic	0	0	0	15	0	0	0	24	0	0	45	0	0	19	24	12
Total Project Traffic	0	0	0	46	0	0	0	78	0	0	173	0	0	51	69	31
2030 Buildout Total	0	0	0	466	0	0	0	1358	0	333	2057	178	0	403	1934	331
Approach Percent Impact		9.88%				5.74%				6.74%				5.66%		

Overall Percent Impact (vs. Buildout) 6.3%

PM PEAK HOUR
PHF =

Description	Forest Light Way Eastbound U-Turn	Left	Through	Right	Williams Street Westbound U-Turn	Left	Through	Right	NC 55 Northbound U-Turn	Left	Through	Right	NC 55 Southbound U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	74	0	0	0	615	0	23	1436	287	0	965	1970	25
Committed Projects																
Aqualine	0	0	0	0	0	0	0	97	0	0	102	0	0	71	75	0
Veridina East Village	0	0	0	340	0	0	0	107	0	359	299	41	0	25	242	125
NCC Phase 1 (Assume 50% Built-out)	0	0	0	101	0	0	0	0	0	15	68	0	0	0	0	32
Total Committed Traffic	0	0	0	441	0	0	0	204	0	374	469	41	0	96	317	157
2030 Background Traffic	0	0	0	515	0	0	0	819	0	397	1905	328	0	1061	2287	182
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	5%	0%	0%	0%	10%	0%	0%	40%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(10%)	(35%)	(5%)
Industrial Project Traffic	0	0	0	2	0	0	0	4	0	0	14	0	0	11	39	6
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	12%	0%	0%	0%	20%	0%	0%	37%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(20%)	(25%)	(12%)
NE Retail Pod Project Traffic	0	0	0	28	0	0	0	46	0	0	86	0	0	48	61	29
Total NE Pod Project Traffic	0	0	0	28	0	0	0	46	0	0	86	0	0	48	61	29
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	12%	0%	0%	0%	20%	0%	0%	37%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(20%)	(25%)	(12%)
SE Retail Pod Project Traffic	0	0	0	13	0	0	0	21	0	0	39	0	0	21	26	12
Total SE Pod Project Traffic	0	0	0	13	0	0	0	21	0	0	39	0	0	21	26	12
Total Project Traffic	0	0	0	43	0	0	0	71	0	0	139	0	0	80	126	47
2030 Buildout Total	0	0	0	558	0	0	0	890	0	397	2044	328	0	1141	2413	229
Approach Percent Impact		7.71%				7.98%				5.02%				6.69%		

Overall Percent Impact (vs. Buildout) 6.3%

INTERSECTION ANALYSIS SHEET

Project:	**Jessie Commons**
Location:	**Apex, NC**
Scenario:	**Jessie Dr Ext. Full-Mvmt.**
Ct. Date	**2030 Forecast Vols with HL-0007**
Ct. Peaks	**N/A**
E/W Street:	**U-Turn South of Forest Light Way/-**
N/S Street:	**NC 55**

	AM In	AM Out	PM In	PM Out
Industrial (E Pod) New Trips:	124	20	35	112
NE Retail Pod New Trips:	210	151	232	242
NE Retail Pod Pass-By Trips:	215	214	278	279
SE Retail Pod New Trips:	121	97	107	104
SE Retail Pod Pass-By Trips:	39	38	62	59

Annual Growth Rate:	3.0%	**Existing Year:**	2026 0
Growth Factor:	0.126	**Buildout Year:**	2030 0

AM PEAK HOUR
PHF =

	U-Turn South of Forest Light Way				-				NC 55				NC 55			
	Eastbound				**Westbound**				**Northbound**				**Southbound**			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	1745	0	18	0	1546	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	42	0	0	0	45	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	314	0	233	0	398	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	43	0	30	0	15	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	399	0	263	0	458	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	2144	0	281	0	2004	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%	5%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(35%)	(0%)
Industrial Project Traffic	0	0	0	0	0	0	0	0	0	0	43	0	6	0	7	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	0%	12%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(25%)	(0%)
NE Retail Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	53	0	25	0	38	0
Total NE Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	53	0	25	0	38	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	0%	12%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(25%)	(0%)
SE Retail Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	30	0	15	0	24	0
Total SE Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	30	0	15	0	24	0
Total Project Traffic	0	0	0	0	0	0	0	0	0	0	126	0	46	0	69	0
2030 Buildout Total	0	0	0	0	0	0	0	0	0	0	2270	0	327	0	2073	0
Approach Percent Impact		-				-				5.55%				4.79%		

Overall Percent Impact (vs. Buildout) 5.2%

PM PEAK HOUR
PHF =

	U-Turn South of Forest Light Way				-				NC 55				NC 55			
	Eastbound				**Westbound**				**Northbound**				**Southbound**			
Description	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	1709	0	37	0	2007	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	102	0	0	0	75	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	436	0	274		307	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	15	0	68	0	33	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	553	0	342	0	415	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	2262	0	379	0	2422	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%	5%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(35%)	(0%)
Industrial Project Traffic	0	0	0	0	0	0	0	0	0	0	12	0	2	0	39	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	0%	12%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(25%)	(0%)
NE Retail Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	58	0	28	0	61	0
Total NE Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	58	0	28	0	61	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	0%	12%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(25%)	(0%)
SE Retail Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	27	0	13	0	26	0
Total SE Pod Project Traffic	0	0	0	0	0	0	0	0	0	0	27	0	13	0	26	0
Total Project Traffic	0	0	0	0	0	0	0	0	0	0	97	0	43	0	126	0
2030 Buildout Total	0	0	0	0	0	0	0	0	0	0	2359	0	422	0	2548	0
Approach Percent Impact		-				-				4.11%				5.69%		

Overall Percent Impact (vs. Buildout) 5.0%

INTERSECTION ANALYSIS SHEET

Project:	Jessie Commons
Location:	Apex, NC
Scenario:	Jessie Dr Ext. Full-Mvmt.
Ct. Date	2030 Forecast Vols with HL-0007
Ct. Peaks	N/A
E/W Street:	-/Jessie Drive Extension
N/S Street:	NC 55

	AM In	AM Out	PM In	PM Out
Industrial (E Pod) New Trips:	124	20	35	112
NE Retail Pod New Trips:	210	151	232	242
NE Retail Pod Pass-By Trips:	215	214	278	279
SE Retail Pod New Trips:	121	97	107	104
SE Retail Pod Pass-By Trips:	39	38	62	59
Annual Growth Rate:	3.0%	**Existing Year:**	2026	0
Growth Factor:	0.126	**Buildout Year:**	2030	0

AM PEAK HOUR
PHF =

Description	- Eastbound				Jessie Drive Extension Westbound				NC 55 Northbound				NC 55 Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	2453	0	0	0	1570	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	80	0	0	0	80	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	266	0	0	0	277	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	30	0	0	0	88	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	376	0	0	0	445	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	2829	0	0	0	2015	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	50%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(100%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(50%)	(0%)
Industrial Project Traffic	0	0	0	0	0	0	0	20	0	0	0	62	0	62	10	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	22%	35%	0%	35%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(77%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(57%)	(0%)
NE Retail Pod Project Traffic	0	0	0	0	0	0	0	116	0	0	46	74	0	74	86	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	-129	0	0	0	-86	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	107	0	0	108	22	0	86	86	0
Total NE Pod Pass-By Traffic	0	0	0	0	0	0	0	107	0	0	-21	22	0	86	0	0
Total NE Pod Project Traffic	0	0	0	0	0	0	0	223	0	0	25	96	0	160	86	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	57%	0%	35%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(92%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(57%)	(0%)
SE Retail Pod Project Traffic	0	0	0	0	0	0	0	89	0	0	0	69	0	42	55	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	-23	0	0	0	-16	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	38	0	0	0	23	0	16	15	0
Total SE Pod Pass-By Traffic	0	0	0	0	0	0	0	38	0	0	-23	23	0	16	-1	0
Total SE Pod Project Traffic	0	0	0	0	0	0	0	127	0	0	-23	92	0	58	54	0
Total Project Traffic	0	0	0	0	0	0	0	370	0	0	2	250	0	280	150	0
2030 Buildout Total	0	0	0	0	0	0	0	370	0	0	2831	250	0	280	2165	0
Approach Percent Impact		-				100.00%				8.18%				17.59%		

Overall Percent Impact (vs. Buildout) 17.8%

PM PEAK HOUR
PHF =

Description	- Eastbound				Jessie Drive Extension Westbound				NC 55 Northbound				NC 55 Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	1897	0	0	0	2806	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	199	0	0	0	146	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	236	0	0	0	333	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	68	0	0	0	32	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	503	0	0	0	511	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	2400	0	0	0	3317	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	50%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(100%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(50%)	(0%)
Industrial Project Traffic	0	0	0	0	0	0	0	112	0	0	0	18	0	18	56	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	22%	35%	0%	35%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(77%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(57%)	(0%)
NE Retail Pod Project Traffic	0	0	0	0	0	0	0	186	0	0	51	81	0	81	138	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	-111	0	0	0	-167	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	195	0	0	83	28	0	167	167	0
Total NE Pod Pass-By Traffic	0	0	0	0	0	0	0	195	0	0	-28	28	0	167	0	0
Total NE Pod Project Traffic	0	0	0	0	0	0	0	381	0	0	23	109	0	248	138	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	57%	0%	35%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(92%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(57%)	(0%)
SE Retail Pod Project Traffic	0	0	0	0	0	0	0	95	0	0	0	61	0	37	59	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	-25	0	0	0	-37	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	59	0	0	0	25	0	37	35	0
Total SE Pod Pass-By Traffic	0	0	0	0	0	0	0	59	0	0	-25	25	0	37	-2	0
Total SE Pod Project Traffic	0	0	0	0	0	0	0	154	0	0	-25	86	0	74	57	0
Total Project Traffic	0	0	0	0	0	0	0	647	0	0	-2	213	0	340	251	0
2030 Buildout Total	0	0	0	0	0	0	0	647	0	0	2398	213	0	340	3568	0
Approach Percent Impact		-				100.00%				8.08%				15.12%		

Overall Percent Impact (vs. Buildout) 20.2%

INTERSECTION ANALYSIS SHEET

Project:	Jessie Commons
Location:	Apex, NC
Scenario:	Jessie Dr Ext. Full-Mvmt.
Ct. Date	2030 Forecast Vols with HL-0007
Ct. Peaks	N/A
E/W Street:	-/Site Access A (RIRO)
N/S Street:	NC 55

	AM In	AM Out	PM In	PM Out
Industrial (E Pod) New Trips:	124	20	35	112
NE Retail Pod New Trips:	210	151	232	242
NE Retail Pod Pass-By Trips:	215	214	278	279
SE Retail Pod New Trips:	121	97	107	104
SE Retail Pod Pass-By Trips:	39	38	62	59

Annual Growth Rate:	3.0%	**Existing Year:**	2026	0
Growth Factor:	0.126	**Buildout Year:**	2030	0

AM PEAK HOUR
PHF =

Description	- Eastbound				Site Access A (RIRO) Westbound				NC 55 Northbound				NC 55 Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	2453	0	0	0	1570	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	80	0	0	0	80	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	266	0	0	0	277	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	30	0	0	0	88	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	376	0	0	0	445	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	2829	0	0	0	2015	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(50%)	(0%)	(50%)	(0%)	(0%)	(0%)	(0%)	(0%)
Industrial Project Traffic	0	0	0	0	0	0	0	0	10	0	10	0	0	0	62	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	22%	0%	0%	35%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(15%)	(57%)	(0%)	(20%)	(0%)	(0%)	(0%)	(0%)	(0%)
NE Retail Pod Project Traffic	0	0	0	0	0	0	0	23	86	0	30	46	0	0	74	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	-129	0	0	0	-86	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	107	86	0	21	108	0	0	86	0
Total NE Pod Pass-By Traffic	0	0	0	0	0	0	0	107	86	0	-108	108	0	0	0	0
Total NE Pod Project Traffic	0	0	0	0	0	0	0	130	172	0	-78	154	0	0	74	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(57%)	(0%)	(35%)	(0%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	0	0	0	0	0	0	0	55	0	34	0	0	0	42	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0
Total SE Pod Pass-By Traffic	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0
Total SE Pod Project Traffic	0	0	0	0	0	0	0	0	70	0	34	0	0	0	42	0
Total Project Traffic	0	0	0	0	0	0	0	130	252	0	-34	154	0	0	178	0
2030 Buildout Total	0	0	0	0	0	0	0	130	252	0	2795	154	0	0	2193	0
Approach Percent Impact		-				100.00%				11.62%				8.12%		

Overall Percent Impact (vs. Buildout) 12.3%

PM PEAK HOUR
PHF =

Description	- Eastbound				Site Access A (RIRO) Westbound				NC 55 Northbound				NC 55 Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	1897	0	0	0	2806	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	199	0	0	0	146	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	236	0	0	0	333	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	68	0	0	0	32	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	503	0	0	0	511	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	2400	0	0	0	3317	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(50%)	(0%)	(50%)	(0%)	(0%)	(0%)	(0%)	(0%)
Industrial Project Traffic	0	0	0	0	0	0	0	0	56	0	56	0	0	0	18	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	22%	0%	0%	35%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(15%)	(57%)	(0%)	(20%)	(0%)	(0%)	(0%)	(0%)	(0%)
NE Retail Pod Project Traffic	0	0	0	0	0	0	0	36	138	0	48	51	0	0	81	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	-111	0	0	0	-167	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	84	167	0	28	83	0	0	167	0
Total NE Pod Pass-By Traffic	0	0	0	0	0	0	0	84	167	0	-83	83	0	0	0	0
Total NE Pod Project Traffic	0	0	0	0	0	0	0	120	305	0	-35	134	0	0	81	0
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(57%)	(0%)	(35%)	(0%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	0	0	0	0	0	0	0	59	0	36	0	0	0	37	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	0	35	0	0	0	0	0	0	0
Total SE Pod Pass-By Traffic	0	0	0	0	0	0	0	0	35	0	0	0	0	0	0	0
Total SE Pod Project Traffic	0	0	0	0	0	0	0	0	94	0	36	0	0	0	37	0
Total Project Traffic	0	0	0	0	0	0	0	120	455	0	57	134	0	0	136	0
2030 Buildout Total	0	0	0	0	0	0	0	120	455	0	2457	134	0	0	3453	0
Approach Percent Impact		-				100.00%				21.21%				3.94%		

Overall Percent Impact (vs. Buildout) 13.6%

INTERSECTION ANALYSIS SHEET

Project:	Jessie Commons
Location:	Apex, NC
Scenario:	Jessie Dr Ext. Full-Mvmt.
Ct. Date	2030 Forecast Vols with HL-0007
Ct. Peaks	N/A
E/W Street:	Jessie Drive Extension
N/S Street:	Site Access B (RIRO)

	AM In	AM Out	PM In	PM Out
Industrial (E Pod) New Trips:	124	20	35	112
NE Retail Pod New Trips:	210	151	232	242
NE Retail Pod Pass-By Trips:	215	214	278	279
SE Retail Pod New Trips:	121	97	107	104
SE Retail Pod Pass-By Trips:	39	38	62	59
Annual Growth Rate:	3.0%	**Existing Year:**	2026	0
Growth Factor:	0.126	**Buildout Year:**	2030	0

AM PEAK HOUR
PHF =

Description	Jessie Drive Extension Eastbound				Jessie Drive Extension Westbound				Site Access B (RIRO) Northbound				Site Access B (RIRO) Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(100%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
Industrial Project Traffic	0	0	124	0	0	0	20	0	0	0	0	0	0	0	0	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	70%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(47%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(30%)
NE Retail Pod Project Traffic	0	0	147	0	0	0	71	0	0	0	0	0	0	0	0	45
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	108	0	0	0	21	0	0	0	0	0	0	0	0	86
Total NE Pod Pass-By Traffic	0	0	108	0	0	0	21	0	0	0	0	0	0	0	0	86
Total NE Pod Project Traffic	0	0	255	0	0	0	92	0	0	0	0	0	0	0	0	131
SE Retail Pod																
Percent Assignment Inbound	0%	0%	37%	55%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(92%)	(0%)	(0%)	(0%)	(0%)	(22%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	0	45	67	0	0	89	0	0	0	0	21	0	0	0	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	4	35	0	0	38	0	0	0	0	15	0	0	0	0
Total SE Pod Pass-By Traffic	0	0	4	35	0	0	38	0	0	0	0	15	0	0	0	0
Total SE Pod Project Traffic	0	0	49	102	0	0	127	0	0	0	0	36	0	0	0	0
Total Project Traffic	0	0	428	102	0	0	239	0	0	0	0	36	0	0	0	131
2030 Buildout Total	0	0	428	102	0	0	239	0	0	0	0	36	0	0	0	131
Approach Percent Impact			100.00%				100.00%				100.00%				100.00%	

Overall Percent Impact (vs. Buildout) 100.0%

PM PEAK HOUR
PHF =

Description	Jessie Drive Extension Eastbound				Jessie Drive Extension Westbound				Site Access B (RIRO) Northbound				Site Access B (RIRO) Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(100%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
Industrial Project Traffic	0	0	35	0	0	0	112	0	0	0	0	0	0	0	0	0
NE Retail Pod																
Percent Assignment Inbound	0%	0%	70%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(47%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(30%)
NE Retail Pod Project Traffic	0	0	162	0	0	0	114	0	0	0	0	0	0	0	0	73
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	195	0	0	0	98	0	0	0	0	0	0	0	0	98
Total NE Pod Pass-By Traffic	0	0	195	0	0	0	98	0	0	0	0	0	0	0	0	98
Total NE Pod Project Traffic	0	0	357	0	0	0	212	0	0	0	0	0	0	0	0	171
SE Retail Pod																
Percent Assignment Inbound	0%	0%	37%	55%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(92%)	(0%)	(0%)	(0%)	(0%)	(22%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	0	39	59	0	0	95	0	0	0	0	23	0	0	0	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	25	37	0	0	59	0	0	0	0	24	0	0	0	0
Total SE Pod Pass-By Traffic	0	0	25	37	0	0	59	0	0	0	0	24	0	0	0	0
Total SE Pod Project Traffic	0	0	64	96	0	0	154	0	0	0	0	47	0	0	0	0
Total Project Traffic	0	0	456	96	0	0	478	0	0	0	0	47	0	0	0	171
2030 Buildout Total	0	0	456	96	0	0	478	0	0	0	0	47	0	0	0	171
Approach Percent Impact			100.00%				100.00%				100.00%				100.00%	

Overall Percent Impact (vs. Buildout) 100.0%

INTERSECTION ANALYSIS SHEET

Project:	Jessie Commons
Location:	Apex, NC
Scenario:	Jessie Dr Ext. Full-Mvmt.
Ct. Date	2030 Forecast Vols with HL-0007
Ct. Peaks	N/A
E/W Street:	Jessie Drive Extension
N/S Street:	Site Access C (Full-Movement)

	AM In	AM Out	PM In	PM Out
Industrial (E Pod) New Trips:	124	20	35	112
NE Retail Pod New Trips:	210	151	232	242
NE Retail Pod Pass-By Trips:	215	214	278	279
SE Retail Pod New Trips:	121	97	107	104
SE Retail Pod Pass-By Trips:	39	38	62	59

Annual Growth Rate:	3.0%	**Existing Year:**	2026 0
Growth Factor:	0.126	**Buildout Year:**	2030 0

AM PEAK HOUR
PHF =

Description	Jessie Drive Extension Eastbound				Jessie Drive Extension Westbound				Site Access C (Full-Movement) Northbound				Site Access C (Full-Movement) Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(100%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
Industrial Project Traffic	0	0	124	0	0	0	20	0	0	0	0	0	0	0	0	0
NE Retail Pod																
Percent Assignment Inbound	0%	70%	0%	0%	0%	0%	0%	3%	0%	0%	5%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(3%)	(5%)	(47%)
NE Retail Pod Project Traffic	0	147	0	0	0	0	0	6	0	0	11	0	0	5	8	71
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	108	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Total NE Pod Pass-By Traffic	0	108	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Total NE Pod Project Traffic	0	255	0	0	0	0	0	6	0	0	11	0	0	5	8	92
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	37%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%
Percent Assignment Outbound	(22%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(70%)	(5%)	(3%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	21	0	0	45	0	4	0	0	0	68	5	3	0	0	6	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	15	0	0	4	0	0	0	0	0	23	0	0	0	0	0	0
Total SE Pod Pass-By Traffic	15	0	0	4	0	0	0	0	0	23	0	0	0	0	0	0
Total SE Pod Project Traffic	36	0	0	49	0	4	0	0	0	91	5	3	0	0	6	0
Total Project Traffic	36	255	124	49	0	4	20	6	0	91	16	3	0	5	14	92
2030 Buildout Total	36	255	124	49	0	4	20	6	0	91	16	3	0	5	14	92
Approach Percent Impact		100.00%				100.00%				100.00%				100.00%		

Overall Percent Impact (vs. Buildout) 100.0%

PM PEAK HOUR
PHF =

Description	Jessie Drive Extension Eastbound				Jessie Drive Extension Westbound				Site Access C (Full-Movement) Northbound				Site Access C (Full-Movement) Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(100%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
Industrial Project Traffic	0	0	35	0	0	0	112	0	0	0	0	0	0	0	0	0
NE Retail Pod																
Percent Assignment Inbound	0%	70%	0%	0%	0%	0%	0%	3%	0%	0%	5%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(3%)	(5%)	(47%)
NE Retail Pod Project Traffic	0	162	0	0	0	0	0	7	0	0	12	0	0	7	12	114
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	195	0	0	0	0	0	0	0	0	0	0	0	0	0	98
Total NE Pod Pass-By Traffic	0	195	0	0	0	0	0	0	0	0	0	0	0	0	0	98
Total NE Pod Project Traffic	0	357	0	0	0	0	0	7	0	0	12	0	0	7	12	212
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	37%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%
Percent Assignment Outbound	(22%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(70%)	(5%)	(3%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	23	0	0	39	0	3	0	0	0	73	5	3	0	0	5	0
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	24	0	0	25	0	0	0	0	0	35	0	0	0	0	0	0
Total SE Pod Pass-By Traffic	24	0	0	25	0	0	0	0	0	35	0	0	0	0	0	0
Total SE Pod Project Traffic	47	0	0	64	0	3	0	0	0	108	5	3	0	0	5	0
Total Project Traffic	47	357	35	64	0	3	112	7	0	108	17	3	0	7	17	212
2030 Buildout Total	47	357	35	64	0	3	112	7	0	108	17	3	0	7	17	212
Approach Percent Impact		100.00%				100.00%				100.00%				100.00%		

Overall Percent Impact (vs. Buildout) 100.0%

INTERSECTION ANALYSIS SHEET

Project:	Jessie Commons
Location:	Apex, NC
Scenario:	Jessie Dr Ext. Full-Mvmt.
Ct. Date	2030 Forecast Vols with HL-0007
Ct. Peaks	N/A
E/W Street:	Jessie Drive Extension /Jessie Drive Extension
N/S Street:	-/Site Access D (RO)

	AM In	AM Out	PM In	PM Out
Industrial (E Pod) New Trips:	124	20	35	112
NE Retail Pod New Trips:	210	151	232	242
NE Retail Pod Pass-By Trips:	215	214	278	279
SE Retail Pod New Trips:	121	97	107	104
SE Retail Pod Pass-By Trips:	39	38	62	59

Annual Growth Rate:	3.0%	**Existing Year:**	2026	0
Growth Factor:	0.126	**Buildout Year:**	2030	0

AM PEAK HOUR
PHF =

Description	Jessie Drive Extension Eastbound				Jessie Drive Extension Westbound				- Northbound				Site Access D (RO) Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(50%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(50%)
Industrial Project Traffic	0	0	124	0	0	0	10	0	0	0	0	0	0	0	0	10
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Percent Assignment Outbound	(0%)	(0%)	(3%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
NE Retail Pod Project Traffic	0	0	5	0	0	0	4	0	0	0	0	0	0	0	0	2
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NE Pod Pass-By Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NE Pod Project Traffic	0	0	5	0	0	0	4	0	0	0	0	0	0	0	0	2
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Percent Assignment Outbound	(0%)	(0%)	(3%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	1
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total SE Pod Pass-By Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total SE Pod Project Traffic	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	1
Total Project Traffic	0	0	132	0	0	0	16	0	0	0	0	0	0	0	0	13
2030 Buildout Total	0	0	132	0	0	0	16	0	0	0	0	0	0	0	0	13
Approach Percent Impact			100.00%				100.00%				-				100.00%	

Overall Percent Impact (vs. Buildout) 100.0%

PM PEAK HOUR
PHF =

Description	Jessie Drive Extension Eastbound				Jessie Drive Extension Westbound				- Northbound				Site Access D (RO) Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(50%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(50%)
Industrial Project Traffic	0	0	35	0	0	0	56	0	0	0	0	0	0	0	0	56
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Percent Assignment Outbound	(0%)	(0%)	(3%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
NE Retail Pod Project Traffic	0	0	7	0	0	0	5	0	0	0	0	0	0	0	0	2
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NE Pod Pass-By Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NE Pod Project Traffic	0	0	7	0	0	0	5	0	0	0	0	0	0	0	0	2
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Percent Assignment Outbound	(0%)	(0%)	(3%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	1
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total SE Pod Pass-By Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total SE Pod Project Traffic	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	1
Total Project Traffic	0	0	45	0	0	0	63	0	0	0	0	0	0	0	0	59
2030 Buildout Total	0	0	45	0	0	0	63	0	0	0	0	0	0	0	0	59
Approach Percent Impact			100.00%				100.00%				-				100.00%	

Overall Percent Impact (vs. Buildout) 100.0%

INTERSECTION ANALYSIS SHEET

Project:	Jessie Commons
Location:	Apex, NC
Scenario:	Jessie Dr Ext. Full-Mvmt.
Ct. Date	2030 Forecast Vols with HL-0007
Ct. Peaks	N/A
E/W Street:	Jessie Drive Extension
N/S Street:	Site Access E (Full-Movement)

	AM In	AM Out	PM In	PM Out
Industrial (E Pod) New Trips:	124	20	35	112
NE Retail Pod New Trips:	210	151	232	242
NE Retail Pod Pass-By Trips:	215	214	278	279
SE Retail Pod New Trips:	121	97	107	104
SE Retail Pod Pass-By Trips:	39	38	62	59

Annual Growth Rate:	3.0%	**Existing Year:**	2026 0
Growth Factor:	0.126	**Buildout Year:**	2030 0

AM PEAK HOUR
PHF =

Description	Jessie Drive Extension Eastbound				Jessie Drive Extension Westbound				Site Access E (Full-Movement) Northbound				Site Access E (Full-Movement) Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	65%	0%	35%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(35%)	(0%)	(0%)	(0%)	(0%)	(0%)	(15%)
Industrial Project Traffic	0	81	0	43	0	0	0	0	0	7	0	0	0	0	0	3
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%
Percent Assignment Outbound	(0%)	(2%)	(0%)	(1%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
NE Retail Pod Project Traffic	0	3	0	2	0	0	0	0	0	2	0	0	0	0	0	2
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NE Pod Pass-By Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NE Pod Project Traffic	0	3	0	2	0	0	0	0	0	2	0	0	0	0	0	2
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%
Percent Assignment Outbound	(0%)	(2%)	(0%)	(1%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	2	0	1	0	0	0	0	0	1	0	0	0	0	0	1
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total SE Pod Pass-By Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total SE Pod Project Traffic	0	2	0	1	0	0	0	0	0	1	0	0	0	0	0	1
Total Project Traffic	0	86	0	46	0	0	0	0	0	10	0	0	0	0	0	6
2030 Buildout Total	0	86	0	46	0	0	0	0	0	10	0	0	0	0	0	6
Approach Percent Impact		100.00%				-				100.00%				100.00%		

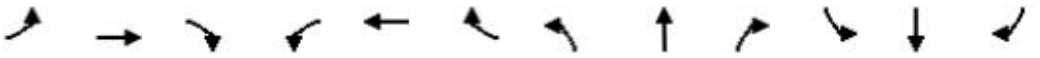
Overall Percent Impact (vs. Buildout) 100.0%

PM PEAK HOUR
PHF =

Description	Jessie Drive Extension Eastbound				Jessie Drive Extension Westbound				Site Access E (Full-Movement) Northbound				Site Access E (Full-Movement) Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2030 Forecast Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects																
Aqualine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Veridina East Village	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NCC Phase 1 (Assume 50% Built-out)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic																
Industrial (E Pod)																
Percent Assignment Inbound	0%	65%	0%	35%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(35%)	(0%)	(0%)	(0%)	(0%)	(0%)	(15%)
Industrial Project Traffic	0	23	0	12	0	0	0	0	0	39	0	0	0	0	0	17
NE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%
Percent Assignment Outbound	(0%)	(2%)	(0%)	(1%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
NE Retail Pod Project Traffic	0	5	0	2	0	0	0	0	0	2	0	0	0	0	0	2
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NE Pod Pass-By Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NE Pod Project Traffic	0	5	0	2	0	0	0	0	0	2	0	0	0	0	0	2
SE Retail Pod																
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%
Percent Assignment Outbound	(0%)	(2%)	(0%)	(1%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
SE Retail Pod Project Traffic	0	2	0	1	0	0	0	0	0	1	0	0	0	0	0	1
Pass-By Capture Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Capture Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total SE Pod Pass-By Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total SE Pod Project Traffic	0	2	0	1	0	0	0	0	0	1	0	0	0	0	0	1
Total Project Traffic	0	30	0	15	0	0	0	0	0	42	0	0	0	0	0	20
2030 Buildout Total	0	30	0	15	0	0	0	0	0	42	0	0	0	0	0	20
Approach Percent Impact		100.00%				-				100.00%				100.00%		

Overall Percent Impact (vs. Buildout) 100.0%

Appendix G:
Synchro Output:
Existing (2026)



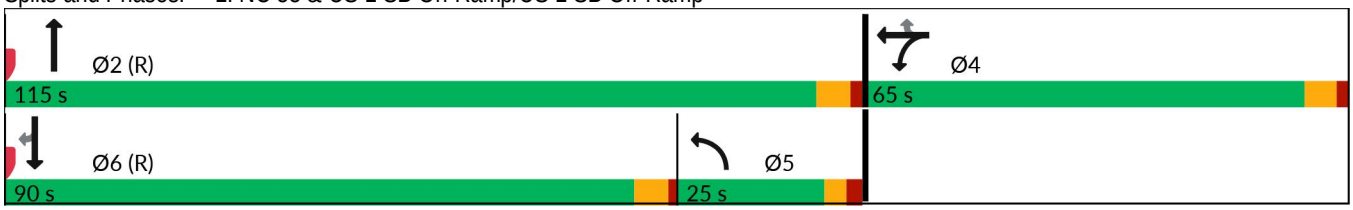
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	853	4	443	82	1067	0	0	967	129
Future Volume (vph)	0	0	0	853	4	443	82	1067	0	0	967	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			4%			0%			0%	
Storage Length (ft)	0		0	450		400	150		0	0		150
Storage Lanes	0		0	1		1	1		0	0		1
Taper Length (ft)	25			225			75			25		
Satd. Flow (prot)	0	0	0	1571	1575	2603	1687	3374	0	0	4893	1524
Flt Permitted				0.950	0.953		0.950					
Satd. Flow (perm)	0	0	0	1571	1575	2603	1687	3374	0	0	4893	1524
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						145						97
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1164			1095			597			1074	
Travel Time (s)		17.6			16.6			9.0			16.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	7%	7%	7%	7%	7%	7%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	474	478	492	91	1186	0	0	1074	143
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				4	4		5	2			6	
Permitted Phases						4						6
Detector Phase				4	4	4	5	2			6	6
Switch Phase												
Minimum Initial (s)				7.0	7.0	7.0	7.0	12.0			12.0	12.0
Minimum Split (s)				12.8	12.8	12.8	12.1	18.3			17.5	17.5
Total Split (s)				65.0	65.0	65.0	25.0	115.0			90.0	90.0
Total Split (%)				36.1%	36.1%	36.1%	13.9%	63.9%			50.0%	50.0%
Yellow Time (s)				4.2	4.2	4.2	3.0	4.5			4.5	4.5
All-Red Time (s)				1.6	1.6	1.6	2.1	1.8			1.0	1.0
Lost Time Adjust (s)				-0.8	-0.8	-0.8	-0.1	-1.3			-0.5	-0.5
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lag				Lead	Lead
Lead-Lag Optimize?							Yes				Yes	Yes
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				58.7	58.7	58.7	20.0	111.3			86.3	86.3
Actuated g/C Ratio				0.33	0.33	0.33	0.11	0.62			0.48	0.48
v/c Ratio				0.93	0.93	0.52	0.49	0.57			0.46	0.18
Control Delay (s/veh)				83.2	83.9	35.7	70.5	17.9			32.3	9.9
Queue Delay				0.0	0.0	0.0	0.0	0.3			0.1	0.0
Total Delay (s/veh)				83.2	83.9	35.7	70.5	18.2			32.3	9.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS				F	F	D	E	B			C	A
Approach Delay (s/veh)					67.3			21.9			29.7	
Approach LOS					E			C			C	
Queue Length 50th (ft)				596	604	198	100	339			326	31
Queue Length 95th (ft)				#840	#849	268	149	348			370	79
Internal Link Dist (ft)		1084			1015			517			994	
Turn Bay Length (ft)				450		400	150					150
Base Capacity (vph)				523	525	964	187	2085			2345	780
Starvation Cap Reductn				0	0	0	0	322			0	0
Spillback Cap Reductn				0	0	0	0	0			252	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.91	0.91	0.51	0.49	0.67			0.51	0.18

Intersection Summary			
Area Type:	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 128 (71%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay (s/veh): 40.9		Intersection LOS: D	
Intersection Capacity Utilization 65.5%		ICU Level of Service C	
Analysis Period (min) 15			
Description: 05-0209			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: NC 55 & US 1 SB On-Ramp/US 1 SB Off-Ramp



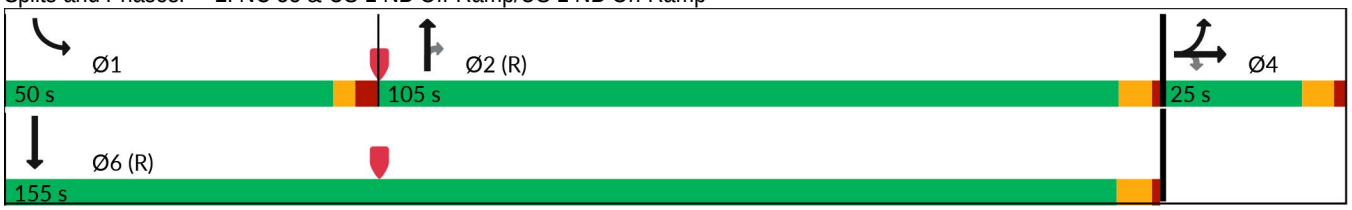
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	221	4	143	0	0	0	0	926	1041	362	1457	0
Future Volume (vph)	221	4	143	0	0	0	0	926	1041	362	1457	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		2%			0%			0%			-2%	
Storage Length (ft)	350		100	0		0	0		225	275		0
Storage Lanes	1		1	0		0	0		2	1		0
Taper Length (ft)	200			25			25			75		
Satd. Flow (prot)	1543	1550	1454	0	0	0	0	3471	2733	3337	3440	0
Flt Permitted	0.950	0.954								0.950		
Satd. Flow (perm)	1543	1550	1454	0	0	0	0	3471	2733	3337	3440	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			97						737			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		828			998			1022			597	
Travel Time (s)		12.5			15.1			15.5			9.0	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.90	0.90	0.90	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	10%	10%	10%	2%	2%	2%	4%	4%	4%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	117	117	149	0	0	0	0	965	1084	377	1518	0
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0					12.0	12.0	7.0	12.0	
Minimum Split (s)	13.0	13.0	13.0					17.5	17.5	12.9	17.8	
Total Split (s)	25.0	25.0	25.0					105.0	105.0	50.0	155.0	
Total Split (%)	13.9%	13.9%	13.9%					58.3%	58.3%	27.8%	86.1%	
Yellow Time (s)	4.3	4.3	4.3					4.5	4.5	3.0	4.7	
All-Red Time (s)	1.7	1.7	1.7					1.0	1.0	2.9	1.1	
Lost Time Adjust (s)	-1.0	-1.0	-1.0					-0.5	-0.5	-0.9	-0.8	
Total Lost Time (s)	5.0	5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)	17.8	17.8	17.8					121.4	121.4	25.8	152.2	
Actuated g/C Ratio	0.10	0.10	0.10					0.67	0.67	0.14	0.85	
v/c Ratio	0.77	0.76	0.65					0.41	0.52	0.79	0.52	
Control Delay (s/veh)	109.0	108.6	41.7					14.5	5.2	84.9	11.1	
Queue Delay	0.0	0.0	0.0					0.0	0.0	0.0	0.6	
Total Delay (s/veh)	109.0	108.6	41.7					14.5	5.2	84.9	11.7	

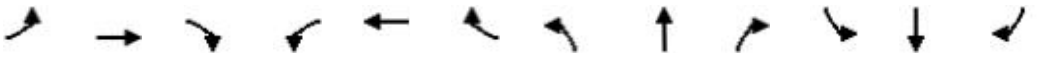
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	F	D					B	A	F	B	
Approach Delay (s/veh)		82.7						9.6			26.3	
Approach LOS		F						A			C	
Queue Length 50th (ft)	154	153	62					274	98	134	609	
Queue Length 95th (ft)	#253	#252	155					357	168	145	703	
Internal Link Dist (ft)		748			918			942			517	
Turn Bay Length (ft)	350		100						225	275		
Base Capacity (vph)	171	172	247					2341	2083	834	2908	
Starvation Cap Reductn	0	0	0					0	0	0	878	
Spillback Cap Reductn	0	0	0					0	0	0	0	
Storage Cap Reductn	0	0	0					0	0	0	0	
Reduced v/c Ratio	0.68	0.68	0.60					0.41	0.52	0.45	0.75	

Intersection Summary

Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 180
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay (s/veh): 23.4 Intersection LOS: C
Intersection Capacity Utilization 65.5% ICU Level of Service C
Analysis Period (min) 15
Description: 05-0900
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: NC 55 & US 1 NB Off-Ramp/US 1 NB On-Ramp





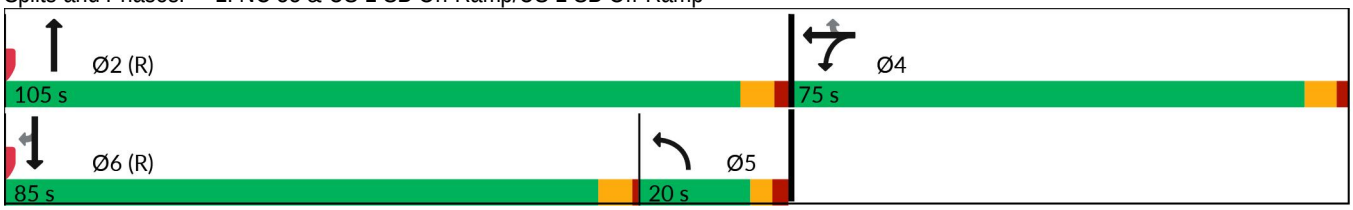
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	1200	4	471	127	917	0	0	1209	221
Future Volume (vph)	0	0	0	1200	4	471	127	917	0	0	1209	221
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			4%			0%			0%	
Storage Length (ft)	0		0	450		400	150		0	0		150
Storage Lanes	0		0	1		1	1		0	0		1
Taper Length (ft)	25			225			75			25		
Satd. Flow (prot)	0	0	0	1648	1653	2731	1752	3505	0	0	5036	1568
Flt Permitted				0.950	0.953		0.950					
Satd. Flow (perm)	0	0	0	1648	1653	2731	1752	3505	0	0	5036	1535
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						212						126
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1164			1095			597			1074	
Travel Time (s)		17.6			16.6			9.0			16.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)									1			1
Peak Hour Factor	0.90	0.90	0.90	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	606	610	476	128	926	0	0	1221	223
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				4	4		5	2			6	
Permitted Phases						4						6
Detector Phase				4	4	4	5	2			6	6
Switch Phase												
Minimum Initial (s)				7.0	7.0	7.0	7.0	12.0			12.0	12.0
Minimum Split (s)				12.8	12.8	12.8	12.1	18.3			17.5	17.5
Total Split (s)				75.0	75.0	75.0	20.0	105.0			85.0	85.0
Total Split (%)				41.7%	41.7%	41.7%	11.1%	58.3%			47.2%	47.2%
Yellow Time (s)				4.2	4.2	4.2	3.0	4.5			4.5	4.5
All-Red Time (s)				1.6	1.6	1.6	2.1	1.8			1.0	1.0
Lost Time Adjust (s)				-0.8	-0.8	-0.8	-0.1	-1.3			-0.5	-0.5
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lag				Lead	Lead
Lead-Lag Optimize?							Yes				Yes	Yes
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				69.6	69.6	69.6	15.0	100.4			80.4	80.4
Actuated g/C Ratio				0.39	0.39	0.39	0.08	0.56			0.45	0.45
v/c Ratio				0.95	0.95	0.40	0.88	0.47			0.54	0.30
Control Delay (s/veh)				78.6	79.2	22.2	114.7	24.6			37.6	14.3
Queue Delay				21.6	22.3	0.0	0.0	0.3			0.0	0.0
Total Delay (s/veh)				100.2	101.5	22.2	114.7	24.9			37.6	14.3

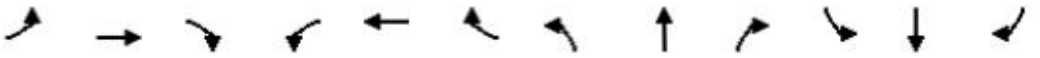
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS				F	F	C	F	C			D	B
Approach Delay (s/veh)					78.7			35.8			34.0	
Approach LOS					E			D			C	
Queue Length 50th (ft)				740	747	127	152	405			394	70
Queue Length 95th (ft)				#1013	#1024	184	#269	467			442	138
Internal Link Dist (ft)		1084			1015			517			994	
Turn Bay Length (ft)				450		400	150					150
Base Capacity (vph)				640	642	1191	146	1954			2249	755
Starvation Cap Reductn				0	0	0	0	402			0	0
Spillback Cap Reductn				58	58	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				1.04	1.04	0.40	0.88	0.60			0.54	0.30

Intersection Summary			
Area Type:	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay (s/veh): 52.5		Intersection LOS: D	
Intersection Capacity Utilization 103.4%		ICU Level of Service G	
Analysis Period (min) 15			
Description: 05-0209			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: NC 55 & US 1 SB On-Ramp/US 1 SB Off-Ramp



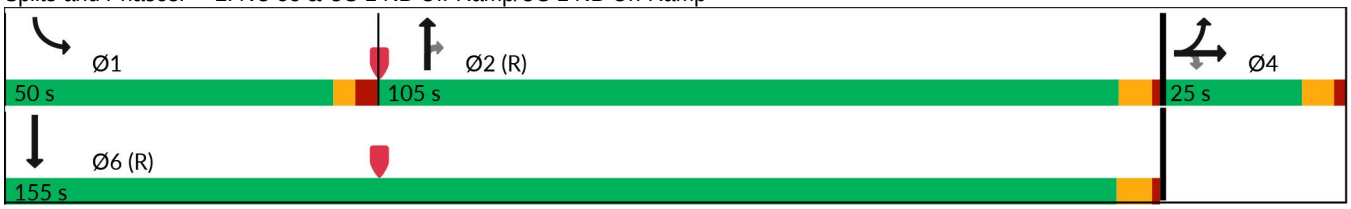


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	148	4	111	0	0	0	0	879	975	359	2117	0
Future Volume (vph)	148	4	111	0	0	0	0	879	975	359	2117	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		2%			0%			0%			-2%	
Storage Length (ft)	350		100	0		0	0		225	275		0
Storage Lanes	1		1	0		0	0		2	1		0
Taper Length (ft)	200			25			25			75		
Satd. Flow (prot)	1557	1566	1467	0	0	0	0	3505	2760	3467	3575	0
Flt Permitted	0.950	0.955								0.950		
Satd. Flow (perm)	1557	1566	1467	0	0	0	0	3505	2702	3465	3575	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			53						748			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		828			998			1022			597	
Travel Time (s)		12.5			15.1			15.5			9.0	
Confl. Peds. (#/hr)							1		1	1		1
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.90	0.90	0.90	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	9%	9%	9%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	77	78	113	0	0	0	0	897	995	366	2160	0
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0					12.0	12.0	7.0	12.0	
Minimum Split (s)	13.0	13.0	13.0					17.5	17.5	12.9	17.8	
Total Split (s)	25.0	25.0	25.0					105.0	105.0	50.0	155.0	
Total Split (%)	13.9%	13.9%	13.9%					58.3%	58.3%	27.8%	86.1%	
Yellow Time (s)	4.3	4.3	4.3					4.5	4.5	3.0	4.7	
All-Red Time (s)	1.7	1.7	1.7					1.0	1.0	2.9	1.1	
Lost Time Adjust (s)	-1.0	-1.0	-1.0					-0.5	-0.5	-0.9	-0.8	
Total Lost Time (s)	5.0	5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)	14.7	14.7	14.7					125.9	125.9	24.4	155.3	
Actuated g/C Ratio	0.08	0.08	0.08					0.70	0.70	0.14	0.86	
v/c Ratio	0.61	0.61	0.67					0.37	0.47	0.78	0.70	
Control Delay (s/veh)	98.9	99.2	61.2					12.2	3.6	108.1	7.2	
Queue Delay	0.0	0.0	0.0					0.0	0.0	0.0	0.4	
Total Delay (s/veh)	98.9	99.2	61.2					12.2	3.6	108.1	7.5	

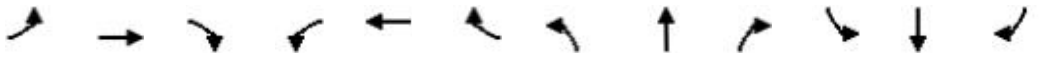
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	F	E					B	A	F	A	
Approach Delay (s/veh)		83.1						7.7			22.1	
Approach LOS		F						A			C	
Queue Length 50th (ft)	101	102	75					217	52	222	686	
Queue Length 95th (ft)	168	169	152					312	113	258	813	
Internal Link Dist (ft)		748			918			942			517	
Turn Bay Length (ft)	350		100						225	275		
Base Capacity (vph)	173	174	210					2451	2114	866	3084	
Starvation Cap Reductn	0	0	0					0	0	0	363	
Spillback Cap Reductn	0	0	0					0	0	0	0	
Storage Cap Reductn	0	0	0					0	0	0	0	
Reduced v/c Ratio	0.45	0.45	0.54					0.37	0.47	0.42	0.79	

Intersection Summary			
Area Type:	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay (s/veh): 19.8		Intersection LOS: B	
Intersection Capacity Utilization 103.4%		ICU Level of Service G	
Analysis Period (min) 15			
Description: 05-0900			

Splits and Phases: 2: NC 55 & US 1 NB Off-Ramp/US 1 NB On-Ramp



Appendix H:
Synchro Output:
Background (2030)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	1245	4	499	117	1317	0	0	1213	145
Future Volume (vph)	0	0	0	1245	4	499	117	1317	0	0	1213	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			4%			0%			0%	
Storage Length (ft)	0		0	425		400	150		0	0		150
Storage Lanes	0		0	1		2	1		0	0		1
Taper Length (ft)	25			225			75			25		
Satd. Flow (prot)	0	0	0	3009	1509	2603	1687	3374	0	0	4893	1524
Flt Permitted				0.950	0.953		0.950					
Satd. Flow (perm)	0	0	0	3009	1509	2603	1687	3374	0	0	4893	1524
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						70						97
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1164			1095			597			1074	
Travel Time (s)		17.6			16.6			9.0			16.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	7%	7%	7%	7%	7%	7%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)				33%								
Lane Group Flow (vph)	0	0	0	927	460	554	130	1463	0	0	1348	161
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				4	4		5	2			6	
Permitted Phases						4						6
Detector Phase				4	4	4	5	2			6	6
Switch Phase												
Minimum Initial (s)				7.0	7.0	7.0	7.0	12.0			12.0	12.0
Minimum Split (s)				12.8	12.8	12.8	12.5	18.4			18.4	18.4
Total Split (s)				60.0	60.0	60.0	20.0	70.0			50.0	50.0
Total Split (%)				46.2%	46.2%	46.2%	15.4%	53.8%			38.5%	38.5%
Yellow Time (s)				4.2	4.2	4.2	3.0	4.5			4.5	4.5
All-Red Time (s)				1.6	1.6	1.6	2.1	1.8			1.0	1.0
Lost Time Adjust (s)				-0.8	-0.8	-0.8	-0.1	-1.3			-0.5	-0.5
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?												
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				52.7	52.7	52.7	13.6	67.3			48.7	48.7
Actuated g/C Ratio				0.41	0.41	0.41	0.10	0.52			0.37	0.37
v/c Ratio				0.76	0.75	0.51	0.74	0.84			0.74	0.26
Control Delay (s/veh)				37.7	41.7	26.4	103.2	23.1			38.9	13.7
Queue Delay				0.0	0.0	0.0	0.0	0.5			0.0	0.0
Total Delay (s/veh)				37.7	41.7	26.4	103.2	23.6			38.9	13.7

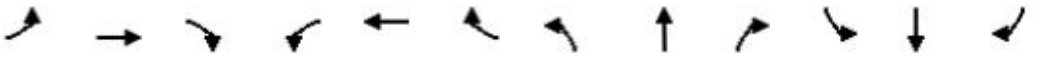
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS				D	D	C	F	C			D	B
Approach Delay (s/veh)					35.4			30.1			36.2	
Approach LOS					D			C			D	
Queue Length 50th (ft)				371	368	174	113	245			392	38
Queue Length 95th (ft)				463	525	235	m156	345			455	96
Internal Link Dist (ft)		1084			1015			517			994	
Turn Bay Length (ft)				425		400	150					150
Base Capacity (vph)				1273	638	1141	194	1747			1832	631
Starvation Cap Reductn				0	0	0	0	64			0	0
Spillback Cap Reductn				0	0	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.73	0.72	0.49	0.67	0.87			0.74	0.26

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.84
Intersection Signal Delay (s/veh): 34.0 Intersection LOS: C
Intersection Capacity Utilization 74.8% ICU Level of Service D
Analysis Period (min) 15
Description: 05-0209
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: NC 55 & US 1 SB On-Ramp/US 1 SB Off-Ramp





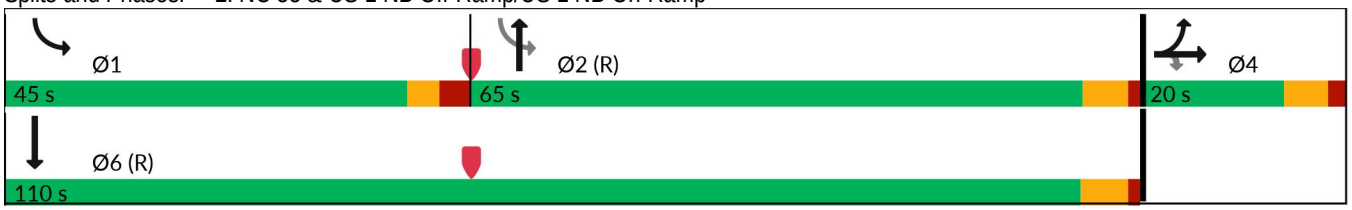
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	249	4	180	0	0	0	0	1183	1488	407	2050	0
Future Volume (vph)	249	4	180	0	0	0	0	1183	1488	407	2050	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		2%			0%			0%			-2%	
Storage Length (ft)	350		100	0		0	0		1000	275		0
Storage Lanes	1		1	0		0	0		1	1		0
Taper Length (ft)	200			25			25			75		
Satd. Flow (prot)	1543	1550	1454	0	0	0	0	3471	1553	1720	4942	0
Flt Permitted	0.950	0.954								0.133		
Satd. Flow (perm)	1543	1550	1454	0	0	0	0	3471	1553	241	4942	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			73						685			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		828			998			1424			597	
Travel Time (s)		12.5			15.1			21.6			9.0	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.90	0.90	0.90	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	10%	10%	10%	2%	2%	2%	4%	4%	4%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	132	131	188	0	0	0	0	1232	1550	424	2135	0
Turn Type	Split	NA	Perm					NA	Free	D.P+P	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						Free	2		
Detector Phase	4	4	4					2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0					12.0		7.0	12.0	
Minimum Split (s)	13.0	13.0	13.0					17.5		12.9	17.8	
Total Split (s)	20.0	20.0	20.0					65.0		45.0	110.0	
Total Split (%)	15.4%	15.4%	15.4%					50.0%		34.6%	84.6%	
Yellow Time (s)	4.3	4.3	4.3					4.5		3.0	4.7	
All-Red Time (s)	1.7	1.7	1.7					1.0		2.9	1.1	
Lost Time Adjust (s)	-1.0	-1.0	-1.0					-0.5		-0.9	-0.8	
Total Lost Time (s)	5.0	5.0	5.0					5.0		5.0	5.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?												
Recall Mode	None	None	None					C-Max		None	C-Max	
Act Effct Green (s)	14.2	14.2	14.2					69.6	130.0	100.8	105.8	
Actuated g/C Ratio	0.11	0.11	0.11					0.54	1.00	0.78	0.81	
v/c Ratio	0.79	0.78	0.84					0.66	1.00	0.78	0.53	
Control Delay (s/veh)	86.3	85.4	64.7					25.4	25.2	63.9	12.1	
Queue Delay	0.0	0.0	0.0					0.0	0.0	0.1	0.5	
Total Delay (s/veh)	86.3	85.4	64.7					25.4	25.2	64.0	12.6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	F	E					C	C	E	B	
Approach Delay (s/veh)		77.1						25.3			21.1	
Approach LOS		E						C			C	
Queue Length 50th (ft)	124	123	104					401	0	320	422	
Queue Length 95th (ft)	#236	#233	#241					554	#269	429	464	
Internal Link Dist (ft)		748			918			1344			517	
Turn Bay Length (ft)	350		100						1000	275		
Base Capacity (vph)	178	178	232					1857	1553	648	4021	
Starvation Cap Reductn	0	0	0					0	0	11	1257	
Spillback Cap Reductn	0	0	0					0	0	0	0	
Storage Cap Reductn	0	0	0					0	0	0	0	
Reduced v/c Ratio	0.74	0.74	0.81					0.66	1.00	0.67	0.77	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:SBT, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay (s/veh): 27.5		Intersection LOS: C	
Intersection Capacity Utilization 74.8%		ICU Level of Service D	
Analysis Period (min) 15			
Description: 05-0900			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: NC 55 & US 1 NB Off-Ramp/US 1 NB On-Ramp





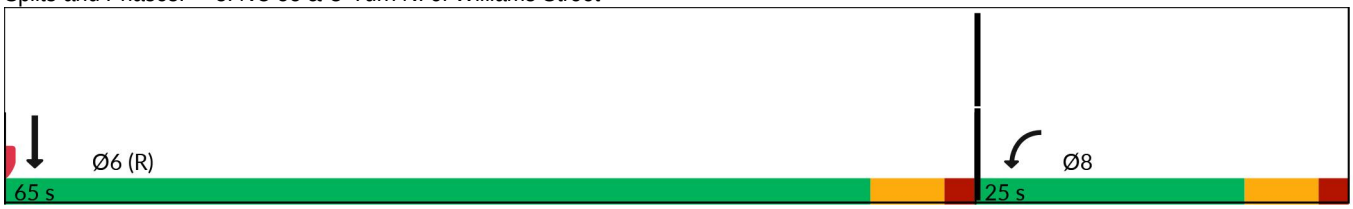
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	357	0	0	0	0	2168
Future Volume (vph)	357	0	0	0	0	2168
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	2	0		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	3433	0	0	0	0	5085
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	5085
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	14					
Link Speed (mph)	45		45			45
Link Distance (ft)	70		454			1055
Travel Time (s)	1.1		6.9			16.0
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	397	0	0	0	0	2409
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Detector Phase	8					6
Switch Phase						
Minimum Initial (s)	7.0					14.0
Minimum Split (s)	14.0					21.0
Total Split (s)	25.0					65.0
Total Split (%)	27.8%					72.2%
Yellow Time (s)	5.0					5.0
All-Red Time (s)	2.0					2.0
Lost Time Adjust (s)	-2.0					-2.0
Total Lost Time (s)	5.0					5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None					C-Max
Act Effct Green (s)	17.0					63.0
Actuated g/C Ratio	0.19					0.70
v/c Ratio	0.60					0.68
Control Delay (s/veh)	34.7					9.3
Queue Delay	0.0					0.0
Total Delay (s/veh)	34.7					9.3

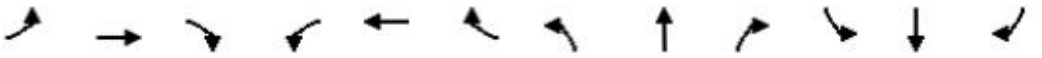
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
LOS	C					A
Approach Delay (s/veh)	34.7					9.3
Approach LOS	C					A
Queue Length 50th (ft)	98					252
Queue Length 95th (ft)	m107					337
Internal Link Dist (ft)	1		374			975
Turn Bay Length (ft)						
Base Capacity (vph)	773					3560
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.51					0.68

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2: and 6:SBT, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay (s/veh): 12.9		Intersection LOS: B	
Intersection Capacity Utilization 127.2%		ICU Level of Service H	
Analysis Period (min) 15			

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

Splits and Phases: 3: NC 55 & U-Turn N. of Williams Street





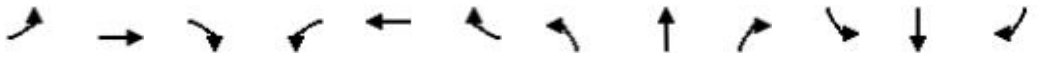
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	420	0	333	0	0	0	0	0	1865	300
Future Volume (vph)	0	0	420	0	333	0	0	0	0	0	1865	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		100
Storage Lanes	0		2	0		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	2787	0	3539	0	0	0	0	0	5085	1583
Flt Permitted												
Satd. Flow (perm)	0	0	2787	0	3539	0	0	0	0	0	5085	1583
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)			48									191
Link Speed (mph)		35			45			45			45	
Link Distance (ft)		885			193			656			387	
Travel Time (s)		17.2			2.9			9.9			5.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	467	0	370	0	0	0	0	0	2072	333
Turn Type			Perm		NA						NA	Perm
Protected Phases					3						6	
Permitted Phases			3									6
Detector Phase			3		3						6	6
Switch Phase												
Minimum Initial (s)			7.0		7.0						14.0	14.0
Minimum Split (s)			14.0		14.0						21.0	21.0
Total Split (s)			30.0		30.0						60.0	60.0
Total Split (%)			33.3%		33.3%						66.7%	66.7%
Yellow Time (s)			5.0		5.0						5.0	5.0
All-Red Time (s)			2.0		2.0						2.0	2.0
Lost Time Adjust (s)			-2.0		-2.0						-2.0	-2.0
Total Lost Time (s)			5.0		5.0						5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode			None		None						C-Max	C-Max
Act Effct Green (s)			21.2		21.2						58.8	58.8
Actuated g/C Ratio			0.24		0.24						0.65	0.65
v/c Ratio			0.67		0.44						0.62	0.30
Control Delay (s/veh)			32.6		30.5						6.8	2.2
Queue Delay			0.0		0.0						0.0	0.0
Total Delay (s/veh)			32.6		30.5						6.8	2.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS			C		C						A	A
Approach Delay (s/veh)		32.6			30.5						6.2	
Approach LOS		C			C						A	
Queue Length 50th (ft)			124		103						146	9
Queue Length 95th (ft)			173		146						163	28
Internal Link Dist (ft)		805			113			576			307	
Turn Bay Length (ft)												100
Base Capacity (vph)			808		983						3319	1099
Starvation Cap Reductn			0		0						0	0
Spillback Cap Reductn			0		0						0	0
Storage Cap Reductn			0		0						0	0
Reduced v/c Ratio			0.58		0.38						0.62	0.30

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2: and 6:SBT, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay (s/veh): 12.7		Intersection LOS: B	
Intersection Capacity Utilization 97.4%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 4: NC 55 & Forest Light Way





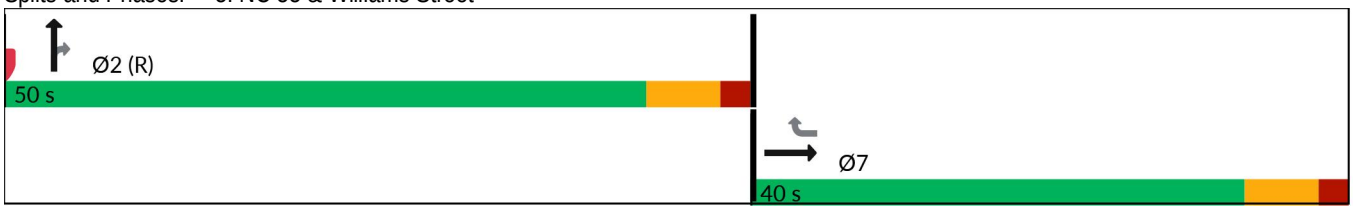
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	352	0	0	0	1280	0	1884	178	0	0	0
Future Volume (vph)	0	352	0	0	0	1280	0	1884	178	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		3	0		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3539	0	0	0	3610	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	3610	0	5085	1583	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						48			198			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		395			800			177			816	
Travel Time (s)		6.0			12.1			2.7			12.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	391	0	0	0	1422	0	2093	198	0	0	0
Turn Type		NA				Perm		NA	Perm			
Protected Phases		7						2				
Permitted Phases						7			2			
Detector Phase		7				7		2	2			
Switch Phase												
Minimum Initial (s)		7.0				7.0		14.0	14.0			
Minimum Split (s)		14.0				14.0		21.0	21.0			
Total Split (s)		40.0				40.0		50.0	50.0			
Total Split (%)		44.4%				44.4%		55.6%	55.6%			
Yellow Time (s)		5.0				5.0		5.0	5.0			
All-Red Time (s)		2.0				2.0		2.0	2.0			
Lost Time Adjust (s)		-2.0				-2.0		-2.0	-2.0			
Total Lost Time (s)		5.0				5.0		5.0	5.0			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		None				None		C-Max	C-Max			
Act Effct Green (s)		35.0				35.0		45.0	45.0			
Actuated g/C Ratio		0.39				0.39		0.50	0.50			
v/c Ratio		0.28				0.99		0.82	0.22			
Control Delay (s/veh)		19.8				49.6		17.1	2.1			
Queue Delay		0.0				0.0		0.0	0.0			
Total Delay (s/veh)		19.8				49.6		17.1	2.1			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		B				D		B	A			
Approach Delay (s/veh)		19.8			49.6			15.8				
Approach LOS		B			D			B				
Queue Length 50th (ft)		90				342		213	0			
Queue Length 95th (ft)		135				#482		264	m25			
Internal Link Dist (ft)		315			720			97			736	
Turn Bay Length (ft)												
Base Capacity (vph)		1376				1433		2542	890			
Starvation Cap Reductn		0				0		0	0			
Spillback Cap Reductn		0				0		0	0			
Storage Cap Reductn		0				0		0	0			
Reduced v/c Ratio		0.28				0.99		0.82	0.22			

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay (s/veh): 27.9		Intersection LOS: C	
Intersection Capacity Utilization 74.6%		ICU Level of Service D	
Analysis Period (min) 15			

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

Splits and Phases: 5: NC 55 & Williams Street





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	281	0	0	2144	0	0
Future Volume (vph)	281	0	0	2144	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	2	0	0			0
Taper Length (ft)	25		25			
Satd. Flow (prot)	3433	0	0	5085	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	5085	0	0
Right Turn on Red	Yes	Yes				Yes
Satd. Flow (RTOR)	15					
Link Speed (mph)	45			45	45	
Link Distance (ft)	62			939	526	
Travel Time (s)	0.9			14.2	8.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	312	0	0	2382	0	0
Turn Type	Prot			NA		
Protected Phases	4			2		
Permitted Phases						
Detector Phase	4			2		
Switch Phase						
Minimum Initial (s)	7.0			14.0		
Minimum Split (s)	14.0			21.0		
Total Split (s)	25.0			65.0		
Total Split (%)	27.8%			72.2%		
Yellow Time (s)	5.0			5.0		
All-Red Time (s)	2.0			2.0		
Lost Time Adjust (s)	-2.0			-2.0		
Total Lost Time (s)	5.0			5.0		
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None			C-Max		
Act Effct Green (s)	15.1			64.9		
Actuated g/C Ratio	0.17			0.72		
v/c Ratio	0.53			0.65		
Control Delay (s/veh)	35.5			8.0		
Queue Delay	0.0			0.0		
Total Delay (s/veh)	35.5			8.0		

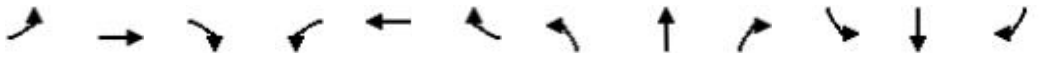


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
LOS	D			A		
Approach Delay (s/veh)	35.5			8.0		
Approach LOS	D			A		
Queue Length 50th (ft)	90			221		
Queue Length 95th (ft)	130			312		
Internal Link Dist (ft)	1			859	446	
Turn Bay Length (ft)						
Base Capacity (vph)	774			3669		
Starvation Cap Reductn	0			0		
Spillback Cap Reductn	0			0		
Storage Cap Reductn	0			0		
Reduced v/c Ratio	0.40			0.65		

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay (s/veh): 11.1		Intersection LOS: B	
Intersection Capacity Utilization 71.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 6: NC 55 & U-Turn S. of Forest Light Way





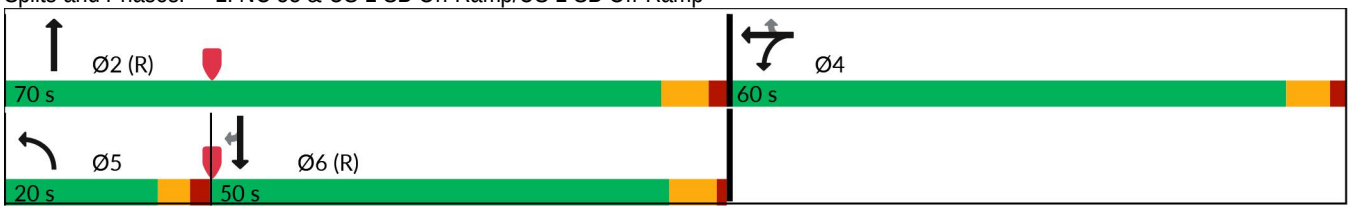
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	1724	4	530	175	1180	0	0	1542	249
Future Volume (vph)	0	0	0	1724	4	530	175	1180	0	0	1542	249
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			4%			0%			0%	
Storage Length (ft)	0		0	425		400	150		0	0		150
Storage Lanes	0		0	1		2	1		0	0		1
Taper Length (ft)	25			225			75			25		
Satd. Flow (prot)	0	0	0	3156	1583	2731	1752	3505	0	0	5036	1568
Flt Permitted				0.950	0.953		0.950					
Satd. Flow (perm)	0	0	0	3156	1583	2731	1752	3505	0	0	5036	1535
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						78						131
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1164			1095			597			1074	
Travel Time (s)		17.6			16.6			9.0			16.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)									1			1
Peak Hour Factor	0.90	0.90	0.90	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)				33%								
Lane Group Flow (vph)	0	0	0	1166	579	535	177	1192	0	0	1558	252
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				4	4		5	2			6	
Permitted Phases						4						6
Detector Phase				4	4	4	5	2			6	6
Switch Phase												
Minimum Initial (s)				7.0	7.0	7.0	7.0	12.0			12.0	12.0
Minimum Split (s)				12.8	12.8	12.8	12.5	18.4			18.4	18.4
Total Split (s)				60.0	60.0	60.0	20.0	70.0			50.0	50.0
Total Split (%)				46.2%	46.2%	46.2%	15.4%	53.8%			38.5%	38.5%
Yellow Time (s)				4.2	4.2	4.2	3.0	4.5			4.5	4.5
All-Red Time (s)				1.6	1.6	1.6	2.1	1.8			1.0	1.0
Lost Time Adjust (s)				-0.8	-0.8	-0.8	-0.1	-1.3			-0.5	-0.5
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?												
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				55.0	55.0	55.0	14.8	65.0			45.2	45.2
Actuated g/C Ratio				0.42	0.42	0.42	0.11	0.50			0.35	0.35
v/c Ratio				0.87	0.87	0.45	0.89	0.68			0.89	0.41
Control Delay (s/veh)				42.9	49.0	23.8	76.7	18.9			47.5	17.1
Queue Delay				9.7	11.2	0.0	0.0	1.2			0.0	0.0
Total Delay (s/veh)				52.6	60.2	23.8	76.7	20.1			47.5	17.1

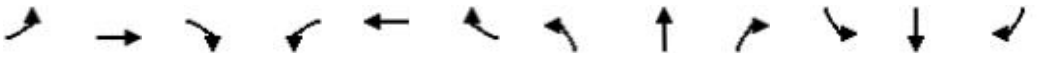
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS				D	E	C	E	C			D	B
Approach Delay (s/veh)					47.8			27.4			43.3	
Approach LOS					D			C			D	
Queue Length 50th (ft)				494	489	155	152	455			464	75
Queue Length 95th (ft)				604	#729	210	#274	402			532	152
Internal Link Dist (ft)		1084			1015			517			994	
Turn Bay Length (ft)				425		400	150					150
Base Capacity (vph)				1335	669	1200	202	1752			1752	619
Starvation Cap Reductn				0	0	0	0	327			0	0
Spillback Cap Reductn				158	78	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.99	0.98	0.45	0.88	0.84			0.89	0.41

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 30 (23%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay (s/veh): 41.2	Intersection LOS: D
Intersection Capacity Utilization 106.5%	ICU Level of Service G
Analysis Period (min) 15	
Description: 05-0209	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: NC 55 & US 1 SB On-Ramp/US 1 SB Off-Ramp





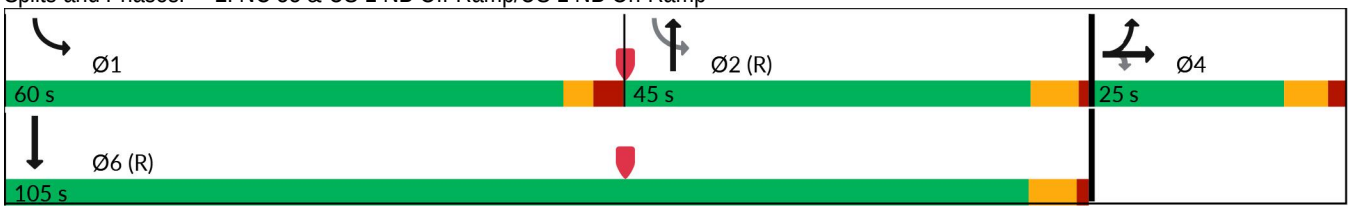
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	167	4	168	0	0	0	0	1169	1409	404	2939	0
Future Volume (vph)	167	4	168	0	0	0	0	1169	1409	404	2939	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		2%			0%			0%			-2%	
Storage Length (ft)	350		100	0		0	0		1000	275		0
Storage Lanes	1		1	0		0	0		1	1		0
Taper Length (ft)	200			25			25			75		
Satd. Flow (prot)	1557	1564	1467	0	0	0	0	3505	1568	1787	5136	0
Flt Permitted	0.950	0.954								0.138		
Satd. Flow (perm)	1557	1564	1467	0	0	0	0	3505	1549	260	5136	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			73						670			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		828			998			1424			597	
Travel Time (s)		12.5			15.1			21.6			9.0	
Confl. Peds. (#/hr)							1		1	1		1
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.90	0.90	0.90	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	9%	9%	9%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	87	87	171	0	0	0	0	1193	1438	412	2999	0
Turn Type	Split	NA	Perm					NA	Free	D.P+P	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						Free	2		
Detector Phase	4	4	4					2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0					12.0		7.0	12.0	
Minimum Split (s)	13.0	13.0	13.0					17.5		12.9	17.8	
Total Split (s)	25.0	25.0	25.0					45.0		60.0	105.0	
Total Split (%)	19.2%	19.2%	19.2%					34.6%		46.2%	80.8%	
Yellow Time (s)	4.3	4.3	4.3					4.5		3.0	4.7	
All-Red Time (s)	1.7	1.7	1.7					1.0		2.9	1.1	
Lost Time Adjust (s)	-1.0	-1.0	-1.0					-0.5		-0.9	-0.8	
Total Lost Time (s)	5.0	5.0	5.0					5.0		5.0	5.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?												
Recall Mode	None	None	None					C-Max		None	C-Max	
Act Effct Green (s)	14.5	14.5	14.5					67.7	130.0	100.5	105.5	
Actuated g/C Ratio	0.11	0.11	0.11					0.52	1.00	0.77	0.81	
v/c Ratio	0.50	0.50	0.75					0.65	0.93	0.70	0.72	
Control Delay (s/veh)	63.1	62.9	51.0					27.3	12.4	23.3	10.8	
Queue Delay	0.0	0.0	0.0					0.0	0.0	0.2	6.5	
Total Delay (s/veh)	63.1	62.9	51.0					27.3	12.4	23.5	17.3	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	E	D					C	B	C	B	
Approach Delay (s/veh)		57.1						19.2			18.0	
Approach LOS		E						B			B	
Queue Length 50th (ft)	78	78	86					384	0	334	384	
Queue Length 95th (ft)	136	136	168					590	#72	m355	639	
Internal Link Dist (ft)		748			918			1344			517	
Turn Bay Length (ft)	350		100						1000	275		
Base Capacity (vph)	239	240	287					1824	1549	857	4166	
Starvation Cap Reductn	0	0	0					0	0	79	1134	
Spillback Cap Reductn	0	0	0					37	0	0	0	
Storage Cap Reductn	0	0	0					0	0	0	0	
Reduced v/c Ratio	0.36	0.36	0.60					0.67	0.93	0.53	0.99	

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:SBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay (s/veh): 20.6 Intersection LOS: C
Intersection Capacity Utilization 106.5% ICU Level of Service G
Analysis Period (min) 15
Description: 05-0900
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: NC 55 & US 1 NB Off-Ramp/US 1 NB On-Ramp





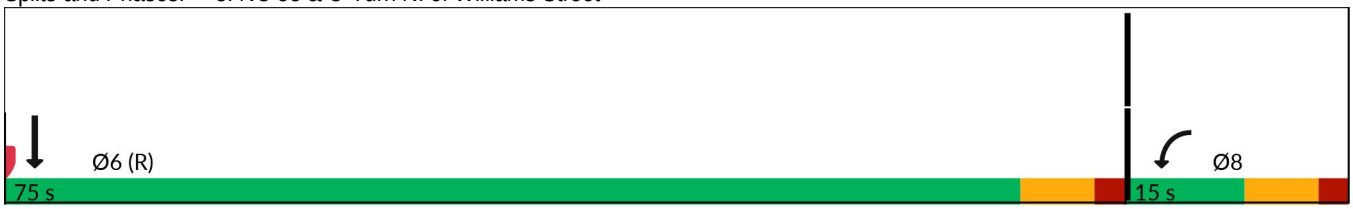
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	204	0	0	0	0	3350
Future Volume (vph)	204	0	0	0	0	3350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	2	0		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	3433	0	0	0	0	5085
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	5085
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	2					
Link Speed (mph)	45		45			45
Link Distance (ft)	70		454			1055
Travel Time (s)	1.1		6.9			16.0
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	227	0	0	0	0	3722
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Detector Phase	8					6
Switch Phase						
Minimum Initial (s)	7.0					14.0
Minimum Split (s)	14.0					21.0
Total Split (s)	15.0					75.0
Total Split (%)	16.7%					83.3%
Yellow Time (s)	5.0					5.0
All-Red Time (s)	2.0					2.0
Lost Time Adjust (s)	-2.0					-2.0
Total Lost Time (s)	5.0					5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None					C-Max
Act Effct Green (s)	10.0					70.0
Actuated g/C Ratio	0.11					0.78
v/c Ratio	0.59					0.94
Control Delay (s/veh)	40.6					15.0
Queue Delay	0.0					0.0
Total Delay (s/veh)	40.6					15.0

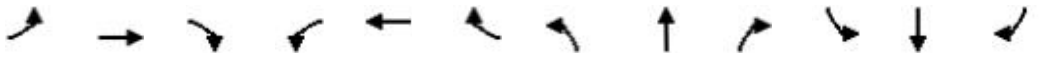
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
LOS	D					B
Approach Delay (s/veh)	40.6					15.0
Approach LOS	D					B
Queue Length 50th (ft)	66					504
Queue Length 95th (ft)	m87					622
Internal Link Dist (ft)	1		374			975
Turn Bay Length (ft)						
Base Capacity (vph)	383					3955
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.59					0.94

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2: and 6:SBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay (s/veh): 16.5		Intersection LOS: B	
Intersection Capacity Utilization 141.9%		ICU Level of Service H	
Analysis Period (min) 15			

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

Splits and Phases: 3: NC 55 & U-Turn N. of Williams Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	515	0	397	0	0	0	0	0	2287	182
Future Volume (vph)	0	0	515	0	397	0	0	0	0	0	2287	182
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		100
Storage Lanes	0		2	0		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	2787	0	3539	0	0	0	0	0	5085	1583
Flt Permitted												
Satd. Flow (perm)	0	0	2787	0	3539	0	0	0	0	0	5085	1583
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)			48									112
Link Speed (mph)		35			45			45			45	
Link Distance (ft)		885			193			656			387	
Travel Time (s)		17.2			2.9			9.9			5.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	572	0	441	0	0	0	0	0	2541	202
Turn Type			Perm		NA						NA	Perm
Protected Phases					3						6	
Permitted Phases			3									6
Detector Phase			3		3						6	6
Switch Phase												
Minimum Initial (s)			7.0		7.0						14.0	14.0
Minimum Split (s)			14.0		14.0						21.0	21.0
Total Split (s)			30.0		30.0						60.0	60.0
Total Split (%)			33.3%		33.3%						66.7%	66.7%
Yellow Time (s)			5.0		5.0						5.0	5.0
All-Red Time (s)			2.0		2.0						2.0	2.0
Lost Time Adjust (s)			-2.0		-2.0						-2.0	-2.0
Total Lost Time (s)			5.0		5.0						5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode			None		None						C-Max	C-Max
Act Effct Green (s)			23.1		23.1						56.9	56.9
Actuated g/C Ratio			0.26		0.26						0.63	0.63
v/c Ratio			0.76		0.49						0.79	0.19
Control Delay (s/veh)			35.3		30.1						12.0	4.4
Queue Delay			0.0		0.0						0.0	0.0
Total Delay (s/veh)			35.3		30.1						12.0	4.4

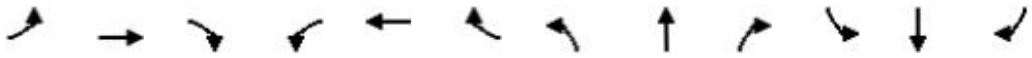
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS			D		C						B	A
Approach Delay (s/veh)		35.3			30.1						11.4	
Approach LOS		D			C						B	
Queue Length 50th (ft)			154		123						234	19
Queue Length 95th (ft)			221		174						m317	m26
Internal Link Dist (ft)		805			113			576			307	
Turn Bay Length (ft)												100
Base Capacity (vph)			808		983						3213	1041
Starvation Cap Reductn			0		0						0	0
Spillback Cap Reductn			0		0						0	0
Storage Cap Reductn			0		0						0	0
Reduced v/c Ratio			0.71		0.45						0.79	0.19

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2: and 6:SBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay (s/veh): 17.2		Intersection LOS: B	
Intersection Capacity Utilization 112.2%		ICU Level of Service H	
Analysis Period (min) 15			

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

Splits and Phases: 4: NC 55 & Forest Light Way





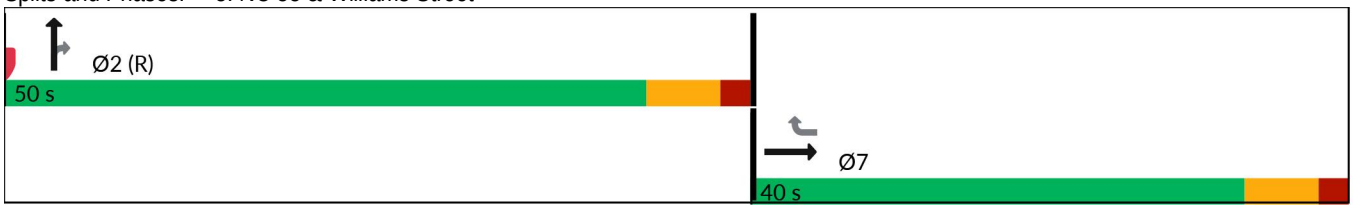
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1061	0	0	0	819	0	1905	328	0	0	0
Future Volume (vph)	0	1061	0	0	0	819	0	1905	328	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		3	0		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3539	0	0	0	3610	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	3610	0	5085	1583	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						48			48			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		395			800			177			816	
Travel Time (s)		6.0			12.1			2.7			12.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1179	0	0	0	910	0	2117	364	0	0	0
Turn Type		NA				Perm		NA	Perm			
Protected Phases		7						2				
Permitted Phases						7			2			
Detector Phase		7				7		2	2			
Switch Phase												
Minimum Initial (s)		7.0				7.0		14.0	14.0			
Minimum Split (s)		14.0				14.0		21.0	21.0			
Total Split (s)		40.0				40.0		50.0	50.0			
Total Split (%)		44.4%				44.4%		55.6%	55.6%			
Yellow Time (s)		5.0				5.0		5.0	5.0			
All-Red Time (s)		2.0				2.0		2.0	2.0			
Lost Time Adjust (s)		-2.0				-2.0		-2.0	-2.0			
Total Lost Time (s)		5.0				5.0		5.0	5.0			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		None				None		C-Max	C-Max			
Act Effct Green (s)		34.8				34.8		45.2	45.2			
Actuated g/C Ratio		0.39				0.39		0.50	0.50			
v/c Ratio		0.86				0.64		0.83	0.44			
Control Delay (s/veh)		25.0				23.6		17.8	12.6			
Queue Delay		0.0				0.0		0.0	0.0			
Total Delay (s/veh)		25.0				23.6		17.8	12.6			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		C				C		B	B			
Approach Delay (s/veh)		25.0			23.6			17.1				
Approach LOS		C			C			B				
Queue Length 50th (ft)		341				173		225	84			
Queue Length 95th (ft)		m352				228		300	121			
Internal Link Dist (ft)		315			720			97			736	
Turn Bay Length (ft)												
Base Capacity (vph)		1376				1433		2553	818			
Starvation Cap Reductn		0				0		0	0			
Spillback Cap Reductn		0				0		0	0			
Storage Cap Reductn		0				0		0	0			
Reduced v/c Ratio		0.86				0.64		0.83	0.44			

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay (s/veh): 20.4		Intersection LOS: C	
Intersection Capacity Utilization 105.3%		ICU Level of Service G	
Analysis Period (min) 15			

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

Splits and Phases: 5: NC 55 & Williams Street





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	379	0	0	2262	0	0
Future Volume (vph)	379	0	0	2262	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	2	0	0			0
Taper Length (ft)	25		25			
Satd. Flow (prot)	3433	0	0	5085	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	5085	0	0
Right Turn on Red	Yes	Yes				Yes
Satd. Flow (RTOR)	11					
Link Speed (mph)	45			45	45	
Link Distance (ft)	62			939	526	
Travel Time (s)	0.9			14.2	8.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	421	0	0	2513	0	0
Turn Type	Prot			NA		
Protected Phases	4			2		
Permitted Phases						
Detector Phase	4			2		
Switch Phase						
Minimum Initial (s)	7.0			14.0		
Minimum Split (s)	14.0			21.0		
Total Split (s)	25.0			65.0		
Total Split (%)	27.8%			72.2%		
Yellow Time (s)	5.0			5.0		
All-Red Time (s)	2.0			2.0		
Lost Time Adjust (s)	-2.0			-2.0		
Total Lost Time (s)	5.0			5.0		
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None			C-Max		
Act Effct Green (s)	17.5			62.5		
Actuated g/C Ratio	0.19			0.69		
v/c Ratio	0.62			0.71		
Control Delay (s/veh)	33.7			10.1		
Queue Delay	0.0			0.0		
Total Delay (s/veh)	33.7			10.1		



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
LOS	C			B		
Approach Delay (s/veh)	33.7			10.1		
Approach LOS	C			B		
Queue Length 50th (ft)	120			281		
Queue Length 95th (ft)	m161			366		
Internal Link Dist (ft)	1			859	446	
Turn Bay Length (ft)						
Base Capacity (vph)	771			3532		
Starvation Cap Reductn	0			0		
Spillback Cap Reductn	0			0		
Storage Cap Reductn	0			0		
Reduced v/c Ratio	0.55			0.71		

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay (s/veh): 13.5		Intersection LOS: B	
Intersection Capacity Utilization 73.5%		ICU Level of Service D	
Analysis Period (min) 15			

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

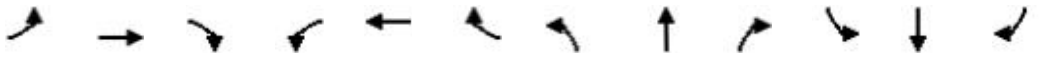
Splits and Phases: 6: NC 55 & U-Turn S. of Forest Light Way



Appendix I:

Synchro Output:

Build-out (2030) – Access Scenario 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	1293	4	499	133	1357	0	0	1275	145
Future Volume (vph)	0	0	0	1293	4	499	133	1357	0	0	1275	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			4%			0%			0%	
Storage Length (ft)	0		0	425		400	150		0	0		150
Storage Lanes	0		0	1		2	1		0	0		1
Taper Length (ft)	25			225			75			25		
Satd. Flow (prot)	0	0	0	3009	1509	2603	1687	3374	0	0	4893	1524
Flt Permitted				0.950	0.953		0.950					
Satd. Flow (perm)	0	0	0	3009	1509	2603	1687	3374	0	0	4893	1524
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						70						92
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1164			1095			597			1074	
Travel Time (s)		17.6			16.6			9.0			16.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	7%	7%	7%	7%	7%	7%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)				33%								
Lane Group Flow (vph)	0	0	0	963	478	554	148	1508	0	0	1417	161
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				4	4		5	2			6	
Permitted Phases						4						6
Detector Phase				4	4	4	5	2			6	6
Switch Phase												
Minimum Initial (s)				7.0	7.0	7.0	7.0	12.0			12.0	12.0
Minimum Split (s)				12.8	12.8	12.8	12.5	18.4			18.4	18.4
Total Split (s)				60.0	60.0	60.0	20.0	70.0			50.0	50.0
Total Split (%)				46.2%	46.2%	46.2%	15.4%	53.8%			38.5%	38.5%
Yellow Time (s)				4.2	4.2	4.2	3.0	4.5			4.5	4.5
All-Red Time (s)				1.6	1.6	1.6	2.1	1.8			1.0	1.0
Lost Time Adjust (s)				-0.8	-0.8	-0.8	-0.1	-1.3			-0.5	-0.5
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?												
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				53.3	53.3	53.3	14.2	66.7			47.5	47.5
Actuated g/C Ratio				0.41	0.41	0.41	0.11	0.51			0.37	0.37
v/c Ratio				0.78	0.77	0.50	0.80	0.87			0.79	0.26
Control Delay (s/veh)				38.4	42.7	26.0	107.1	25.4			41.4	14.6
Queue Delay				0.0	0.0	0.0	0.0	0.9			0.0	0.0
Total Delay (s/veh)				38.4	42.7	26.0	107.1	26.3			41.4	14.6

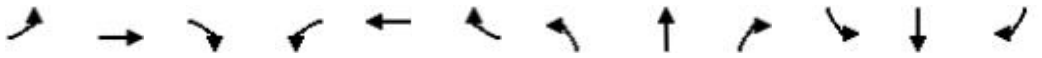
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS				D	D	C	F	C			D	B
Approach Delay (s/veh)					36.0			33.5			38.7	
Approach LOS					D			C			D	
Queue Length 50th (ft)				393	389	174	128	250			420	42
Queue Length 95th (ft)				487	553	235	m167	367			486	99
Internal Link Dist (ft)		1084			1015			517			994	
Turn Bay Length (ft)				425		400	150					150
Base Capacity (vph)				1273	638	1141	194	1732			1789	615
Starvation Cap Reductn				0	0	0	0	68			0	0
Spillback Cap Reductn				0	0	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.76	0.75	0.49	0.76	0.91			0.79	0.26

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.87
Intersection Signal Delay (s/veh): 36.0 Intersection LOS: D
Intersection Capacity Utilization 76.2% ICU Level of Service D
Analysis Period (min) 15
Description: 05-0209
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: NC 55 & US 1 SB On-Ramp/US 1 SB Off-Ramp





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	249	4	216	0	0	0	0	1237	1506	407	2159	0
Future Volume (vph)	249	4	216	0	0	0	0	1237	1506	407	2159	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		2%			0%			0%			-2%	
Storage Length (ft)	350		100	0		0	0		1000	275		0
Storage Lanes	1		1	0		0	0		1	1		0
Taper Length (ft)	200			25			25			75		
Satd. Flow (prot)	1543	1550	1454	0	0	0	0	3471	1553	1720	4942	0
Flt Permitted	0.950	0.954								0.113		
Satd. Flow (perm)	1543	1550	1454	0	0	0	0	3471	1553	205	4942	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			73						694			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		828			998			1424			597	
Travel Time (s)		12.5			15.1			21.6			9.0	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.90	0.90	0.90	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	10%	10%	10%	2%	2%	2%	4%	4%	4%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	132	131	225	0	0	0	0	1289	1569	424	2249	0
Turn Type	Split	NA	Perm					NA	Free	D.P+P	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						Free	2		
Detector Phase	4	4	4					2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0					12.0		7.0	12.0	
Minimum Split (s)	13.0	13.0	13.0					17.5		12.9	17.8	
Total Split (s)	20.0	20.0	20.0					65.0		45.0	110.0	
Total Split (%)	15.4%	15.4%	15.4%					50.0%		34.6%	84.6%	
Yellow Time (s)	4.3	4.3	4.3					4.5		3.0	4.7	
All-Red Time (s)	1.7	1.7	1.7					1.0		2.9	1.1	
Lost Time Adjust (s)	-1.0	-1.0	-1.0					-0.5		-0.9	-0.8	
Total Lost Time (s)	5.0	5.0	5.0					5.0		5.0	5.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?												
Recall Mode	None	None	None					C-Max		None	C-Max	
Act Effct Green (s)	15.0	15.0	15.0					68.1	130.0	100.0	105.0	
Actuated g/C Ratio	0.12	0.12	0.12					0.52	1.00	0.77	0.81	
v/c Ratio	0.74	0.74	0.97					0.71	1.01	0.80	0.56	
Control Delay (s/veh)	80.3	79.7	90.4					27.4	28.6	66.0	12.4	
Queue Delay	0.0	0.0	0.0					0.0	0.0	0.0	0.7	
Total Delay (s/veh)	80.3	79.7	90.4					27.4	28.6	66.0	13.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	E	F					C	C	E	B	
Approach Delay (s/veh)		84.8						28.1			21.4	
Approach LOS		F						C			C	
Queue Length 50th (ft)	124	123	143					437	~29	333	446	
Queue Length 95th (ft)	#236	#233	#325					594	#304	m437	481	
Internal Link Dist (ft)		748			918			1344			517	
Turn Bay Length (ft)	350		100						1000	275		
Base Capacity (vph)	178	178	232					1817	1553	629	3991	
Starvation Cap Reductn	0	0	0					0	0	0	1233	
Spillback Cap Reductn	0	0	0					17	0	0	0	
Storage Cap Reductn	0	0	0					0	0	0	0	
Reduced v/c Ratio	0.74	0.74	0.97					0.72	1.01	0.67	0.82	

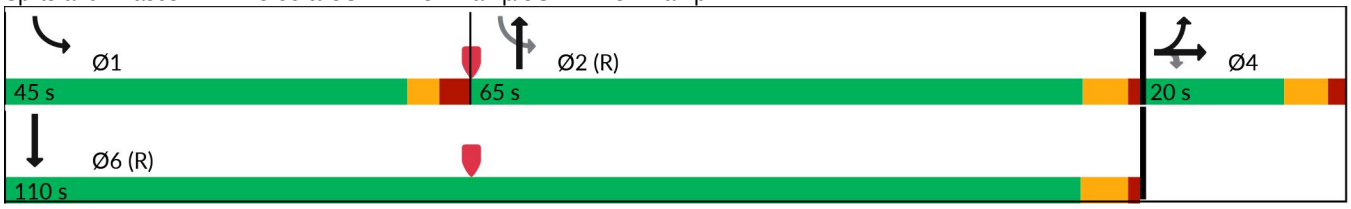
Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:SBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay (s/veh): 29.7	Intersection LOS: C
Intersection Capacity Utilization 76.2%	ICU Level of Service D
Analysis Period (min) 15	
Description: 05-0900	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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

Splits and Phases: 2: NC 55 & US 1 NB Off-Ramp/US 1 NB On-Ramp





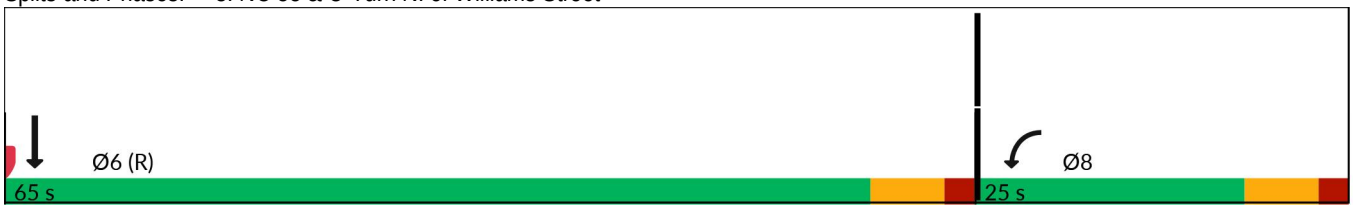
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	357	0	0	0	0	2319
Future Volume (vph)	357	0	0	0	0	2319
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	2	0		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	3433	0	0	0	0	5085
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	5085
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	10					
Link Speed (mph)	45		45			45
Link Distance (ft)	70		454			1055
Travel Time (s)	1.1		6.9			16.0
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	397	0	0	0	0	2577
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Detector Phase	8					6
Switch Phase						
Minimum Initial (s)	7.0					14.0
Minimum Split (s)	14.0					21.0
Total Split (s)	25.0					65.0
Total Split (%)	27.8%					72.2%
Yellow Time (s)	5.0					5.0
All-Red Time (s)	2.0					2.0
Lost Time Adjust (s)	-2.0					-2.0
Total Lost Time (s)	5.0					5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None					C-Max
Act Effct Green (s)	17.0					63.0
Actuated g/C Ratio	0.19					0.70
v/c Ratio	0.60					0.72
Control Delay (s/veh)	34.2					7.2
Queue Delay	0.0					0.0
Total Delay (s/veh)	34.2					7.2

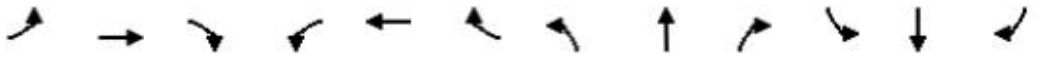
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
LOS	C					A
Approach Delay (s/veh)	34.2					7.2
Approach LOS	C					A
Queue Length 50th (ft)	100					215
Queue Length 95th (ft)	m101					243
Internal Link Dist (ft)	1		374			975
Turn Bay Length (ft)						
Base Capacity (vph)	770					3557
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.52					0.72

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2: and 6:SBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 10.8		Intersection LOS: B	
Intersection Capacity Utilization 137.1%		ICU Level of Service H	
Analysis Period (min) 15			

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

Splits and Phases: 3: NC 55 & U-Turn N. of Williams Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	466	0	333	0	0	0	0	0	1934	331
Future Volume (vph)	0	0	466	0	333	0	0	0	0	0	1934	331
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		100
Storage Lanes	0		2	0		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	2787	0	3539	0	0	0	0	0	5085	1583
Flt Permitted												
Satd. Flow (perm)	0	0	2787	0	3539	0	0	0	0	0	5085	1583
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)			48									191
Link Speed (mph)		35			45			45			45	
Link Distance (ft)		885			193			656			387	
Travel Time (s)		17.2			2.9			9.9			5.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	518	0	370	0	0	0	0	0	2149	368
Turn Type			Perm		NA						NA	Perm
Protected Phases					3						6	
Permitted Phases			3									6
Detector Phase			3		3						6	6
Switch Phase												
Minimum Initial (s)			7.0		7.0						14.0	14.0
Minimum Split (s)			14.0		14.0						21.0	21.0
Total Split (s)			30.0		30.0						60.0	60.0
Total Split (%)			33.3%		33.3%						66.7%	66.7%
Yellow Time (s)			5.0		5.0						5.0	5.0
All-Red Time (s)			2.0		2.0						2.0	2.0
Lost Time Adjust (s)			-2.0		-2.0						-2.0	-2.0
Total Lost Time (s)			5.0		5.0						5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode			None		None						C-Max	C-Max
Act Effct Green (s)			22.2		22.2						57.8	57.8
Actuated g/C Ratio			0.25		0.25						0.64	0.64
v/c Ratio			0.72		0.42						0.66	0.34
Control Delay (s/veh)			33.8		29.4						7.5	3.0
Queue Delay			0.0		0.0						0.0	0.0
Total Delay (s/veh)			33.8		29.4						7.5	3.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS			C		C						A	A
Approach Delay (s/veh)		33.8			29.4						6.9	
Approach LOS		C			C						A	
Queue Length 50th (ft)			139		103						147	11
Queue Length 95th (ft)			196		146						189	m51
Internal Link Dist (ft)		805			113			576			307	
Turn Bay Length (ft)												100
Base Capacity (vph)			808		983						3266	1085
Starvation Cap Reductn			0		0						0	0
Spillback Cap Reductn			0		0						0	0
Storage Cap Reductn			0		0						0	0
Reduced v/c Ratio			0.64		0.38						0.66	0.34

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2: and 6:SBT, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 13.4		Intersection LOS: B	
Intersection Capacity Utilization 103.7%		ICU Level of Service G	
Analysis Period (min) 15			

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

Splits and Phases: 4: NC 55 & Forest Light Way



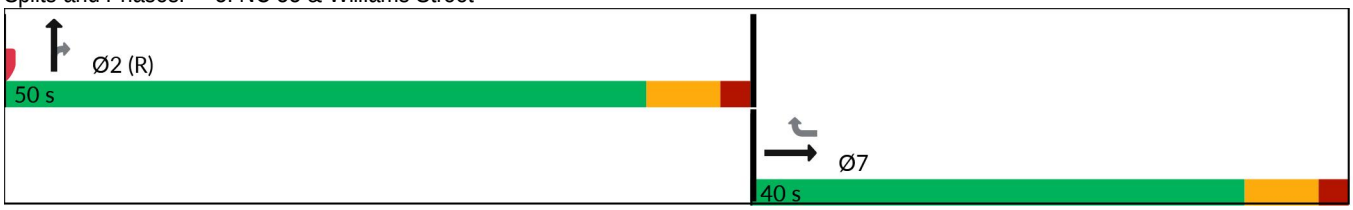
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	403	0	0	0	1358	0	2057	178	0	0	0
Future Volume (vph)	0	403	0	0	0	1358	0	2057	178	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		3	0		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3539	0	0	0	3610	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	3610	0	5085	1583	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						48			198			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		395			800			177			816	
Travel Time (s)		6.0			12.1			2.7			12.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	448	0	0	0	1509	0	2286	198	0	0	0
Turn Type		NA				Perm		NA	Perm			
Protected Phases		7						2				
Permitted Phases						7			2			
Detector Phase		7				7		2	2			
Switch Phase												
Minimum Initial (s)		7.0				7.0		14.0	14.0			
Minimum Split (s)		14.0				14.0		21.0	21.0			
Total Split (s)		40.0				40.0		50.0	50.0			
Total Split (%)		44.4%				44.4%		55.6%	55.6%			
Yellow Time (s)		5.0				5.0		5.0	5.0			
All-Red Time (s)		2.0				2.0		2.0	2.0			
Lost Time Adjust (s)		-2.0				-2.0		-2.0	-2.0			
Total Lost Time (s)		5.0				5.0		5.0	5.0			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		None				None		C-Max	C-Max			
Act Effct Green (s)		35.0				35.0		45.0	45.0			
Actuated g/C Ratio		0.39				0.39		0.50	0.50			
v/c Ratio		0.33				1.05		0.90	0.22			
Control Delay (s/veh)		19.1				66.6		20.8	2.8			
Queue Delay		0.0				0.0		0.0	0.0			
Total Delay (s/veh)		19.1				66.6		20.8	2.8			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		B				E		C	A			
Approach Delay (s/veh)		19.1			66.6			19.3				
Approach LOS		B			E			B				
Queue Length 50th (ft)		104				~414		237	0			
Queue Length 95th (ft)		145				#530		324	m29			
Internal Link Dist (ft)		315			720			97			736	
Turn Bay Length (ft)												
Base Capacity (vph)		1376				1433		2542	890			
Starvation Cap Reductn		0				0		0	0			
Spillback Cap Reductn		0				0		0	0			
Storage Cap Reductn		0				0		0	0			
Reduced v/c Ratio		0.33				1.05		0.90	0.22			

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.05			
Intersection Signal Delay (s/veh): 35.4		Intersection LOS: D	
Intersection Capacity Utilization 79.7%		ICU Level of Service D	
Analysis Period (min) 15			

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

Splits and Phases: 5: NC 55 & Williams Street





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	327	0	0	2270	0	0
Future Volume (vph)	327	0	0	2270	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	2	0	0			0
Taper Length (ft)	25		25			
Satd. Flow (prot)	3433	0	0	5085	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	5085	0	0
Right Turn on Red	Yes	Yes				Yes
Satd. Flow (RTOR)	11					
Link Speed (mph)	45			45	45	
Link Distance (ft)	62			939	526	
Travel Time (s)	0.9			14.2	8.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	363	0	0	2522	0	0
Turn Type	Prot			NA		
Protected Phases	4			2		
Permitted Phases						
Detector Phase	4			2		
Switch Phase						
Minimum Initial (s)	7.0			14.0		
Minimum Split (s)	14.0			21.0		
Total Split (s)	25.0			65.0		
Total Split (%)	27.8%			72.2%		
Yellow Time (s)	5.0			5.0		
All-Red Time (s)	2.0			2.0		
Lost Time Adjust (s)	-2.0			-2.0		
Total Lost Time (s)	5.0			5.0		
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None			C-Max		
Act Effct Green (s)	16.4			63.6		
Actuated g/C Ratio	0.18			0.71		
v/c Ratio	0.57			0.70		
Control Delay (s/veh)	35.3			9.4		
Queue Delay	0.0			0.0		
Total Delay (s/veh)	35.3			9.4		



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
LOS	D			A		
Approach Delay (s/veh)	35.3			9.4		
Approach LOS	D			A		
Queue Length 50th (ft)	103			264		
Queue Length 95th (ft)	148			368		
Internal Link Dist (ft)	1			859	446	
Turn Bay Length (ft)						
Base Capacity (vph)	771			3595		
Starvation Cap Reductn	0			0		
Spillback Cap Reductn	0			0		
Storage Cap Reductn	0			0		
Reduced v/c Ratio	0.47			0.70		

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay (s/veh): 12.7		Intersection LOS: B	
Intersection Capacity Utilization 73.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 6: NC 55 & U-Turn S. of Forest Light Way





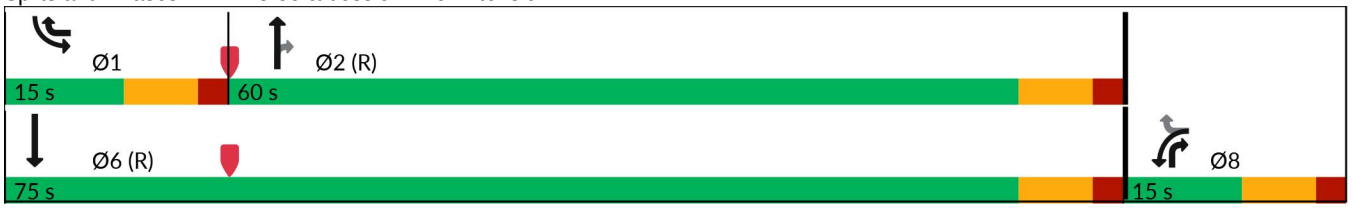
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	252	118	2831	250	280	1913
Future Volume (vph)	252	118	2831	250	280	1913
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	350	0		100	250	
Storage Lanes	1	1		2	2	
Taper Length (ft)	100				200	
Satd. Flow (prot)	3433	1583	5085	1583	3433	3539
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3433	1583	5085	1583	3433	3539
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	35		45			45
Link Distance (ft)	467		604			851
Travel Time (s)	9.1		9.2			12.9
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	280	131	3146	278	311	2126
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	12.0	7.0	7.0	12.0
Minimum Split (s)	14.0	14.0	19.0	14.0	14.0	19.0
Total Split (s)	15.0	15.0	60.0	15.0	15.0	75.0
Total Split (%)	16.7%	16.7%	66.7%	16.7%	16.7%	83.3%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max
Act Effct Green (s)	10.0	25.0	55.0	70.0	10.0	70.0
Actuated g/C Ratio	0.11	0.28	0.61	0.78	0.11	0.78
v/c Ratio	0.73	0.30	1.01	0.23	0.82	0.77
Control Delay (s/veh)	51.8	28.9	32.8	3.0	57.5	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.8	28.9	32.8	3.0	57.5	8.1

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
LOS	D	C	C	A	E	A
Approach Delay (s/veh)	44.5		30.4			14.4
Approach LOS	D		C			B
Queue Length 50th (ft)	82	60	~606	35	92	277
Queue Length 95th (ft)	m#135	m109	m#731	m45	#159	362
Internal Link Dist (ft)	387		524			771
Turn Bay Length (ft)	350			100	250	
Base Capacity (vph)	381	439	3107	1231	381	2752
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.73	0.30	1.01	0.23	0.82	0.77

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.01			
Intersection Signal Delay (s/veh): 25.1		Intersection LOS: C	
Intersection Capacity Utilization 82.4%		ICU Level of Service E	
Analysis Period (min) 15			

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

Splits and Phases: 7: NC 55 & Jessie Drive Extension





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	130	2795	154	0	2193
Future Volume (vph)	0	130	2795	154	0	2193
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		1	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	0	1611	3539	1583	0	3539
Flt Permitted						
Satd. Flow (perm)	0	1611	3539	1583	0	3539
Link Speed (mph)	25		45			45
Link Distance (ft)	1291		851			776
Travel Time (s)	35.2		12.9			11.8
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	144	3106	171	0	2437
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 92.0%		ICU Level of Service F	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	7.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	130	2795	154	0	2193
Future Vol, veh/h	0	130	2795	154	0	2193
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	144	3106	171	0	2437

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1553	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	~ 102	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	~ 102	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	$ 309.22	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	102	-
HCM Lane V/C Ratio	-	-	1.413	-
HCM Ctrl Dly (s/v)	-	-	-$ 309.2	-
HCM Lane LOS	-	-	F	-
HCM 95th %tile Q(veh)	-	-	10.5	-

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	428	102	0	239	4	0	0	36	0	0	131
Future Volume (vph)	0	428	102	0	239	4	0	0	36	0	0	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3437	0	0	3532	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	3437	0	0	3532	0	0	0	1611	0	0	1611
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		467			283			423			536	
Travel Time (s)		9.1			5.5			11.5			14.6	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	589	0	0	270	0	0	0	40	0	0	146
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.1%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	428	102	0	239	4	0	0	36	0	0	131
Future Vol, veh/h	0	428	102	0	239	4	0	0	36	0	0	131
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	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	476	113	0	266	4	0	0	40	0	0	146

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	294	-	-	135
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	702	0	0	889
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	702	-	-	889
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	10.44	9.84
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	702	-	-	-	-	889
HCM Lane V/C Ratio	0.057	-	-	-	-	0.164
HCM Ctrl Dly (s/v)	10.4	-	-	-	-	9.8
HCM Lane LOS	B	-	-	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	-	0.6

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	36	255	124	49	4	20	6	91	16	4	5	14
Future Volume (vph)	36	255	124	49	4	20	6	91	16	4	5	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%			0%			0%
Storage Length (ft)		100		0	100		0	0		0	0	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		100			100			25			25	
Satd. Flow (prot)	0	1770	3391	0	1770	3412	0	1770	1812	0	1770	1621
Flt Permitted		0.950			0.950			0.950			0.950	
Satd. Flow (perm)	0	1770	3391	0	1770	3412	0	1770	1812	0	1770	1621
Link Speed (mph)			35			35			25			25
Link Distance (ft)			283			343			462			530
Travel Time (s)			5.5			6.7			12.6			14.5
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	323	192	0	4	29	0	101	22	0	6	118
Sign Control			Free			Free			Stop			Stop

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.2%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	92
Future Volume (vph)	92
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.90
Growth Factor	100%
Heavy Vehicles (%)	2%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Sign Control	

Intersection Summary

Intersection	
Int Delay, s/veh	12.1

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	36	255	124	49	4	20	6	91	16	4	5	14	92
Future Vol, veh/h	36	255	124	49	4	20	6	91	16	4	5	14	92
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	100	-	-	100	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	40	283	138	54	4	22	7	101	18	4	6	16	102

Major/Minor	Major1				Major2			Minor1			Minor2		
Conflicting Flow All	29	29	0	0	192	0	0	839	849	96	759	873	14
Stage 1	-	-	-	-	-	-	-	812	812	-	34	34	-
Stage 2	-	-	-	-	-	-	-	28	38	-	724	839	-
Critical Hdwy	6.44	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	2.52	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1370	1583	-	-	1379	-	-	258	296	941	296	287	1062
Stage 1	-	-	-	-	-	-	-	339	391	-	977	866	-
Stage 2	-	-	-	-	-	-	-	986	863	-	383	379	-
Platoon blocked, %			-	-		-	-						
Mov Cap-1 Maneuver	1530	1530	-	-	1379	-	-	173	233	941	217	226	1062
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	173	233	-	217	226	-
Stage 1	-	-	-	-	-	-	-	267	308	-	974	863	-
Stage 2	-	-	-	-	-	-	-	872	860	-	283	299	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	5.01	1.02	45.51	11.54
HCM LOS			E	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	173	274	1530	-	-	1379	-	-	217	713
HCM Lane V/C Ratio	0.583	0.081	0.211	-	-	0.003	-	-	0.026	0.165
HCM Ctrl Dly (s/v)	51.3	19.3	8	-	-	7.6	-	-	22	11
HCM Lane LOS	F	C	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	3.1	0.3	0.8	-	-	0	-	-	0.1	0.6



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	132	16	4	0	13
Future Volume (vph)	0	132	16	4	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	0	3539	3444	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	3539	3444	0	0	1611
Link Speed (mph)		35	35		25	
Link Distance (ft)		343	287		403	
Travel Time (s)		6.7	5.6		11.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	147	22	0	0	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 13.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	132	16	4	0	13
Future Vol, veh/h	0	132	16	4	0	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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	147	18	4	0	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	11
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	1067
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	1067
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	8.42
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	1067
HCM Lane V/C Ratio	-	-	-	0.014
HCM Ctrl Dly (s/v)	-	-	-	8.4
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	86	46	10	4	4	6
Future Volume (vph)	86	46	10	4	4	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	1	0			0
Taper Length (ft)	50		25			
Satd. Flow (prot)	1770	1583	0	1798	1703	0
Flt Permitted	0.950			0.965		
Satd. Flow (perm)	1770	1583	0	1798	1703	0
Link Speed (mph)	35			25	25	
Link Distance (ft)	287			596	493	
Travel Time (s)	5.6			16.3	13.4	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	96	51	0	15	11	0
Sign Control	Free			Stop	Stop	

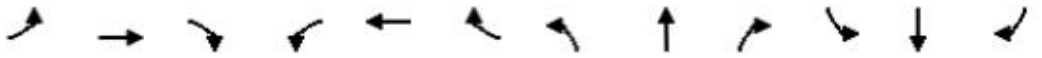
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 18.9%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	86	46	10	4	4	6
Future Volume (Veh/h)	86	46	10	4	4	6
Sign Control	Free			Stop	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	96	51	11	4	4	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	0		201	192	243	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0		201	192	243	0
tC, single (s)	4.1		7.1	6.5	6.5	6.2
tC, 2 stage (s)						
tF (s)	2.2		3.5	4.0	4.0	3.3
p0 queue free %	94		98	99	99	99
cM capacity (veh/h)	1623		715	661	620	1085

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	96	51	15	11
Volume Left	96	0	11	0
Volume Right	0	51	0	7
cSH	1623	1700	700	852
Volume to Capacity	0.06	0.03	0.02	0.01
Queue Length 95th (ft)	5	0	2	1
Control Delay (s/veh)	7.4	0.0	10.3	9.3
Lane LOS	A		B	A
Approach Delay (s/veh)	4.8		10.3	9.3
Approach LOS			B	A

Intersection Summary			
Average Delay	5.6		
Intersection Capacity Utilization	18.9%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	1750	4	530	209	1243	0	0	1597	249
Future Volume (vph)	0	0	0	1750	4	530	209	1243	0	0	1597	249
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			4%			0%			0%	
Storage Length (ft)	0		0	425		400	150		0	0		150
Storage Lanes	0		0	1		2	1		0	0		1
Taper Length (ft)	25			225			75			25		
Satd. Flow (prot)	0	0	0	3156	1583	2731	1752	3505	0	0	5036	1568
Flt Permitted				0.950	0.953		0.950					
Satd. Flow (perm)	0	0	0	3156	1583	2731	1752	3505	0	0	5036	1535
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						70						126
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1164			1095			597			1074	
Travel Time (s)		17.6			16.6			9.0			16.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)									1			1
Peak Hour Factor	0.90	0.90	0.90	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)				33%								
Lane Group Flow (vph)	0	0	0	1185	587	535	211	1256	0	0	1613	252
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				4	4		5	2			6	
Permitted Phases						4						6
Detector Phase				4	4	4	5	2			6	6
Switch Phase												
Minimum Initial (s)				7.0	7.0	7.0	7.0	12.0			12.0	12.0
Minimum Split (s)				12.8	12.8	12.8	12.5	18.4			18.4	18.4
Total Split (s)				60.0	60.0	60.0	20.0	70.0			50.0	50.0
Total Split (%)				46.2%	46.2%	46.2%	15.4%	53.8%			38.5%	38.5%
Yellow Time (s)				4.2	4.2	4.2	3.0	4.5			4.5	4.5
All-Red Time (s)				1.6	1.6	1.6	2.1	1.8			1.0	1.0
Lost Time Adjust (s)				-0.8	-0.8	-0.8	-0.1	-1.3			-0.5	-0.5
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?												
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				55.0	55.0	55.0	15.0	65.0			45.0	45.0
Actuated g/C Ratio				0.42	0.42	0.42	0.12	0.50			0.35	0.35
v/c Ratio				0.89	0.88	0.45	1.04	0.72			0.93	0.41
Control Delay (s/veh)				44.2	50.4	24.3	108.0	18.8			51.0	17.8
Queue Delay				35.7	33.5	0.0	0.0	2.0			0.0	0.0
Total Delay (s/veh)				79.8	83.9	24.3	108.0	20.8			51.0	17.8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS				E	F	C	F	C			D	B
Approach Delay (s/veh)					68.0			33.3			46.5	
Approach LOS					E			C			D	
Queue Length 50th (ft)				507	500	157	~193	498			488	78
Queue Length 95th (ft)				618	#747	214	m#327	584			#570	156
Internal Link Dist (ft)		1084			1015			517			994	
Turn Bay Length (ft)				425		400	150					150
Base Capacity (vph)				1335	669	1195	202	1752			1743	613
Starvation Cap Reductn				0	0	0	0	330			0	0
Spillback Cap Reductn				230	115	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				1.07	1.06	0.45	1.04	0.88			0.93	0.41

Intersection Summary

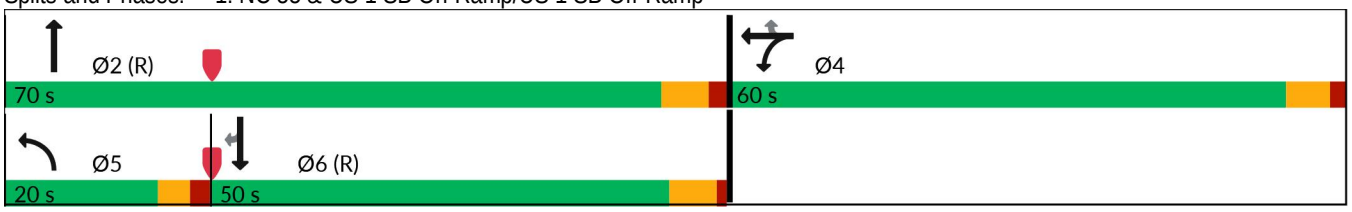
Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 30 (23%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.04
Intersection Signal Delay (s/veh): 51.9 Intersection LOS: D
Intersection Capacity Utilization 111.7% ICU Level of Service H
Analysis Period (min) 15
Description: 05-0209

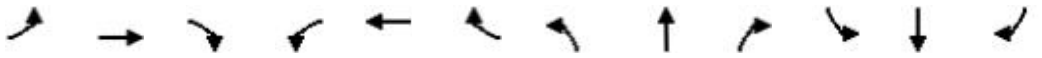
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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

Splits and Phases: 1: NC 55 & US 1 SB On-Ramp/US 1 SB Off-Ramp





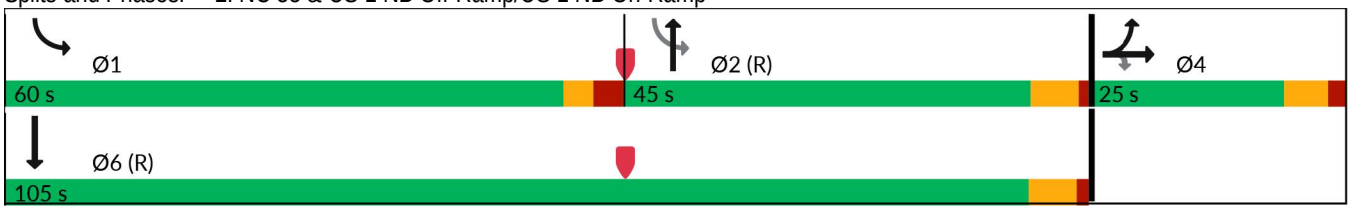
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	167	4	190	0	0	0	0	1266	1454	404	3018	0
Future Volume (vph)	167	4	190	0	0	0	0	1266	1454	404	3018	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		2%			0%			0%			-2%	
Storage Length (ft)	350		100	0		0	0		1000	275		0
Storage Lanes	1		1	0		0	0		1	1		0
Taper Length (ft)	200			25			25			75		
Satd. Flow (prot)	1557	1564	1467	0	0	0	0	3505	1568	1787	5136	0
Flt Permitted	0.950	0.954								0.106		
Satd. Flow (perm)	1557	1564	1467	0	0	0	0	3505	1549	199	5136	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			73						678			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		828			998			1424			597	
Travel Time (s)		12.5			15.1			21.6			9.0	
Confl. Peds. (#/hr)							1		1	1		1
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.90	0.90	0.90	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	9%	9%	9%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	87	87	194	0	0	0	0	1292	1484	412	3080	0
Turn Type	Split	NA	Perm					NA	Free	D.P+P	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						Free	2		
Detector Phase	4	4	4					2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0					12.0		7.0	12.0	
Minimum Split (s)	13.0	13.0	13.0					17.5		12.9	17.8	
Total Split (s)	25.0	25.0	25.0					45.0		60.0	105.0	
Total Split (%)	19.2%	19.2%	19.2%					34.6%		46.2%	80.8%	
Yellow Time (s)	4.3	4.3	4.3					4.5		3.0	4.7	
All-Red Time (s)	1.7	1.7	1.7					1.0		2.9	1.1	
Lost Time Adjust (s)	-1.0	-1.0	-1.0					-0.5		-0.9	-0.8	
Total Lost Time (s)	5.0	5.0	5.0					5.0		5.0	5.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?												
Recall Mode	None	None	None					C-Max		None	C-Max	
Act Effct Green (s)	15.8	15.8	15.8					66.4	130.0	99.2	104.2	
Actuated g/C Ratio	0.12	0.12	0.12					0.51	1.00	0.76	0.80	
v/c Ratio	0.46	0.46	0.80					0.72	0.96	0.75	0.75	
Control Delay (s/veh)	59.8	59.7	57.5					30.0	16.8	25.0	12.8	
Queue Delay	0.0	0.0	0.0					0.1	0.0	0.0	18.0	
Total Delay (s/veh)	59.8	59.7	57.5					30.1	16.8	25.1	30.9	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	E	E					C	B	C	C	
Approach Delay (s/veh)		58.6						23.0			30.2	
Approach LOS		E						C			C	
Queue Length 50th (ft)	76	76	107					452	0	339	741	
Queue Length 95th (ft)	136	136	199					#705	#154	m349	749	
Internal Link Dist (ft)		748			918			1344			517	
Turn Bay Length (ft)	350		100						1000	275		
Base Capacity (vph)	239	240	287					1789	1549	831	4115	
Starvation Cap Reductn	0	0	0					0	0	10	1127	
Spillback Cap Reductn	0	0	0					62	0	0	0	
Storage Cap Reductn	0	0	0					0	0	0	0	
Reduced v/c Ratio	0.36	0.36	0.68					0.75	0.96	0.50	1.03	

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:SBT, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay (s/veh): 28.7 Intersection LOS: C
Intersection Capacity Utilization 111.7% ICU Level of Service H
Analysis Period (min) 15
Description: 05-0900
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: NC 55 & US 1 NB Off-Ramp/US 1 NB On-Ramp





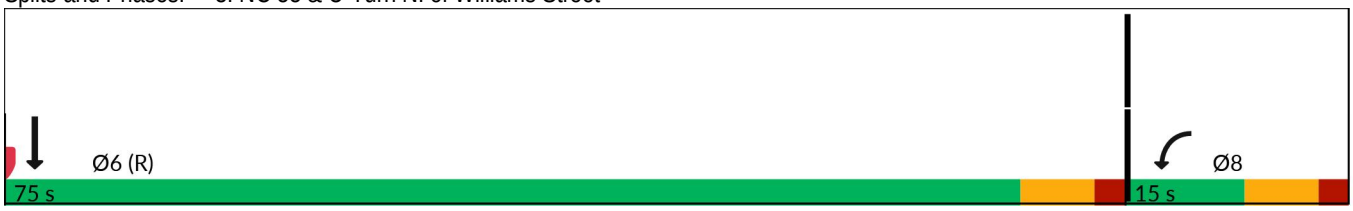
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	204	0	0	0	0	3603
Future Volume (vph)	204	0	0	0	0	3603
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	2	0		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	3433	0	0	0	0	5085
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	5085
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	1					
Link Speed (mph)	45		45			45
Link Distance (ft)	70		454			1055
Travel Time (s)	1.1		6.9			16.0
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	227	0	0	0	0	4003
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Detector Phase	8					6
Switch Phase						
Minimum Initial (s)	7.0					14.0
Minimum Split (s)	14.0					21.0
Total Split (s)	15.0					75.0
Total Split (%)	16.7%					83.3%
Yellow Time (s)	5.0					5.0
All-Red Time (s)	2.0					2.0
Lost Time Adjust (s)	-2.0					-2.0
Total Lost Time (s)	5.0					5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None					C-Max
Act Effct Green (s)	10.0					70.0
Actuated g/C Ratio	0.11					0.78
v/c Ratio	0.59					1.01
Control Delay (s/veh)	40.1					28.7
Queue Delay	0.0					0.0
Total Delay (s/veh)	40.1					28.7

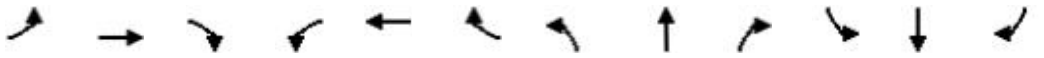
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
LOS	D					C
Approach Delay (s/veh)	40.1					28.7
Approach LOS	D					C
Queue Length 50th (ft)	65					~723
Queue Length 95th (ft)	m81					#986
Internal Link Dist (ft)	1		374			975
Turn Bay Length (ft)						
Base Capacity (vph)	382					3955
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.59					1.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2: and 6:SBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.01			
Intersection Signal Delay (s/veh): 29.3		Intersection LOS: C	
Intersection Capacity Utilization 152.6%		ICU Level of Service H	
Analysis Period (min) 15			

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

Splits and Phases: 3: NC 55 & U-Turn N. of Williams Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	558	0	397	0	0	0	0	0	2413	229
Future Volume (vph)	0	0	558	0	397	0	0	0	0	0	2413	229
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		100
Storage Lanes	0		2	0		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	2787	0	3539	0	0	0	0	0	5085	1583
Flt Permitted												
Satd. Flow (perm)	0	0	2787	0	3539	0	0	0	0	0	5085	1583
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)			48									133
Link Speed (mph)		35			45			45			45	
Link Distance (ft)		885			193			656			387	
Travel Time (s)		17.2			2.9			9.9			5.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	620	0	441	0	0	0	0	0	2681	254
Turn Type			Perm		NA						NA	Perm
Protected Phases					3						6	
Permitted Phases			3									6
Detector Phase			3		3						6	6
Switch Phase												
Minimum Initial (s)			7.0		7.0						14.0	14.0
Minimum Split (s)			14.0		14.0						21.0	21.0
Total Split (s)			30.0		30.0						60.0	60.0
Total Split (%)			33.3%		33.3%						66.7%	66.7%
Yellow Time (s)			5.0		5.0						5.0	5.0
All-Red Time (s)			2.0		2.0						2.0	2.0
Lost Time Adjust (s)			-2.0		-2.0						-2.0	-2.0
Total Lost Time (s)			5.0		5.0						5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode			None		None						C-Max	C-Max
Act Effct Green (s)			24.0		24.0						56.0	56.0
Actuated g/C Ratio			0.27		0.27						0.62	0.62
v/c Ratio			0.80		0.47						0.85	0.25
Control Delay (s/veh)			36.8		29.2						13.6	4.9
Queue Delay			0.0		0.0						0.0	0.0
Total Delay (s/veh)			36.8		29.2						13.6	4.9

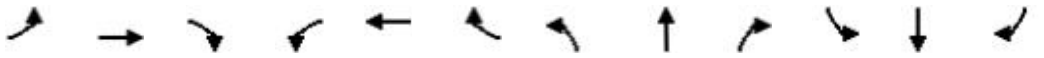
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS			D		C						B	A
Approach Delay (s/veh)		36.8			29.2						12.8	
Approach LOS		D			C						B	
Queue Length 50th (ft)			172		123						305	30
Queue Length 95th (ft)			243		m172						m300	m31
Internal Link Dist (ft)		805			113			576			307	
Turn Bay Length (ft)												100
Base Capacity (vph)			808		983						3162	1035
Starvation Cap Reductn			0		0						0	0
Spillback Cap Reductn			0		0						0	0
Storage Cap Reductn			0		0						0	0
Reduced v/c Ratio			0.77		0.45						0.85	0.25

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2: and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 18.3		Intersection LOS: B	
Intersection Capacity Utilization 118.8%		ICU Level of Service H	
Analysis Period (min) 15			

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

Splits and Phases: 4: NC 55 & Forest Light Way





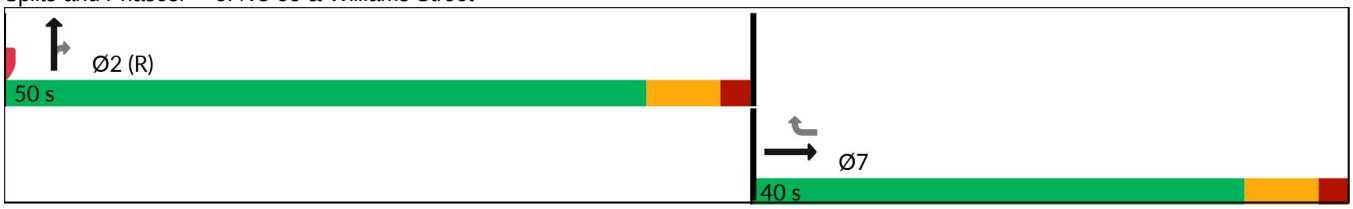
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1141	0	0	0	890	0	2044	328	0	0	0
Future Volume (vph)	0	1141	0	0	0	890	0	2044	328	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		3	0		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3539	0	0	0	3610	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	3610	0	5085	1583	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						48			48			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		395			800			177			816	
Travel Time (s)		6.0			12.1			2.7			12.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1268	0	0	0	989	0	2271	364	0	0	0
Turn Type		NA				Perm		NA	Perm			
Protected Phases		7						2				
Permitted Phases						7			2			
Detector Phase		7				7		2	2			
Switch Phase												
Minimum Initial (s)		7.0				7.0		14.0	14.0			
Minimum Split (s)		14.0				14.0		21.0	21.0			
Total Split (s)		40.0				40.0		50.0	50.0			
Total Split (%)		44.4%				44.4%		55.6%	55.6%			
Yellow Time (s)		5.0				5.0		5.0	5.0			
All-Red Time (s)		2.0				2.0		2.0	2.0			
Lost Time Adjust (s)		-2.0				-2.0		-2.0	-2.0			
Total Lost Time (s)		5.0				5.0		5.0	5.0			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		None				None		C-Max	C-Max			
Act Effct Green (s)		35.0				35.0		45.0	45.0			
Actuated g/C Ratio		0.39				0.39		0.50	0.50			
v/c Ratio		0.92				0.69		0.89	0.45			
Control Delay (s/veh)		25.8				24.8		20.9	13.3			
Queue Delay		0.0				0.0		0.0	0.0			
Total Delay (s/veh)		25.8				24.8		20.9	13.3			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		C				C		C	B			
Approach Delay (s/veh)		25.8			24.8			19.9				
Approach LOS		C			C			B				
Queue Length 50th (ft)		356				195		260	90			
Queue Length 95th (ft)		m355				255		371	m120			
Internal Link Dist (ft)		315			720			97			736	
Turn Bay Length (ft)												
Base Capacity (vph)		1376				1433		2542	815			
Starvation Cap Reductn		0				0		0	0			
Spillback Cap Reductn		0				0		0	0			
Storage Cap Reductn		0				0		0	0			
Reduced v/c Ratio		0.92				0.69		0.89	0.45			

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay (s/veh): 22.4		Intersection LOS: C	
Intersection Capacity Utilization 113.0%		ICU Level of Service H	
Analysis Period (min) 15			

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

Splits and Phases: 5: NC 55 & Williams Street





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	422	0	0	2359	0	0
Future Volume (vph)	422	0	0	2359	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	2	0	0			0
Taper Length (ft)	25		25			
Satd. Flow (prot)	3433	0	0	5085	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	5085	0	0
Right Turn on Red	Yes	Yes				Yes
Satd. Flow (RTOR)	9					
Link Speed (mph)	45			45	45	
Link Distance (ft)	62			939	526	
Travel Time (s)	0.9			14.2	8.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	469	0	0	2621	0	0
Turn Type	Prot			NA		
Protected Phases	4			2		
Permitted Phases						
Detector Phase	4			2		
Switch Phase						
Minimum Initial (s)	7.0			14.0		
Minimum Split (s)	14.0			21.0		
Total Split (s)	25.0			65.0		
Total Split (%)	27.8%			72.2%		
Yellow Time (s)	5.0			5.0		
All-Red Time (s)	2.0			2.0		
Lost Time Adjust (s)	-2.0			-2.0		
Total Lost Time (s)	5.0			5.0		
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None			C-Max		
Act Effct Green (s)	18.3			61.7		
Actuated g/C Ratio	0.20			0.69		
v/c Ratio	0.67			0.75		
Control Delay (s/veh)	33.6			11.2		
Queue Delay	0.0			0.0		
Total Delay (s/veh)	33.6			11.2		



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
LOS	C			B		
Approach Delay (s/veh)	33.6			11.2		
Approach LOS	C			B		
Queue Length 50th (ft)	136			324		
Queue Length 95th (ft)	m170			399		
Internal Link Dist (ft)	1			859	446	
Turn Bay Length (ft)						
Base Capacity (vph)	769			3488		
Starvation Cap Reductn	0			0		
Spillback Cap Reductn	0			0		
Storage Cap Reductn	0			0		
Reduced v/c Ratio	0.61			0.75		

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay (s/veh): 14.6		Intersection LOS: B	
Intersection Capacity Utilization 75.4%		ICU Level of Service D	
Analysis Period (min) 15			

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

Splits and Phases: 6: NC 55 & U-Turn S. of Forest Light Way





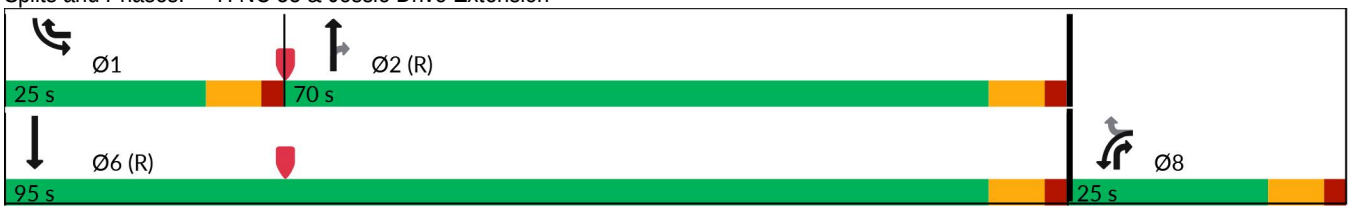
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	455	192	2398	213	340	3113
Future Volume (vph)	455	192	2398	213	340	3113
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	350	0		100	250	
Storage Lanes	1	1		2	2	
Taper Length (ft)	100				200	
Satd. Flow (prot)	3433	1583	5085	1583	3433	3539
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3433	1583	5085	1583	3433	3539
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	35		45			45
Link Distance (ft)	469		575			844
Travel Time (s)	9.1		8.7			12.8
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	506	213	2664	237	378	3459
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	12.0	7.0	7.0	12.0
Minimum Split (s)	14.0	14.0	19.0	14.0	14.0	19.0
Total Split (s)	25.0	25.0	70.0	25.0	25.0	95.0
Total Split (%)	20.8%	20.8%	58.3%	20.8%	20.8%	79.2%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max
Act Effct Green (s)	20.0	43.8	66.2	91.2	18.8	90.0
Actuated g/C Ratio	0.17	0.37	0.55	0.76	0.16	0.75
v/c Ratio	0.88	0.37	0.95	0.20	0.70	1.30
Control Delay (s/veh)	67.9	31.4	34.7	4.7	55.4	158.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.9	31.4	34.7	4.7	55.4	158.9

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
LOS	E	C	C	A	E	F
Approach Delay (s/veh)	57.1		32.3			148.7
Approach LOS	E		C			F
Queue Length 50th (ft)	203	122	709	47	145	~1837
Queue Length 95th (ft)	#298	192	#863	73	198	#1950
Internal Link Dist (ft)	389		495			764
Turn Bay Length (ft)	350			100	250	
Base Capacity (vph)	572	593	2804	1202	572	2654
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.88	0.36	0.95	0.20	0.66	1.30

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.30			
Intersection Signal Delay (s/veh): 94.6		Intersection LOS: F	
Intersection Capacity Utilization 107.4%		ICU Level of Service G	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: NC 55 & Jessie Drive Extension





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	120	2457	134	0	3453
Future Volume (vph)	0	120	2457	134	0	3453
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		1	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	0	1611	3539	1583	0	3539
Flt Permitted						
Satd. Flow (perm)	0	1611	3539	1583	0	3539
Link Speed (mph)	25		45			45
Link Distance (ft)	954		844			825
Travel Time (s)	26.0		12.8			12.5
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	133	2730	149	0	3837
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 98.8%		ICU Level of Service F	
Analysis Period (min) 15			

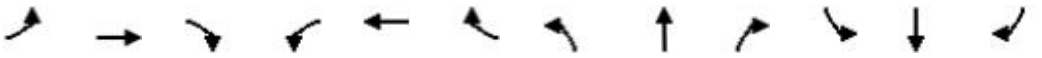
Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	120	2457	134	0	3453
Future Vol, veh/h	0	120	2457	134	0	3453
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	133	2730	149	0	3837

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1365	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	137	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	137	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	132.17	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	137	-
HCM Lane V/C Ratio	-	-	0.972	-
HCM Ctrl Dly (s/v)	-	-	132.2	-
HCM Lane LOS	-	-	F	-
HCM 95th %tile Q(veh)	-	-	6.8	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	456	96	0	478	4	0	0	47	0	0	171
Future Volume (vph)	0	456	96	0	478	4	0	0	47	0	0	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3447	0	0	3536	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	3447	0	0	3536	0	0	0	1611	0	0	1611
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		469			270			464			592	
Travel Time (s)		9.1			5.3			12.7			16.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	614	0	0	535	0	0	0	52	0	0	190
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	456	96	0	478	4	0	0	47	0	0	171
Future Vol, veh/h	0	456	96	0	478	4	0	0	47	0	0	171
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	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	507	107	0	531	4	0	0	52	0	0	190

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	307	-	-	268
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	689	0	0	730
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	689	-	-	730
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	10.65	11.65
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	689	-	-	-	-	730
HCM Lane V/C Ratio	0.076	-	-	-	-	0.26
HCM Ctrl Dly (s/v)	10.7	-	-	-	-	11.7
HCM Lane LOS	B	-	-	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	-	1

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	47	357	35	64	4	112	7	108	17	4	7	17
Future Volume (vph)	47	357	35	64	4	112	7	108	17	4	7	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%			0%			0%
Storage Length (ft)		100		0	100		0	0		0	0	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		100			100			25			25	
Satd. Flow (prot)	0	1770	3196	0	1770	3507	0	1770	1814	0	1770	1604
Flt Permitted		0.950			0.950			0.950			0.950	
Satd. Flow (perm)	0	1770	3196	0	1770	3507	0	1770	1814	0	1770	1604
Link Speed (mph)			35			35			25			25
Link Distance (ft)			270			343			515			582
Travel Time (s)			5.3			6.7			14.0			15.9
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	449	110	0	4	132	0	120	23	0	8	255
Sign Control			Free			Free			Stop			Stop

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 59.0%		ICU Level of Service B	
Analysis Period (min) 15			



Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	212
Future Volume (vph)	212
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.90
Growth Factor	100%
Heavy Vehicles (%)	2%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Sign Control	

Intersection Summary

Intersection	
Int Delay, s/veh	45.9

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	47	357	35	64	4	112	7	108	17	4	7	17	212
Future Vol, veh/h	47	357	35	64	4	112	7	108	17	4	7	17	212
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	100	-	-	100	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	52	397	39	71	4	124	8	120	19	4	8	19	236

Major/Minor	Major1				Major2			Minor1			Minor2		
Conflicting Flow All	132	132	0	0	110	0	0	1053	1113	55	1064	1145	66
Stage 1	-	-	-	-	-	-	-	972	972	-	137	137	-
Stage 2	-	-	-	-	-	-	-	81	141	-	927	1008	-
Critical Hdwy	6.44	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	2.52	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1181	1450	-	-	1478	-	-	181	207	1000	177	198	984
Stage 1	-	-	-	-	-	-	-	271	329	-	852	782	-
Stage 2	-	-	-	-	-	-	-	919	779	-	289	316	-
Platoon blocked, %			-	-		-	-						
Mov Cap-1 Maneuver	1354	1354	-	-	1478	-	-	~ 82	138	1000	106	132	984
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	~ 82	138	-	106	132	-
Stage 1	-	-	-	-	-	-	-	181	220	-	849	780	-
Stage 2	-	-	-	-	-	-	-	680	777	-	176	211	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	7.21	0.24	297.6	14.54
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	82	165	1354	-	-	1478	-	-	106	665
HCM Lane V/C Ratio	1.457	0.141	0.332	-	-	0.003	-	-	0.073	0.382
HCM Ctrl Dly (s/v)	$ 349.6	30.4	9	-	-	7.4	-	-	41.5	13.7
HCM Lane LOS	F	D	A	-	-	A	-	-	E	B
HCM 95th %tile Q(veh)	9.5	0.5	1.5	-	-	0	-	-	0.2	1.8

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



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	45	63	0	0	59
Future Volume (vph)	0	45	63	0	0	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	0	3539	3539	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	3539	3539	0	0	1611
Link Speed (mph)		35	35		25	
Link Distance (ft)		343	284		459	
Travel Time (s)		6.7	5.5		12.5	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	50	70	0	0	66
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 13.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↱
Traffic Vol, veh/h	0	45	63	0	0	59
Future Vol, veh/h	0	45	63	0	0	59
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	50	70	0	0	66

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	35
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	0	1030
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	-	1030
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	8.73
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	1030
HCM Lane V/C Ratio	-	-	0.064
HCM Ctrl Dly (s/v)	-	-	8.7
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	0.2



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	30	15	42	4	4	20
Future Volume (vph)	30	15	42	4	4	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	1	0			0
Taper Length (ft)	50		25			
Satd. Flow (prot)	1770	1583	0	1781	1650	0
Flt Permitted	0.950			0.956		
Satd. Flow (perm)	1770	1583	0	1781	1650	0
Link Speed (mph)	35			25	25	
Link Distance (ft)	284			570	373	
Travel Time (s)	5.5			15.5	10.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	33	17	0	51	26	0
Sign Control	Free			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 19.2%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	30	15	42	4	4	20
Future Volume (Veh/h)	30	15	42	4	4	20
Sign Control	Free			Stop	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	33	17	47	4	4	22
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	0		90	66	83	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0		90	66	83	0
tC, single (s)	4.1		7.1	6.5	6.5	6.2
tC, 2 stage (s)						
tF (s)	2.2		3.5	4.0	4.0	3.3
p0 queue free %	98		95	100	99	98
cM capacity (veh/h)	1623		860	808	791	1085

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	33	17	51	26
Volume Left	33	0	47	0
Volume Right	0	17	0	22
cSH	1623	1700	855	1026
Volume to Capacity	0.02	0.01	0.06	0.03
Queue Length 95th (ft)	2	0	5	2
Control Delay (s/veh)	7.3	0.0	9.5	8.6
Lane LOS	A		A	A
Approach Delay (s/veh)	4.8		9.5	8.6
Approach LOS			A	A

Intersection Summary			
Average Delay	7.5		
Intersection Capacity Utilization	19.2%	ICU Level of Service	A
Analysis Period (min)	15		

7: NC 55 & Jessie Drive Extension Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0
Total Del/Veh (s)	51.7	37.2	16.9	29.8

9: Site Access B (RI/RO) & Jessie Drive Extension Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.2	0.0
Total Del/Veh (s)	1.2	0.7	4.6	3.6	1.5

10: Site Access C (FM) & Jessie Drive Extension Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.1	0.0
Total Del/Veh (s)	1.5	0.7	10.9	4.7	3.5

11: Jessie Drive Extension & Site Access D (RO Only) Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Del/Veh (s)	0.1	0.6	2.8	0.4

12: Site Access E (FM) & Jessie Drive Extension Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.1	0.0
Total Del/Veh (s)	0.2	4.6	4.0	0.9

Total Zone Performance

Denied Del/Veh (s)	0.6
Total Del/Veh (s)	1761.3

Intersection: 7: NC 55 & Jessie Drive Extension

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	L	R	T	T	T	R	L	L	T	T
Maximum Queue (ft)	164	174	151	623	609	200	150	254	236	205	208
Average Queue (ft)	99	110	53	592	585	199	97	138	118	112	97
95th Queue (ft)	152	170	113	619	621	207	186	208	215	169	175
Link Distance (ft)		365	365	527	527					787	787
Upstream Blk Time (%)				29	25						
Queuing Penalty (veh)				456	395						
Storage Bay Dist (ft)	350					100	100	250	250		
Storage Blk Time (%)					33	22	1	0	0		
Queuing Penalty (veh)					400	209	5	1	0		

Intersection: 9: Site Access B (RI/RO) & Jessie Drive Extension

Movement	EB	NB	SB
Directions Served	TR	R	R
Maximum Queue (ft)	38	68	75
Average Queue (ft)	1	20	38
95th Queue (ft)	12	50	57
Link Distance (ft)	365	376	489
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 10: Site Access C (FM) & Jessie Drive Extension

Movement	EB	WB	NB	NB	SB
Directions Served	UL	L	L	TR	TR
Maximum Queue (ft)	52	30	110	52	55
Average Queue (ft)	8	1	46	14	39
95th Queue (ft)	35	10	84	41	57
Link Distance (ft)			416	416	483
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100	100			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 11: Jessie Drive Extension & Site Access D (RO Only)

Movement	SB
Directions Served	R
Maximum Queue (ft)	31
Average Queue (ft)	10
95th Queue (ft)	34
Link Distance (ft)	357
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: Site Access E (FM) & Jessie Drive Extension

Movement	NB	SB
Directions Served	LT	TR
Maximum Queue (ft)	32	32
Average Queue (ft)	14	8
95th Queue (ft)	40	31
Link Distance (ft)	562	447
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 1465

7: NC 55 & Jessie Drive Extension Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	51.9	41.8	45.3	44.6

9: Site Access B (RI/RO) & Jessie Drive Extension Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	1.5	0.8	5.3	5.7	1.9

10: Site Access C (FM) & Jessie Drive Extension Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.2	0.1
Total Del/Veh (s)	2.7	0.8	15.6	8.8	5.8

11: Jessie Drive Extension & Site Access D (RO Only) Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Del/Veh (s)	0.2	0.6	3.2	1.4

12: Site Access E (FM) & Jessie Drive Extension Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.1	0.1
Total Del/Veh (s)	0.1	4.7	3.0	2.5

Total Zone Performance

Denied Del/Veh (s)	0.2
Total Del/Veh (s)	2021.0

Intersection: 7: NC 55 & Jessie Drive Extension

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	L	R	T	T	T	R	L	L	T	T
Maximum Queue (ft)	282	310	214	606	589	200	150	202	450	791	782
Average Queue (ft)	164	171	73	549	550	198	61	100	253	706	665
95th Queue (ft)	246	254	154	625	632	204	159	162	562	907	862
Link Distance (ft)		366	366	498	498					782	782
Upstream Blk Time (%)				34	32					1	0
Queuing Penalty (veh)				447	421					17	6
Storage Bay Dist (ft)	350					100	100	250	250		
Storage Blk Time (%)					39	28	0			25	
Queuing Penalty (veh)					410	227	0			76	

Intersection: 9: Site Access B (RI/RO) & Jessie Drive Extension

Movement	EB	NB	SB
Directions Served	T	R	R
Maximum Queue (ft)	17	68	75
Average Queue (ft)	1	29	45
95th Queue (ft)	6	58	71
Link Distance (ft)	366	417	546
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 10: Site Access C (FM) & Jessie Drive Extension

Movement	EB	NB	NB	SB	SB
Directions Served	UL	L	TR	L	TR
Maximum Queue (ft)	145	134	53	31	160
Average Queue (ft)	46	57	20	7	55
95th Queue (ft)	105	109	46	28	104
Link Distance (ft)		468	468	535	535
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100				
Storage Blk Time (%)	1				
Queuing Penalty (veh)	0				

Intersection: 11: Jessie Drive Extension & Site Access D (RO Only)

Movement	SB
Directions Served	R
Maximum Queue (ft)	54
Average Queue (ft)	30
95th Queue (ft)	49
Link Distance (ft)	412
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: Site Access E (FM) & Jessie Drive Extension

Movement	NB	SB
Directions Served	LT	TR
Maximum Queue (ft)	67	31
Average Queue (ft)	28	20
95th Queue (ft)	53	44
Link Distance (ft)	535	327
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

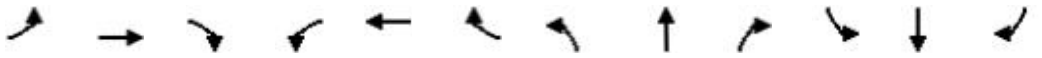
Zone Summary

Zone wide Queuing Penalty: 1604

Appendix J:

Synchro Output:

Build-out (2030) – Access Scenario 2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	1293	4	499	133	1357	0	0	1275	145
Future Volume (vph)	0	0	0	1293	4	499	133	1357	0	0	1275	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			4%			0%			0%	
Storage Length (ft)	0		0	425		400	150		0	0		150
Storage Lanes	0		0	1		2	1		0	0		1
Taper Length (ft)	25			225			75			25		
Satd. Flow (prot)	0	0	0	3009	1509	2603	1687	3374	0	0	4893	1524
Flt Permitted				0.950	0.953		0.950					
Satd. Flow (perm)	0	0	0	3009	1509	2603	1687	3374	0	0	4893	1524
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						70						92
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1164			1095			597			1074	
Travel Time (s)		17.6			16.6			9.0			16.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	7%	7%	7%	7%	7%	7%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)				33%								
Lane Group Flow (vph)	0	0	0	963	478	554	148	1508	0	0	1417	161
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				4	4		5	2			6	
Permitted Phases						4						6
Detector Phase				4	4	4	5	2			6	6
Switch Phase												
Minimum Initial (s)				7.0	7.0	7.0	7.0	12.0			12.0	12.0
Minimum Split (s)				12.8	12.8	12.8	12.5	18.4			18.4	18.4
Total Split (s)				60.0	60.0	60.0	20.0	70.0			50.0	50.0
Total Split (%)				46.2%	46.2%	46.2%	15.4%	53.8%			38.5%	38.5%
Yellow Time (s)				4.2	4.2	4.2	3.0	4.5			4.5	4.5
All-Red Time (s)				1.6	1.6	1.6	2.1	1.8			1.0	1.0
Lost Time Adjust (s)				-0.8	-0.8	-0.8	-0.1	-1.3			-0.5	-0.5
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?												
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				53.3	53.3	53.3	14.2	66.7			47.5	47.5
Actuated g/C Ratio				0.41	0.41	0.41	0.11	0.51			0.37	0.37
v/c Ratio				0.78	0.77	0.50	0.80	0.87			0.79	0.26
Control Delay (s/veh)				38.4	42.7	26.0	107.1	25.4			41.4	14.6
Queue Delay				0.0	0.0	0.0	0.0	0.9			0.0	0.0
Total Delay (s/veh)				38.4	42.7	26.0	107.1	26.3			41.4	14.6

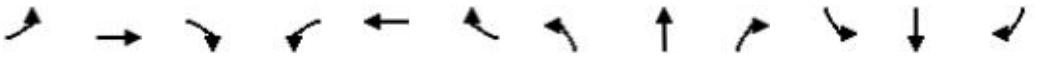
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS				D	D	C	F	C			D	B
Approach Delay (s/veh)					36.0			33.5			38.7	
Approach LOS					D			C			D	
Queue Length 50th (ft)				393	389	174	128	250			420	42
Queue Length 95th (ft)				487	553	235	m167	367			486	99
Internal Link Dist (ft)		1084			1015			517			994	
Turn Bay Length (ft)				425		400	150					150
Base Capacity (vph)				1273	638	1141	194	1732			1789	615
Starvation Cap Reductn				0	0	0	0	68			0	0
Spillback Cap Reductn				0	0	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.76	0.75	0.49	0.76	0.91			0.79	0.26

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.87
Intersection Signal Delay (s/veh): 36.0 Intersection LOS: D
Intersection Capacity Utilization 76.2% ICU Level of Service D
Analysis Period (min) 15
Description: 05-0209
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: NC 55 & US 1 SB On-Ramp/US 1 SB Off-Ramp





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	249	4	216	0	0	0	0	1237	1506	407	2159	0
Future Volume (vph)	249	4	216	0	0	0	0	1237	1506	407	2159	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		2%			0%			0%			-2%	
Storage Length (ft)	350		100	0		0	0		1000	275		0
Storage Lanes	1		1	0		0	0		1	1		0
Taper Length (ft)	200			25			25			75		
Satd. Flow (prot)	1543	1550	1454	0	0	0	0	3471	1553	1720	4942	0
Flt Permitted	0.950	0.954								0.113		
Satd. Flow (perm)	1543	1550	1454	0	0	0	0	3471	1553	205	4942	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			73						694			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		828			998			1424			597	
Travel Time (s)		12.5			15.1			21.6			9.0	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.90	0.90	0.90	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	10%	10%	10%	2%	2%	2%	4%	4%	4%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	132	131	225	0	0	0	0	1289	1569	424	2249	0
Turn Type	Split	NA	Perm					NA	Free	D.P+P	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						Free	2		
Detector Phase	4	4	4					2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0					12.0		7.0	12.0	
Minimum Split (s)	13.0	13.0	13.0					17.5		12.9	17.8	
Total Split (s)	20.0	20.0	20.0					65.0		45.0	110.0	
Total Split (%)	15.4%	15.4%	15.4%					50.0%		34.6%	84.6%	
Yellow Time (s)	4.3	4.3	4.3					4.5		3.0	4.7	
All-Red Time (s)	1.7	1.7	1.7					1.0		2.9	1.1	
Lost Time Adjust (s)	-1.0	-1.0	-1.0					-0.5		-0.9	-0.8	
Total Lost Time (s)	5.0	5.0	5.0					5.0		5.0	5.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?												
Recall Mode	None	None	None					C-Max		None	C-Max	
Act Effct Green (s)	15.0	15.0	15.0					68.1	130.0	100.0	105.0	
Actuated g/C Ratio	0.12	0.12	0.12					0.52	1.00	0.77	0.81	
v/c Ratio	0.74	0.74	0.97					0.71	1.01	0.80	0.56	
Control Delay (s/veh)	80.3	79.7	90.4					27.4	28.6	66.0	12.4	
Queue Delay	0.0	0.0	0.0					0.0	0.0	0.0	0.7	
Total Delay (s/veh)	80.3	79.7	90.4					27.4	28.6	66.0	13.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	E	F					C	C	E	B	
Approach Delay (s/veh)		84.8						28.1			21.4	
Approach LOS		F						C			C	
Queue Length 50th (ft)	124	123	143					437	~29	333	446	
Queue Length 95th (ft)	#236	#233	#325					594	#304	m437	481	
Internal Link Dist (ft)		748			918			1344			517	
Turn Bay Length (ft)	350		100						1000	275		
Base Capacity (vph)	178	178	232					1817	1553	629	3991	
Starvation Cap Reductn	0	0	0					0	0	0	1233	
Spillback Cap Reductn	0	0	0					17	0	0	0	
Storage Cap Reductn	0	0	0					0	0	0	0	
Reduced v/c Ratio	0.74	0.74	0.97					0.72	1.01	0.67	0.82	

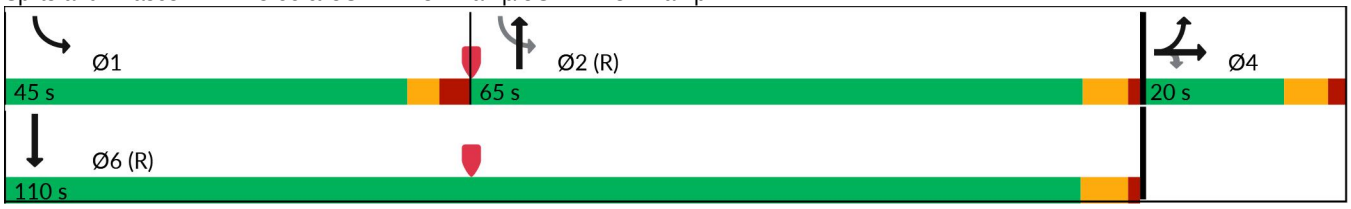
Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:SBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay (s/veh): 29.7	Intersection LOS: C
Intersection Capacity Utilization 76.2%	ICU Level of Service D
Analysis Period (min) 15	
Description: 05-0900	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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

Splits and Phases: 2: NC 55 & US 1 NB Off-Ramp/US 1 NB On-Ramp





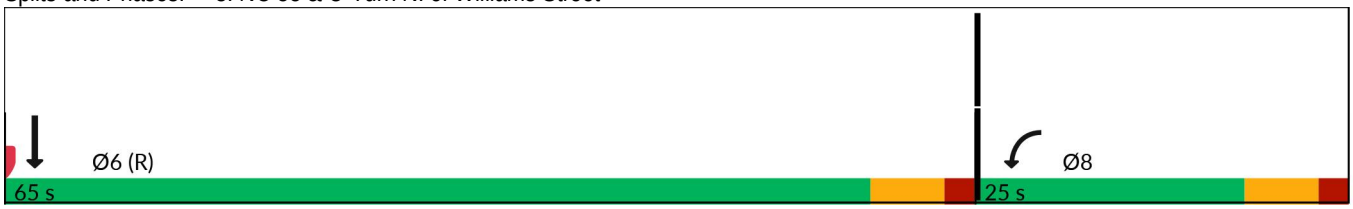
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	357	0	0	0	0	2319
Future Volume (vph)	357	0	0	0	0	2319
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	2	0		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	3433	0	0	0	0	5085
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	5085
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	10					
Link Speed (mph)	45		45			45
Link Distance (ft)	70		454			1068
Travel Time (s)	1.1		6.9			16.2
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	397	0	0	0	0	2577
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Detector Phase	8					6
Switch Phase						
Minimum Initial (s)	7.0					14.0
Minimum Split (s)	14.0					21.0
Total Split (s)	25.0					65.0
Total Split (%)	27.8%					72.2%
Yellow Time (s)	5.0					5.0
All-Red Time (s)	2.0					2.0
Lost Time Adjust (s)	-2.0					-2.0
Total Lost Time (s)	5.0					5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None					C-Max
Act Effct Green (s)	17.0					63.0
Actuated g/C Ratio	0.19					0.70
v/c Ratio	0.60					0.72
Control Delay (s/veh)	34.2					13.5
Queue Delay	0.0					0.0
Total Delay (s/veh)	34.2					13.5

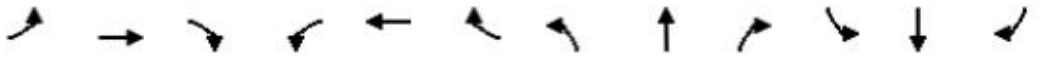
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
LOS	C					B
Approach Delay (s/veh)	34.2					13.5
Approach LOS	C					B
Queue Length 50th (ft)	100					391
Queue Length 95th (ft)	m101					m494
Internal Link Dist (ft)	1		374			988
Turn Bay Length (ft)						
Base Capacity (vph)	770					3557
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.52					0.72

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2: and 6:SBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 16.3		Intersection LOS: B	
Intersection Capacity Utilization 137.1%		ICU Level of Service H	
Analysis Period (min) 15			

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

Splits and Phases: 3: NC 55 & U-Turn N. of Williams Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	466	0	333	0	0	0	0	0	1934	331
Future Volume (vph)	0	0	466	0	333	0	0	0	0	0	1934	331
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		100
Storage Lanes	0		2	0		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	2787	0	3539	0	0	0	0	0	5085	1583
Flt Permitted												
Satd. Flow (perm)	0	0	2787	0	3539	0	0	0	0	0	5085	1583
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)			48									191
Link Speed (mph)		35			45			45			45	
Link Distance (ft)		885			193			656			387	
Travel Time (s)		17.2			2.9			9.9			5.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	518	0	370	0	0	0	0	0	2149	368
Turn Type			Perm		NA						NA	Perm
Protected Phases					3						6	
Permitted Phases			3									6
Detector Phase			3		3						6	6
Switch Phase												
Minimum Initial (s)			7.0		7.0						14.0	14.0
Minimum Split (s)			14.0		14.0						21.0	21.0
Total Split (s)			30.0		30.0						60.0	60.0
Total Split (%)			33.3%		33.3%						66.7%	66.7%
Yellow Time (s)			5.0		5.0						5.0	5.0
All-Red Time (s)			2.0		2.0						2.0	2.0
Lost Time Adjust (s)			-2.0		-2.0						-2.0	-2.0
Total Lost Time (s)			5.0		5.0						5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode			None		None						C-Max	C-Max
Act Effct Green (s)			22.2		22.2						57.8	57.8
Actuated g/C Ratio			0.25		0.25						0.64	0.64
v/c Ratio			0.72		0.42						0.66	0.34
Control Delay (s/veh)			33.8		29.4						8.3	3.3
Queue Delay			0.0		0.0						0.0	0.0
Total Delay (s/veh)			33.8		29.4						8.3	3.3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS			C		C						A	A
Approach Delay (s/veh)		33.8			29.4						7.5	
Approach LOS		C			C						A	
Queue Length 50th (ft)			139		103						169	19
Queue Length 95th (ft)			196		146						168	m37
Internal Link Dist (ft)		805			113			576			307	
Turn Bay Length (ft)												100
Base Capacity (vph)			808		983						3266	1085
Starvation Cap Reductn			0		0						0	0
Spillback Cap Reductn			0		0						0	0
Storage Cap Reductn			0		0						0	0
Reduced v/c Ratio			0.64		0.38						0.66	0.34

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2: and 6:SBT, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 13.9		Intersection LOS: B	
Intersection Capacity Utilization 103.7%		ICU Level of Service G	
Analysis Period (min) 15			

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

Splits and Phases: 4: NC 55 & Forest Light Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	403	0	0	0	1358	0	2057	178	0	0	0
Future Volume (vph)	0	403	0	0	0	1358	0	2057	178	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		3	0		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3539	0	0	0	3610	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	3610	0	5085	1583	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						48			198			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		395			800			177			816	
Travel Time (s)		6.0			12.1			2.7			12.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	448	0	0	0	1509	0	2286	198	0	0	0
Turn Type		NA				Perm		NA	Perm			
Protected Phases		7						2				
Permitted Phases						7			2			
Detector Phase		7				7		2	2			
Switch Phase												
Minimum Initial (s)		7.0				7.0		14.0	14.0			
Minimum Split (s)		14.0				14.0		21.0	21.0			
Total Split (s)		40.0				40.0		50.0	50.0			
Total Split (%)		44.4%				44.4%		55.6%	55.6%			
Yellow Time (s)		5.0				5.0		5.0	5.0			
All-Red Time (s)		2.0				2.0		2.0	2.0			
Lost Time Adjust (s)		-2.0				-2.0		-2.0	-2.0			
Total Lost Time (s)		5.0				5.0		5.0	5.0			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		None				None		C-Max	C-Max			
Act Effct Green (s)		35.0				35.0		45.0	45.0			
Actuated g/C Ratio		0.39				0.39		0.50	0.50			
v/c Ratio		0.33				1.05		0.90	0.22			
Control Delay (s/veh)		19.7				66.6		20.8	2.8			
Queue Delay		0.0				0.0		0.0	0.0			
Total Delay (s/veh)		19.7				66.6		20.8	2.8			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		B				E		C	A			
Approach Delay (s/veh)		19.7			66.6			19.3				
Approach LOS		B			E			B				
Queue Length 50th (ft)		104				~414		237	0			
Queue Length 95th (ft)		154				#530		324	m29			
Internal Link Dist (ft)		315			720			97			736	
Turn Bay Length (ft)												
Base Capacity (vph)		1376				1433		2542	890			
Starvation Cap Reductn		0				0		0	0			
Spillback Cap Reductn		0				0		0	0			
Storage Cap Reductn		0				0		0	0			
Reduced v/c Ratio		0.33				1.05		0.90	0.22			

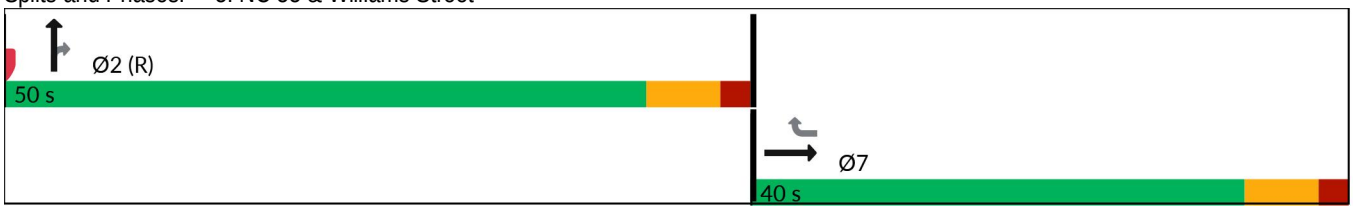
Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay (s/veh): 35.4	Intersection LOS: D
Intersection Capacity Utilization 79.7%	ICU Level of Service D
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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

Splits and Phases: 5: NC 55 & Williams Street





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	327	0	0	2270	0	0
Future Volume (vph)	327	0	0	2270	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	2	0	0			0
Taper Length (ft)	25		25			
Satd. Flow (prot)	3433	0	0	5085	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	5085	0	0
Right Turn on Red	Yes	Yes				Yes
Satd. Flow (RTOR)	11					
Link Speed (mph)	45			45	45	
Link Distance (ft)	62			939	526	
Travel Time (s)	0.9			14.2	8.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	363	0	0	2522	0	0
Turn Type	Prot			NA		
Protected Phases	4			2		
Permitted Phases						
Detector Phase	4			2		
Switch Phase						
Minimum Initial (s)	7.0			14.0		
Minimum Split (s)	14.0			21.0		
Total Split (s)	25.0			65.0		
Total Split (%)	27.8%			72.2%		
Yellow Time (s)	5.0			5.0		
All-Red Time (s)	2.0			2.0		
Lost Time Adjust (s)	-2.0			-2.0		
Total Lost Time (s)	5.0			5.0		
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None			C-Max		
Act Effct Green (s)	16.4			63.6		
Actuated g/C Ratio	0.18			0.71		
v/c Ratio	0.57			0.70		
Control Delay (s/veh)	36.8			9.4		
Queue Delay	0.0			0.0		
Total Delay (s/veh)	36.8			9.4		

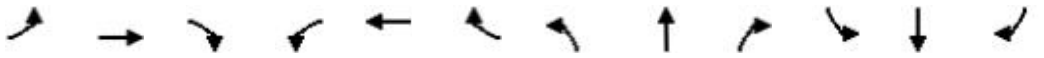


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
LOS	D			A		
Approach Delay (s/veh)	36.8			9.4		
Approach LOS	D			A		
Queue Length 50th (ft)	111			264		
Queue Length 95th (ft)	146			368		
Internal Link Dist (ft)	1			859	446	
Turn Bay Length (ft)						
Base Capacity (vph)	771			3595		
Starvation Cap Reductn	0			0		
Spillback Cap Reductn	0			0		
Storage Cap Reductn	0			0		
Reduced v/c Ratio	0.47			0.70		

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay (s/veh): 12.9		Intersection LOS: B	
Intersection Capacity Utilization 73.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 6: NC 55 & U-Turn S. of Forest Light Way





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	280	0	0	0	370	0	2831	250	0	0	0
Future Volume (vph)	0	280	0	0	0	370	0	2831	250	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		100	0		0
Storage Lanes	0		0	0		2	0		2	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3539	0	0	0	2787	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	2787	0	5085	1583	0	0	0
Right Turn on Red	No		No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			45			45	
Link Distance (ft)		206			452			471			657	
Travel Time (s)		4.0			8.8			7.1			10.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	311	0	0	0	411	0	3146	278	0	0	0
Turn Type		NA				Perm		NA	Perm			
Protected Phases		7						2				
Permitted Phases						7			2			
Detector Phase		7				7		2	2			
Switch Phase												
Minimum Initial (s)		7.0				7.0		14.0	14.0			
Minimum Split (s)		25.0				25.0		25.0	25.0			
Total Split (s)		35.0				35.0		55.0	55.0			
Total Split (%)		38.9%				38.9%		61.1%	61.1%			
Yellow Time (s)		5.0				5.0		5.0	5.0			
All-Red Time (s)		2.0				2.0		2.0	2.0			
Lost Time Adjust (s)		-2.0				-2.0		-2.0	-2.0			
Total Lost Time (s)		5.0				5.0		5.0	5.0			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		None				None		C-Max	C-Max			
Act Effct Green (s)		21.2				21.2		58.8	58.8			
Actuated g/C Ratio		0.24				0.24		0.65	0.65			
v/c Ratio		0.37				0.63		0.95	0.27			
Control Delay (s/veh)		25.4				36.1		20.5	8.2			
Queue Delay		0.0				0.0		0.0	0.0			
Total Delay (s/veh)		25.4				36.1		20.5	8.2			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		C				D		C	A			
Approach Delay (s/veh)		25.4			36.1			19.5				
Approach LOS		C			D			B				
Queue Length 50th (ft)		83				122		557	74			
Queue Length 95th (ft)		m80				162		m#773	m87			
Internal Link Dist (ft)		126			372			391			577	
Turn Bay Length (ft)									100			
Base Capacity (vph)		1179				929		3324	1034			
Starvation Cap Reductn		0				0		0	0			
Spillback Cap Reductn		0				0		0	0			
Storage Cap Reductn		0				0		0	0			
Reduced v/c Ratio		0.26				0.44		0.95	0.27			

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay (s/veh): 21.6		Intersection LOS: C	
Intersection Capacity Utilization 132.5%		ICU Level of Service H	
Analysis Period (min) 15			

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

Splits and Phases: 7: NC 55 & Jessie Drive Extension





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	130	2795	154	0	0
Future Volume (vph)	0	130	2795	154	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		1	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	0	1611	3539	1583	0	0
Flt Permitted						
Satd. Flow (perm)	0	1611	3539	1583	0	0
Link Speed (mph)	25		45			45
Link Distance (ft)	954		188			825
Travel Time (s)	26.0		2.8			12.5
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	144	3106	171	0	0
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 92.0%		ICU Level of Service F	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	13.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	130	2795	154	0	0
Future Vol, veh/h	0	130	2795	154	0	0
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	144	3106	171	0	0

Major/Minor	Minor1		Major1	
Conflicting Flow All	-	1553	0	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	6.94	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	3.32	-	-
Pot Cap-1 Maneuver	0	~ 102	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	-	~ 102	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	WB	NB
HCM Ctrl Dly, s/v	$ 309.22	0
HCM LOS	F	

Minor Lane/Major Mvmt	NBT	NBR	WBLn1
Capacity (veh/h)	-	-	102
HCM Lane V/C Ratio	-	-	1.413
HCM Ctrl Dly (s/v)	-	-	-$ 309.2
HCM Lane LOS	-	-	F
HCM 95th %tile Q(veh)	-	-	10.5

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	428	102	0	239	4	0	0	36	0	0	131
Future Volume (vph)	0	428	102	0	239	4	0	0	36	0	0	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3437	0	0	3532	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	3437	0	0	3532	0	0	0	1611	0	0	1611
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		452			270			464			592	
Travel Time (s)		8.8			5.3			12.7			16.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	589	0	0	270	0	0	0	40	0	0	146
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.1%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	428	102	0	239	4	0	0	36	0	0	131
Future Vol, veh/h	0	428	102	0	239	4	0	0	36	0	0	131
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	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	476	113	0	266	4	0	0	40	0	0	146

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	294	-	-	135
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	702	0	0	889
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	702	-	-	889
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	10.44	9.84
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	702	-	-	-	-	889
HCM Lane V/C Ratio	0.057	-	-	-	-	0.164
HCM Ctrl Dly (s/v)	10.4	-	-	-	-	9.8
HCM Lane LOS	B	-	-	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	-	0.6

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	36	255	124	49	4	20	6	91	16	4	5	14
Future Volume (vph)	36	255	124	49	4	20	6	91	16	4	5	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%			0%			0%
Storage Length (ft)		100		0	100		0	0		0	0	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		100			100			25			25	
Satd. Flow (prot)	0	1770	3391	0	1770	3412	0	1770	1812	0	1770	1621
Flt Permitted		0.950			0.950			0.950			0.950	
Satd. Flow (perm)	0	1770	3391	0	1770	3412	0	1770	1812	0	1770	1621
Link Speed (mph)			35			35			25			25
Link Distance (ft)			270			343			515			582
Travel Time (s)			5.3			6.7			14.0			15.9
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	323	192	0	4	29	0	101	22	0	6	118
Sign Control			Free			Free			Stop			Stop

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.2%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	92
Future Volume (vph)	92
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.90
Growth Factor	100%
Heavy Vehicles (%)	2%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Sign Control	

Intersection Summary

Intersection	
Int Delay, s/veh	12.1

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	36	255	124	49	4	20	6	91	16	4	5	14	92
Future Vol, veh/h	36	255	124	49	4	20	6	91	16	4	5	14	92
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	100	-	-	100	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	40	283	138	54	4	22	7	101	18	4	6	16	102

Major/Minor	Major1				Major2			Minor1			Minor2		
Conflicting Flow All	29	29	0	0	192	0	0	839	849	96	759	873	14
Stage 1	-	-	-	-	-	-	-	812	812	-	34	34	-
Stage 2	-	-	-	-	-	-	-	28	38	-	724	839	-
Critical Hdwy	6.44	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	2.52	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1370	1583	-	-	1379	-	-	258	296	941	296	287	1062
Stage 1	-	-	-	-	-	-	-	339	391	-	977	866	-
Stage 2	-	-	-	-	-	-	-	986	863	-	383	379	-
Platoon blocked, %			-	-		-	-						
Mov Cap-1 Maneuver	1530	1530	-	-	1379	-	-	173	233	941	217	226	1062
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	173	233	-	217	226	-
Stage 1	-	-	-	-	-	-	-	267	308	-	974	863	-
Stage 2	-	-	-	-	-	-	-	872	860	-	283	299	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	5.01	1.02	45.51	11.54
HCM LOS			E	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	173	274	1530	-	-	1379	-	-	217	713
HCM Lane V/C Ratio	0.583	0.081	0.211	-	-	0.003	-	-	0.026	0.165
HCM Ctrl Dly (s/v)	51.3	19.3	8	-	-	7.6	-	-	22	11
HCM Lane LOS	F	C	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	3.1	0.3	0.8	-	-	0	-	-	0.1	0.6



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	132	16	0	0	13
Future Volume (vph)	0	132	16	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	0	3539	3539	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	3539	3539	0	0	1611
Link Speed (mph)		35	35		25	
Link Distance (ft)		343	284		459	
Travel Time (s)		6.7	5.5		12.5	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	147	18	0	0	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 13.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↱
Traffic Vol, veh/h	0	132	16	0	0	13
Future Vol, veh/h	0	132	16	0	0	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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	147	18	0	0	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	9
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	0	1070
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	-	1070
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	8.41
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	1070
HCM Lane V/C Ratio	-	-	0.013
HCM Ctrl Dly (s/v)	-	-	8.4
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	86	46	10	4	4	6
Future Volume (vph)	86	46	10	4	4	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	1	0			0
Taper Length (ft)	50		25			
Satd. Flow (prot)	1770	1583	0	1798	1703	0
Flt Permitted	0.950			0.965		
Satd. Flow (perm)	1770	1583	0	1798	1703	0
Link Speed (mph)	35			25	25	
Link Distance (ft)	284			570	373	
Travel Time (s)	5.5			15.5	10.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	96	51	0	15	11	0
Sign Control	Free			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 18.9%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	86	46	10	4	4	6
Future Volume (Veh/h)	86	46	10	4	4	6
Sign Control	Free			Stop	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	96	51	11	4	4	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	0		201	192	243	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0		201	192	243	0
tC, single (s)	4.1		7.1	6.5	6.5	6.2
tC, 2 stage (s)						
tF (s)	2.2		3.5	4.0	4.0	3.3
p0 queue free %	94		98	99	99	99
cM capacity (veh/h)	1623		715	661	620	1085

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	96	51	15	11
Volume Left	96	0	11	0
Volume Right	0	51	0	7
cSH	1623	1700	700	852
Volume to Capacity	0.06	0.03	0.02	0.01
Queue Length 95th (ft)	5	0	2	1
Control Delay (s/veh)	7.4	0.0	10.3	9.3
Lane LOS	A		B	A
Approach Delay (s/veh)	4.8		10.3	9.3
Approach LOS			B	A

Intersection Summary			
Average Delay	5.6		
Intersection Capacity Utilization	18.9%	ICU Level of Service	A
Analysis Period (min)	15		



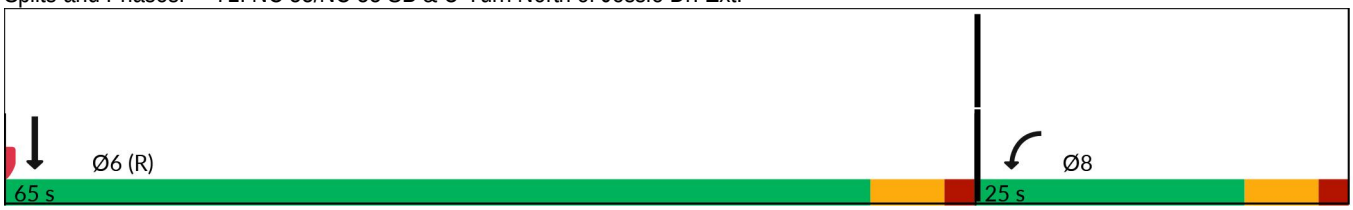
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	252	0	0	0	0	2193
Future Volume (vph)	252	0	0	0	0	2193
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	2	0		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	3433	0	0	0	0	3539
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	3539
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	14					
Link Speed (mph)	45		30			45
Link Distance (ft)	143		578			838
Travel Time (s)	2.2		13.1			12.7
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	280	0	0	0	0	2437
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Detector Phase	8					6
Switch Phase						
Minimum Initial (s)	7.0					14.0
Minimum Split (s)	25.0					25.0
Total Split (s)	25.0					65.0
Total Split (%)	27.8%					72.2%
Yellow Time (s)	5.0					5.0
All-Red Time (s)	2.0					2.0
Lost Time Adjust (s)	-2.0					-2.0
Total Lost Time (s)	5.0					5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None					C-Max
Act Effct Green (s)	14.3					65.7
Actuated g/C Ratio	0.16					0.73
v/c Ratio	0.50					0.94
Control Delay (s/veh)	33.3					20.9
Queue Delay	0.0					0.0
Total Delay (s/veh)	33.3					20.9

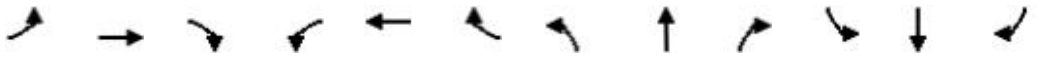
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
LOS	C					C
Approach Delay (s/veh)	33.3					20.9
Approach LOS	C					C
Queue Length 50th (ft)	78					532
Queue Length 95th (ft)	m87					#914
Internal Link Dist (ft)	63		498			758
Turn Bay Length (ft)						
Base Capacity (vph)	773					2585
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.36					0.94

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2: and 6:SBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay (s/veh): 22.2		Intersection LOS: C	
Intersection Capacity Utilization 125.1%		ICU Level of Service H	
Analysis Period (min) 15			

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

Splits and Phases: 71: NC 55/NC 55 SB & U-Turn North of Jessie Dr. Ext.





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	1750	4	530	209	1243	0	0	1597	249
Future Volume (vph)	0	0	0	1750	4	530	209	1243	0	0	1597	249
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			4%			0%			0%	
Storage Length (ft)	0		0	425		400	150		0	0		150
Storage Lanes	0		0	1		2	1		0	0		1
Taper Length (ft)	25			225			75			25		
Satd. Flow (prot)	0	0	0	3156	1583	2731	1752	3505	0	0	5036	1568
Flt Permitted				0.950	0.953		0.950					
Satd. Flow (perm)	0	0	0	3156	1583	2731	1752	3505	0	0	5036	1535
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						70						126
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1164			1095			597			1074	
Travel Time (s)		17.6			16.6			9.0			16.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)									1			1
Peak Hour Factor	0.90	0.90	0.90	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)				33%								
Lane Group Flow (vph)	0	0	0	1185	587	535	211	1256	0	0	1613	252
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				4	4		5	2			6	
Permitted Phases						4						6
Detector Phase				4	4	4	5	2			6	6
Switch Phase												
Minimum Initial (s)				7.0	7.0	7.0	7.0	12.0			12.0	12.0
Minimum Split (s)				12.8	12.8	12.8	12.5	18.4			18.4	18.4
Total Split (s)				60.0	60.0	60.0	20.0	70.0			50.0	50.0
Total Split (%)				46.2%	46.2%	46.2%	15.4%	53.8%			38.5%	38.5%
Yellow Time (s)				4.2	4.2	4.2	3.0	4.5			4.5	4.5
All-Red Time (s)				1.6	1.6	1.6	2.1	1.8			1.0	1.0
Lost Time Adjust (s)				-0.8	-0.8	-0.8	-0.1	-1.3			-0.5	-0.5
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?												
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				55.0	55.0	55.0	15.0	65.0			45.0	45.0
Actuated g/C Ratio				0.42	0.42	0.42	0.12	0.50			0.35	0.35
v/c Ratio				0.89	0.88	0.45	1.04	0.72			0.93	0.41
Control Delay (s/veh)				44.2	50.4	24.3	108.0	18.8			51.0	17.8
Queue Delay				35.7	33.5	0.0	0.0	2.0			0.0	0.0
Total Delay (s/veh)				79.8	83.9	24.3	108.0	20.8			51.0	17.8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS				E	F	C	F	C			D	B
Approach Delay (s/veh)					68.0			33.3			46.5	
Approach LOS					E			C			D	
Queue Length 50th (ft)				507	500	157	~193	498			488	78
Queue Length 95th (ft)				618	#747	214	m#327	584			#570	156
Internal Link Dist (ft)		1084			1015			517			994	
Turn Bay Length (ft)				425		400	150					150
Base Capacity (vph)				1335	669	1195	202	1752			1743	613
Starvation Cap Reductn				0	0	0	0	330			0	0
Spillback Cap Reductn				230	115	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				1.07	1.06	0.45	1.04	0.88			0.93	0.41

Intersection Summary

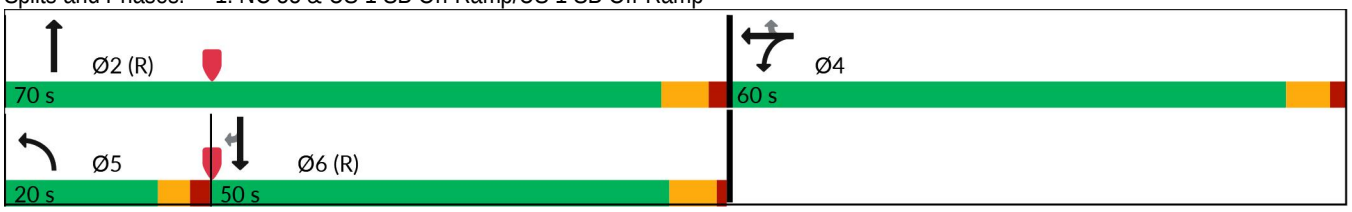
Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 30 (23%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.04
Intersection Signal Delay (s/veh): 51.9 Intersection LOS: D
Intersection Capacity Utilization 111.7% ICU Level of Service H
Analysis Period (min) 15
Description: 05-0209

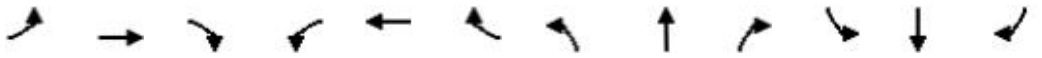
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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

Splits and Phases: 1: NC 55 & US 1 SB On-Ramp/US 1 SB Off-Ramp





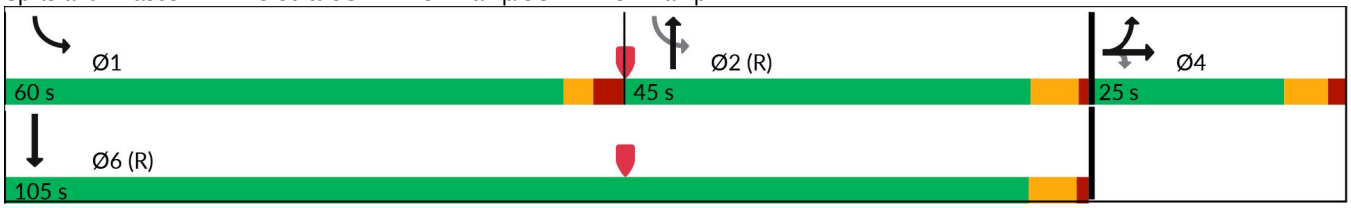
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	167	4	190	0	0	0	0	1266	1454	404	3018	0
Future Volume (vph)	167	4	190	0	0	0	0	1266	1454	404	3018	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		2%			0%			0%			-2%	
Storage Length (ft)	350		100	0		0	0		1000	275		0
Storage Lanes	1		1	0		0	0		1	1		0
Taper Length (ft)	200			25			25			75		
Satd. Flow (prot)	1557	1564	1467	0	0	0	0	3505	1568	1787	5136	0
Flt Permitted	0.950	0.954								0.106		
Satd. Flow (perm)	1557	1564	1467	0	0	0	0	3505	1549	199	5136	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			73						678			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		828			998			1424			597	
Travel Time (s)		12.5			15.1			21.6			9.0	
Confl. Peds. (#/hr)							1		1	1		1
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.90	0.90	0.90	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	9%	9%	9%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	87	87	194	0	0	0	0	1292	1484	412	3080	0
Turn Type	Split	NA	Perm					NA	Free	D.P+P	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						Free	2		
Detector Phase	4	4	4					2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0					12.0		7.0	12.0	
Minimum Split (s)	13.0	13.0	13.0					17.5		12.9	17.8	
Total Split (s)	25.0	25.0	25.0					45.0		60.0	105.0	
Total Split (%)	19.2%	19.2%	19.2%					34.6%		46.2%	80.8%	
Yellow Time (s)	4.3	4.3	4.3					4.5		3.0	4.7	
All-Red Time (s)	1.7	1.7	1.7					1.0		2.9	1.1	
Lost Time Adjust (s)	-1.0	-1.0	-1.0					-0.5		-0.9	-0.8	
Total Lost Time (s)	5.0	5.0	5.0					5.0		5.0	5.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?												
Recall Mode	None	None	None					C-Max		None	C-Max	
Act Effct Green (s)	15.8	15.8	15.8					66.4	130.0	99.2	104.2	
Actuated g/C Ratio	0.12	0.12	0.12					0.51	1.00	0.76	0.80	
v/c Ratio	0.46	0.46	0.80					0.72	0.96	0.75	0.75	
Control Delay (s/veh)	59.8	59.7	57.5					30.0	16.8	25.0	12.8	
Queue Delay	0.0	0.0	0.0					0.1	0.0	0.0	18.0	
Total Delay (s/veh)	59.8	59.7	57.5					30.1	16.8	25.1	30.9	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	E	E					C	B	C	C	
Approach Delay (s/veh)		58.6						23.0			30.2	
Approach LOS		E						C			C	
Queue Length 50th (ft)	76	76	107					452	0	339	741	
Queue Length 95th (ft)	136	136	199					#705	#154	m349	749	
Internal Link Dist (ft)		748			918			1344			517	
Turn Bay Length (ft)	350		100						1000	275		
Base Capacity (vph)	239	240	287					1789	1549	831	4115	
Starvation Cap Reductn	0	0	0					0	0	10	1127	
Spillback Cap Reductn	0	0	0					62	0	0	0	
Storage Cap Reductn	0	0	0					0	0	0	0	
Reduced v/c Ratio	0.36	0.36	0.68					0.75	0.96	0.50	1.03	

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:SBT, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay (s/veh): 28.7 Intersection LOS: C
Intersection Capacity Utilization 111.7% ICU Level of Service H
Analysis Period (min) 15
Description: 05-0900
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: NC 55 & US 1 NB Off-Ramp/US 1 NB On-Ramp





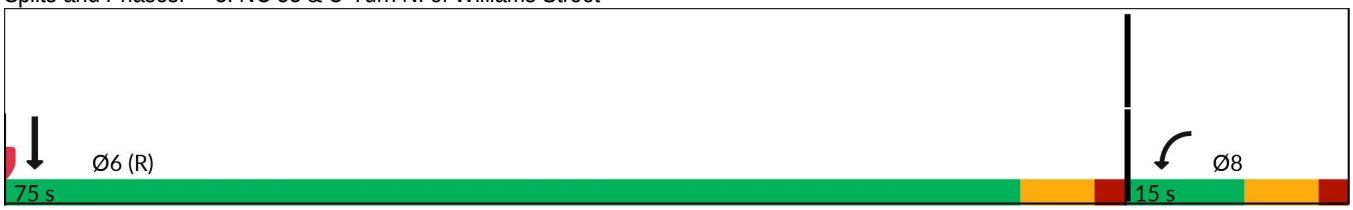
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	204	0	0	0	0	3603
Future Volume (vph)	204	0	0	0	0	3603
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	2	0		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	3433	0	0	0	0	5085
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	5085
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	1					
Link Speed (mph)	45		45			45
Link Distance (ft)	70		454			1067
Travel Time (s)	1.1		6.9			16.2
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	227	0	0	0	0	4003
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Detector Phase	8					6
Switch Phase						
Minimum Initial (s)	7.0					14.0
Minimum Split (s)	14.0					21.0
Total Split (s)	15.0					75.0
Total Split (%)	16.7%					83.3%
Yellow Time (s)	5.0					5.0
All-Red Time (s)	2.0					2.0
Lost Time Adjust (s)	-2.0					-2.0
Total Lost Time (s)	5.0					5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None					C-Max
Act Effct Green (s)	10.0					70.0
Actuated g/C Ratio	0.11					0.78
v/c Ratio	0.59					1.01
Control Delay (s/veh)	40.1					21.9
Queue Delay	0.0					0.0
Total Delay (s/veh)	40.1					21.9

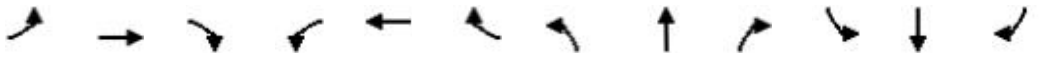
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
LOS	D					C
Approach Delay (s/veh)	40.1					21.9
Approach LOS	D					C
Queue Length 50th (ft)	65					~678
Queue Length 95th (ft)	m81					m398
Internal Link Dist (ft)	1		374			987
Turn Bay Length (ft)						
Base Capacity (vph)	382					3955
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.59					1.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2: and 6:SBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.01			
Intersection Signal Delay (s/veh): 22.9		Intersection LOS: C	
Intersection Capacity Utilization 152.6%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: NC 55 & U-Turn N. of Williams Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	558	0	397	0	0	0	0	0	2413	229
Future Volume (vph)	0	0	558	0	397	0	0	0	0	0	2413	229
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		100
Storage Lanes	0		2	0		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	2787	0	3539	0	0	0	0	0	5085	1583
Flt Permitted												
Satd. Flow (perm)	0	0	2787	0	3539	0	0	0	0	0	5085	1583
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)			48									133
Link Speed (mph)		35			45			45			45	
Link Distance (ft)		885			193			656			387	
Travel Time (s)		17.2			2.9			9.9			5.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	620	0	441	0	0	0	0	0	2681	254
Turn Type			Perm		NA						NA	Perm
Protected Phases					3						6	
Permitted Phases			3									6
Detector Phase			3		3						6	6
Switch Phase												
Minimum Initial (s)			7.0		7.0						14.0	14.0
Minimum Split (s)			14.0		14.0						21.0	21.0
Total Split (s)			30.0		30.0						60.0	60.0
Total Split (%)			33.3%		33.3%						66.7%	66.7%
Yellow Time (s)			5.0		5.0						5.0	5.0
All-Red Time (s)			2.0		2.0						2.0	2.0
Lost Time Adjust (s)			-2.0		-2.0						-2.0	-2.0
Total Lost Time (s)			5.0		5.0						5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode			None		None						C-Max	C-Max
Act Effct Green (s)			24.0		24.0						56.0	56.0
Actuated g/C Ratio			0.27		0.27						0.62	0.62
v/c Ratio			0.80		0.47						0.85	0.25
Control Delay (s/veh)			36.8		29.2						13.4	4.8
Queue Delay			0.0		0.0						0.0	0.0
Total Delay (s/veh)			36.8		29.2						13.4	4.8

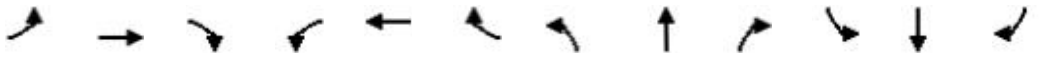
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS			D		C						B	A
Approach Delay (s/veh)		36.8			29.2						12.7	
Approach LOS		D			C						B	
Queue Length 50th (ft)			172		123						305	30
Queue Length 95th (ft)			243		m172						m300	m31
Internal Link Dist (ft)		805			113			576			307	
Turn Bay Length (ft)												100
Base Capacity (vph)			808		983						3162	1035
Starvation Cap Reductn			0		0						0	0
Spillback Cap Reductn			0		0						0	0
Storage Cap Reductn			0		0						0	0
Reduced v/c Ratio			0.77		0.45						0.85	0.25

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2: and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 18.2		Intersection LOS: B	
Intersection Capacity Utilization 118.8%		ICU Level of Service H	
Analysis Period (min) 15			

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

Splits and Phases: 4: NC 55 & Forest Light Way





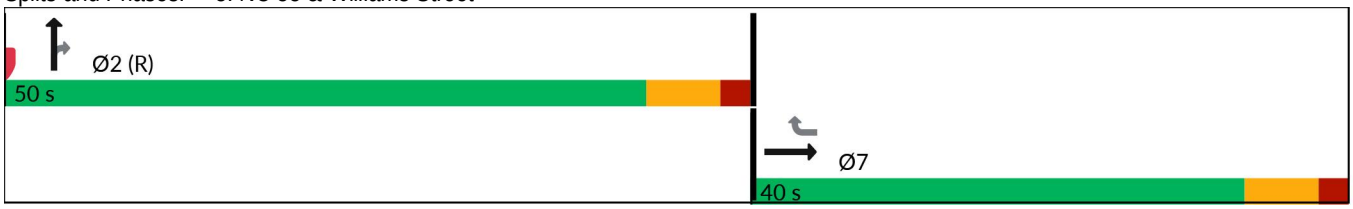
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1141	0	0	0	890	0	2044	328	0	0	0
Future Volume (vph)	0	1141	0	0	0	890	0	2044	328	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		3	0		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3539	0	0	0	3610	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	3610	0	5085	1583	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						48			48			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		395			800			177			816	
Travel Time (s)		6.0			12.1			2.7			12.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1268	0	0	0	989	0	2271	364	0	0	0
Turn Type		NA				Perm		NA	Perm			
Protected Phases		7						2				
Permitted Phases						7			2			
Detector Phase		7				7		2	2			
Switch Phase												
Minimum Initial (s)		7.0				7.0		14.0	14.0			
Minimum Split (s)		14.0				14.0		21.0	21.0			
Total Split (s)		40.0				40.0		50.0	50.0			
Total Split (%)		44.4%				44.4%		55.6%	55.6%			
Yellow Time (s)		5.0				5.0		5.0	5.0			
All-Red Time (s)		2.0				2.0		2.0	2.0			
Lost Time Adjust (s)		-2.0				-2.0		-2.0	-2.0			
Total Lost Time (s)		5.0				5.0		5.0	5.0			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		None				None		C-Max	C-Max			
Act Effct Green (s)		35.0				35.0		45.0	45.0			
Actuated g/C Ratio		0.39				0.39		0.50	0.50			
v/c Ratio		0.92				0.69		0.89	0.45			
Control Delay (s/veh)		25.7				24.8		20.9	13.3			
Queue Delay		0.0				0.0		0.0	0.0			
Total Delay (s/veh)		25.7				24.8		20.9	13.3			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		C				C		C	B			
Approach Delay (s/veh)		25.7			24.8			19.9				
Approach LOS		C			C			B				
Queue Length 50th (ft)		356				195		260	90			
Queue Length 95th (ft)		m355				255		371	m120			
Internal Link Dist (ft)		315			720			97			736	
Turn Bay Length (ft)												
Base Capacity (vph)		1376				1433		2542	815			
Starvation Cap Reductn		0				0		0	0			
Spillback Cap Reductn		0				0		0	0			
Storage Cap Reductn		0				0		0	0			
Reduced v/c Ratio		0.92				0.69		0.89	0.45			

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay (s/veh): 22.4		Intersection LOS: C	
Intersection Capacity Utilization 113.0%		ICU Level of Service H	
Analysis Period (min) 15			

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

Splits and Phases: 5: NC 55 & Williams Street





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	422	0	0	2359	0	0
Future Volume (vph)	422	0	0	2359	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	2	0	0			0
Taper Length (ft)	25		25			
Satd. Flow (prot)	3433	0	0	5085	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	5085	0	0
Right Turn on Red	Yes	Yes				Yes
Satd. Flow (RTOR)	9					
Link Speed (mph)	45			45	45	
Link Distance (ft)	62			939	526	
Travel Time (s)	0.9			14.2	8.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	469	0	0	2621	0	0
Turn Type	Prot			NA		
Protected Phases	4			2		
Permitted Phases						
Detector Phase	4			2		
Switch Phase						
Minimum Initial (s)	7.0			14.0		
Minimum Split (s)	14.0			21.0		
Total Split (s)	25.0			65.0		
Total Split (%)	27.8%			72.2%		
Yellow Time (s)	5.0			5.0		
All-Red Time (s)	2.0			2.0		
Lost Time Adjust (s)	-2.0			-2.0		
Total Lost Time (s)	5.0			5.0		
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None			C-Max		
Act Effct Green (s)	18.3			61.7		
Actuated g/C Ratio	0.20			0.69		
v/c Ratio	0.67			0.75		
Control Delay (s/veh)	33.6			11.2		
Queue Delay	0.0			0.0		
Total Delay (s/veh)	33.6			11.2		



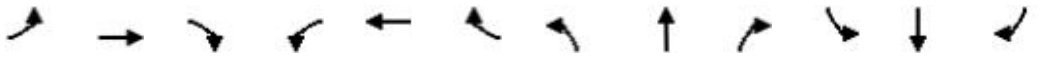
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
LOS	C			B		
Approach Delay (s/veh)	33.6			11.2		
Approach LOS	C			B		
Queue Length 50th (ft)	136			324		
Queue Length 95th (ft)	m170			399		
Internal Link Dist (ft)	1			859	446	
Turn Bay Length (ft)						
Base Capacity (vph)	769			3488		
Starvation Cap Reductn	0			0		
Spillback Cap Reductn	0			0		
Storage Cap Reductn	0			0		
Reduced v/c Ratio	0.61			0.75		

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay (s/veh): 14.6		Intersection LOS: B	
Intersection Capacity Utilization 75.4%		ICU Level of Service D	
Analysis Period (min) 15			

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

Splits and Phases: 6: NC 55 & U-Turn S. of Forest Light Way





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	340	0	0	0	647	0	2398	213	0	0	0
Future Volume (vph)	0	340	0	0	0	647	0	2398	213	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		100	0		0
Storage Lanes	0		0	0		2	0		2	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3539	0	0	0	2787	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	2787	0	5085	1583	0	0	0
Right Turn on Red	No		No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			45			45	
Link Distance (ft)		206			452			471			657	
Travel Time (s)		4.0			8.8			7.1			10.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	378	0	0	0	719	0	2664	237	0	0	0
Turn Type		NA				Perm		NA	Perm			
Protected Phases		7						2				
Permitted Phases						7			2			
Detector Phase		7				7		2	2			
Switch Phase												
Minimum Initial (s)		7.0				7.0		14.0	14.0			
Minimum Split (s)		25.0				25.0		25.0	25.0			
Total Split (s)		35.0				35.0		55.0	55.0			
Total Split (%)		38.9%				38.9%		61.1%	61.1%			
Yellow Time (s)		5.0				5.0		5.0	5.0			
All-Red Time (s)		2.0				2.0		2.0	2.0			
Lost Time Adjust (s)		-2.0				-2.0		-2.0	-2.0			
Total Lost Time (s)		5.0				5.0		5.0	5.0			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		None				None		C-Max	C-Max			
Act Effct Green (s)		28.6				28.6		51.4	51.4			
Actuated g/C Ratio		0.32				0.32		0.57	0.57			
v/c Ratio		0.34				0.81		0.92	0.26			
Control Delay (s/veh)		20.6				37.5		29.1	15.8			
Queue Delay		0.0				0.0		0.0	0.0			
Total Delay (s/veh)		20.6				37.5		29.1	15.8			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		C				D		C	B			
Approach Delay (s/veh)		20.6			37.5			28.0				
Approach LOS		C			D			C				
Queue Length 50th (ft)		85				210		532	86			
Queue Length 95th (ft)		m59				286		#606	m110			
Internal Link Dist (ft)		126			372			391			577	
Turn Bay Length (ft)									100			
Base Capacity (vph)		1179				929		2903	903			
Starvation Cap Reductn		0				0		0	0			
Spillback Cap Reductn		0				0		0	0			
Storage Cap Reductn		0				0		0	0			
Reduced v/c Ratio		0.32				0.77		0.92	0.26			

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay (s/veh): 29.0		Intersection LOS: C	
Intersection Capacity Utilization 172.6%		ICU Level of Service H	
Analysis Period (min) 15			

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

Splits and Phases: 7: NC 55 & Jessie Drive Extension





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	120	2457	134	0	0
Future Volume (vph)	0	120	2457	134	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		1	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	0	1611	3539	1583	0	0
Flt Permitted						
Satd. Flow (perm)	0	1611	3539	1583	0	0
Link Speed (mph)	25		45			45
Link Distance (ft)	954		188			825
Travel Time (s)	26.0		2.8			12.5
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	133	2730	149	0	0
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 82.0%		ICU Level of Service E	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	5.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	120	2457	134	0	0
Future Vol, veh/h	0	120	2457	134	0	0
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	133	2730	149	0	0

Major/Minor	Minor1		Major1	
Conflicting Flow All	-	1365	0	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	6.94	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	3.32	-	-
Pot Cap-1 Maneuver	0	137	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	-	137	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	WB	NB
HCM Ctrl Dly, s/v	132.17	0
HCM LOS	F	

Minor Lane/Major Mvmt	NBT	NBR	WBLn1
Capacity (veh/h)	-	-	137
HCM Lane V/C Ratio	-	-	0.972
HCM Ctrl Dly (s/v)	-	-	132.2
HCM Lane LOS	-	-	F
HCM 95th %tile Q(veh)	-	-	6.8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	456	96	0	478	4	0	0	47	0	0	171
Future Volume (vph)	0	456	96	0	478	4	0	0	47	0	0	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3447	0	0	3536	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	3447	0	0	3536	0	0	0	1611	0	0	1611
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		452			270			464			592	
Travel Time (s)		8.8			5.3			12.7			16.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	614	0	0	535	0	0	0	52	0	0	190
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	456	96	0	478	4	0	0	47	0	0	171
Future Vol, veh/h	0	456	96	0	478	4	0	0	47	0	0	171
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	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	507	107	0	531	4	0	0	52	0	0	190

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	307	-	-	268
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	689	0	0	730
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	689	-	-	730
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	10.65	11.65
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	689	-	-	-	-	730
HCM Lane V/C Ratio	0.076	-	-	-	-	0.26
HCM Ctrl Dly (s/v)	10.7	-	-	-	-	11.7
HCM Lane LOS	B	-	-	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	-	1

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	47	357	35	64	4	112	7	108	17	4	7	17
Future Volume (vph)	47	357	35	64	4	112	7	108	17	4	7	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%			0%			0%
Storage Length (ft)		100		0	100		0	0		0	0	
Storage Lanes		1		0	1		0	1		0	1	
Taper Length (ft)		100			100			25			25	
Satd. Flow (prot)	0	1770	3196	0	1770	3507	0	1770	1814	0	1770	1604
Flt Permitted		0.950			0.950			0.950			0.950	
Satd. Flow (perm)	0	1770	3196	0	1770	3507	0	1770	1814	0	1770	1604
Link Speed (mph)			35			35			25			25
Link Distance (ft)			270			343			515			582
Travel Time (s)			5.3			6.7			14.0			15.9
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	449	110	0	4	132	0	120	23	0	8	255
Sign Control			Free			Free			Stop			Stop

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 59.0%		ICU Level of Service B	
Analysis Period (min) 15			



Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	212
Future Volume (vph)	212
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.90
Growth Factor	100%
Heavy Vehicles (%)	2%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Sign Control	

Intersection Summary

Intersection	
Int Delay, s/veh	45.9

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	47	357	35	64	4	112	7	108	17	4	7	17	212
Future Vol, veh/h	47	357	35	64	4	112	7	108	17	4	7	17	212
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	100	-	-	100	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	52	397	39	71	4	124	8	120	19	4	8	19	236

Major/Minor	Major1				Major2			Minor1			Minor2		
Conflicting Flow All	132	132	0	0	110	0	0	1053	1113	55	1064	1145	66
Stage 1	-	-	-	-	-	-	-	972	972	-	137	137	-
Stage 2	-	-	-	-	-	-	-	81	141	-	927	1008	-
Critical Hdwy	6.44	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	2.52	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1181	1450	-	-	1478	-	-	181	207	1000	177	198	984
Stage 1	-	-	-	-	-	-	-	271	329	-	852	782	-
Stage 2	-	-	-	-	-	-	-	919	779	-	289	316	-
Platoon blocked, %			-	-		-	-						
Mov Cap-1 Maneuver	1354	1354	-	-	1478	-	-	~ 82	138	1000	106	132	984
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	~ 82	138	-	106	132	-
Stage 1	-	-	-	-	-	-	-	181	220	-	849	780	-
Stage 2	-	-	-	-	-	-	-	680	777	-	176	211	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	7.21	0.24	297.6	14.54
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	82	165	1354	-	-	1478	-	-	106	665
HCM Lane V/C Ratio	1.457	0.141	0.332	-	-	0.003	-	-	0.073	0.382
HCM Ctrl Dly (s/v)	$ 349.6	30.4	9	-	-	7.4	-	-	41.5	13.7
HCM Lane LOS	F	D	A	-	-	A	-	-	E	B
HCM 95th %tile Q(veh)	9.5	0.5	1.5	-	-	0	-	-	0.2	1.8

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



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	45	63	0	0	59
Future Volume (vph)	0	45	63	0	0	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	0	3539	3539	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	3539	3539	0	0	1611
Link Speed (mph)		35	35		25	
Link Distance (ft)		343	284		459	
Travel Time (s)		6.7	5.5		12.5	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	50	70	0	0	66
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 13.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↗
Traffic Vol, veh/h	0	45	63	0	0	59
Future Vol, veh/h	0	45	63	0	0	59
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	50	70	0	0	66

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	35
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	0	1030
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	-	1030
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	8.73
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	1030
HCM Lane V/C Ratio	-	-	0.064
HCM Ctrl Dly (s/v)	-	-	8.7
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	0.2



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	30	15	42	4	4	20
Future Volume (vph)	30	15	42	4	4	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	1	0			0
Taper Length (ft)	50		25			
Satd. Flow (prot)	1770	1583	0	1781	1650	0
Flt Permitted	0.950			0.956		
Satd. Flow (perm)	1770	1583	0	1781	1650	0
Link Speed (mph)	35			25	25	
Link Distance (ft)	284			570	373	
Travel Time (s)	5.5			15.5	10.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	33	17	0	51	26	0
Sign Control	Free			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 19.2%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	30	15	42	4	4	20
Future Volume (Veh/h)	30	15	42	4	4	20
Sign Control	Free			Stop	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	33	17	47	4	4	22
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	0		90	66	83	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0		90	66	83	0
tC, single (s)	4.1		7.1	6.5	6.5	6.2
tC, 2 stage (s)						
tF (s)	2.2		3.5	4.0	4.0	3.3
p0 queue free %	98		95	100	99	98
cM capacity (veh/h)	1623		860	808	791	1085

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	33	17	51	26
Volume Left	33	0	47	0
Volume Right	0	17	0	22
cSH	1623	1700	855	1026
Volume to Capacity	0.02	0.01	0.06	0.03
Queue Length 95th (ft)	2	0	5	2
Control Delay (s/veh)	7.3	0.0	9.5	8.6
Lane LOS	A		A	A
Approach Delay (s/veh)	4.8		9.5	8.6
Approach LOS			A	A

Intersection Summary			
Average Delay	7.5		
Intersection Capacity Utilization	19.2%	ICU Level of Service	A
Analysis Period (min)	15		



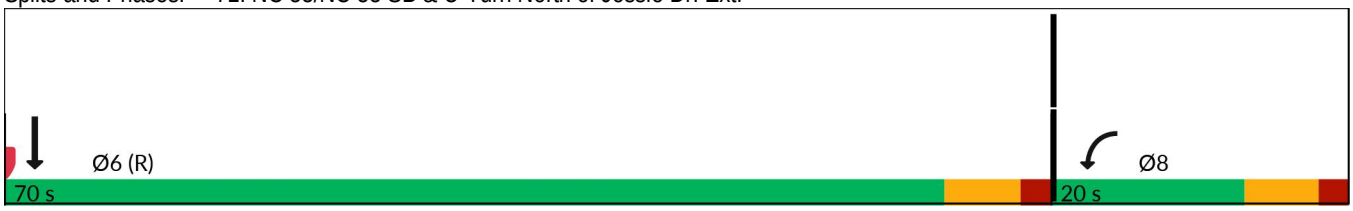
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	455	0	0	0	0	3453
Future Volume (vph)	455	0	0	0	0	3453
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	2	0		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	3433	0	0	0	0	3539
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	3539
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	1					
Link Speed (mph)	45		30			45
Link Distance (ft)	143		578			838
Travel Time (s)	2.2		13.1			12.7
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	506	0	0	0	0	3837
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Detector Phase	8					6
Switch Phase						
Minimum Initial (s)	7.0					14.0
Minimum Split (s)	25.0					25.0
Total Split (s)	20.0					70.0
Total Split (%)	22.2%					77.8%
Yellow Time (s)	5.0					5.0
All-Red Time (s)	2.0					2.0
Lost Time Adjust (s)	-2.0					-2.0
Total Lost Time (s)	5.0					5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None					C-Max
Act Effct Green (s)	15.0					65.0
Actuated g/C Ratio	0.17					0.72
v/c Ratio	0.88					1.50
Control Delay (s/veh)	46.7					246.8
Queue Delay	0.0					0.0
Total Delay (s/veh)	46.7					246.8

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
LOS	D					F
Approach Delay (s/veh)	46.7					246.8
Approach LOS	D					F
Queue Length 50th (ft)	138					~1635
Queue Length 95th (ft)	m166					#1760
Internal Link Dist (ft)	63		498			758
Turn Bay Length (ft)						
Base Capacity (vph)	573					2555
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.88					1.50

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2: and 6:SBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.50			
Intersection Signal Delay (s/veh): 223.5		Intersection LOS: F	
Intersection Capacity Utilization 153.0%		ICU Level of Service H	
Analysis Period (min) 15			

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

Splits and Phases: 71: NC 55/NC 55 SB & U-Turn North of Jessie Dr. Ext.



7: NC 55 & Jessie Drive Extension Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	5.7	4.7
Total Del/Veh (s)	24.7	27.8	27.3	27.2

9: Site Access B (RI/RO) & Jessie Drive Extension Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	1.8	0.6	4.4	3.8	1.9

10: Site Access C (FM) & Jessie Drive Extension Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	1.5	0.3	8.7	5.1	3.2

11: Jessie Drive Extension & Site Access D (RO Only) Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Del/Veh (s)	0.2	0.6	2.6	0.4

12: Site Access E (FM) & Jessie Drive Extension Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.1	0.0
Total Del/Veh (s)	0.1	4.9	4.3	0.9

Total Zone Performance

Denied Del/Veh (s)	37.3
Total Del/Veh (s)	1508.0

Intersection: 7: NC 55 & Jessie Drive Extension

Movement	EB	EB	WB	WB	NB	NB	NB	NB	B23	B23
Directions Served	T	T	R	R	T	T	T	R	T	T
Maximum Queue (ft)	131	121	186	130	501	498	200	150	1382	1409
Average Queue (ft)	73	56	98	79	458	417	195	96	980	988
95th Queue (ft)	122	102	162	137	559	577	226	178	1674	1699
Link Distance (ft)	121	121	349	349	405	405			1431	1431
Upstream Blk Time (%)	1	1			26	17				
Queuing Penalty (veh)	1	1			406	256				
Storage Bay Dist (ft)							100	100		
Storage Blk Time (%)						30	16	3		
Queuing Penalty (veh)						367	154	29		

Intersection: 9: Site Access B (RI/RO) & Jessie Drive Extension

Movement	EB	NB	SB
Directions Served	TR	R	R
Maximum Queue (ft)	38	79	78
Average Queue (ft)	1	25	38
95th Queue (ft)	12	56	57
Link Distance (ft)	349	418	546
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 10: Site Access C (FM) & Jessie Drive Extension

Movement	EB	NB	NB	SB	SB
Directions Served	UL	L	TR	L	TR
Maximum Queue (ft)	55	99	31	30	54
Average Queue (ft)	7	37	13	5	34
95th Queue (ft)	33	71	37	24	46
Link Distance (ft)		468	468	535	535
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 11: Jessie Drive Extension & Site Access D (RO Only)

Movement	SB
Directions Served	R
Maximum Queue (ft)	31
Average Queue (ft)	9
95th Queue (ft)	31
Link Distance (ft)	412
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: Site Access E (FM) & Jessie Drive Extension

Movement	NB	SB
Directions Served	LT	TR
Maximum Queue (ft)	31	31
Average Queue (ft)	10	10
95th Queue (ft)	34	32
Link Distance (ft)	535	327
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 1214

7: NC 55 & Jessie Drive Extension Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	23.0	28.3	30.3	29.5

9: Site Access B (RI/RO) & Jessie Drive Extension Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.2	0.0
Total Del/Veh (s)	1.9	0.7	5.0	5.2	2.0

10: Site Access C (FM) & Jessie Drive Extension Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.2	0.1
Total Del/Veh (s)	2.4	0.8	12.2	6.0	4.4

11: Jessie Drive Extension & Site Access D (RO Only) Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Del/Veh (s)	0.2	0.6	3.0	1.4

12: Site Access E (FM) & Jessie Drive Extension Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.1	0.1
Total Del/Veh (s)	0.1	4.4	3.3	2.6

Total Zone Performance

Denied Del/Veh (s)	0.2
Total Del/Veh (s)	560.7

Intersection: 7: NC 55 & Jessie Drive Extension

Movement	EB	EB	WB	WB	NB	NB	NB	NB	B23	B23
Directions Served	T	T	R	R	T	T	T	R	T	T
Maximum Queue (ft)	114	88	260	211	514	498	200	150	917	947
Average Queue (ft)	67	48	159	138	459	442	194	111	502	451
95th Queue (ft)	106	84	230	196	568	572	238	185	1015	957
Link Distance (ft)	121	121	349	349	405	405			1461	1461
Upstream Blk Time (%)	0				28	17				
Queuing Penalty (veh)	0				389	237				
Storage Bay Dist (ft)							100	100		
Storage Blk Time (%)						35	22	5		
Queuing Penalty (veh)						366	173	39		

Intersection: 9: Site Access B (RI/RO) & Jessie Drive Extension

Movement	EB	EB	NB	SB
Directions Served	T	TR	R	R
Maximum Queue (ft)	16	22	79	143
Average Queue (ft)	1	1	27	43
95th Queue (ft)	5	7	58	79
Link Distance (ft)	349	349	418	546
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: Site Access C (FM) & Jessie Drive Extension

Movement	EB	WB	NB	NB	SB	SB
Directions Served	UL	TR	L	TR	L	TR
Maximum Queue (ft)	80	20	78	31	30	74
Average Queue (ft)	32	1	45	14	6	52
95th Queue (ft)	66	7	71	39	25	74
Link Distance (ft)		281	468	468	535	535
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 11: Jessie Drive Extension & Site Access D (RO Only)

Movement	SB
Directions Served	R
Maximum Queue (ft)	56
Average Queue (ft)	28
95th Queue (ft)	48
Link Distance (ft)	412
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: Site Access E (FM) & Jessie Drive Extension

Movement	NB	SB
Directions Served	LT	TR
Maximum Queue (ft)	53	31
Average Queue (ft)	28	20
95th Queue (ft)	48	44
Link Distance (ft)	535	327
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

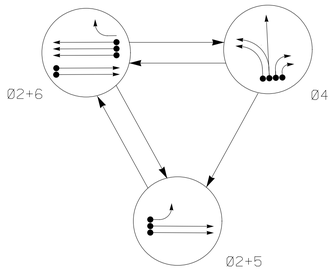
Zone wide Queuing Penalty: 1205

Appendix K:
Signal Plans

PROJECT REFERENCE NO.	SHEET NO.
Apex EVP GPS	Sig.6.0

3 Phase
w/ EV Preemption
Fully Actuated
Apex NC 55 CLS
Signal System #:D05-23_Apex

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

EV PREEMPT PHASES
(Medium Priority)

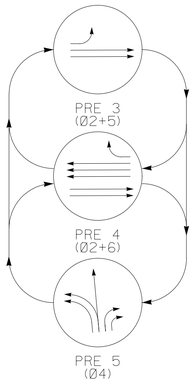
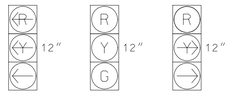


TABLE OF OPERATION

SIGNAL FACE	PHASE						
	Ø2+5	Ø2+6	Ø4	PRE 3	PRE 4	PRE 5	FLASH
21,22	G	G	R	G	G	R	Y
41,42	R	R	G	R	R	G	R
43,44	R	R	→	R	R	→	R
51	←	←R	←R	←	←R	←R	←R
61,62,63	R	G	R	R	G	R	Y

SIGNAL FACE I.D.

All Heads L.E.D.



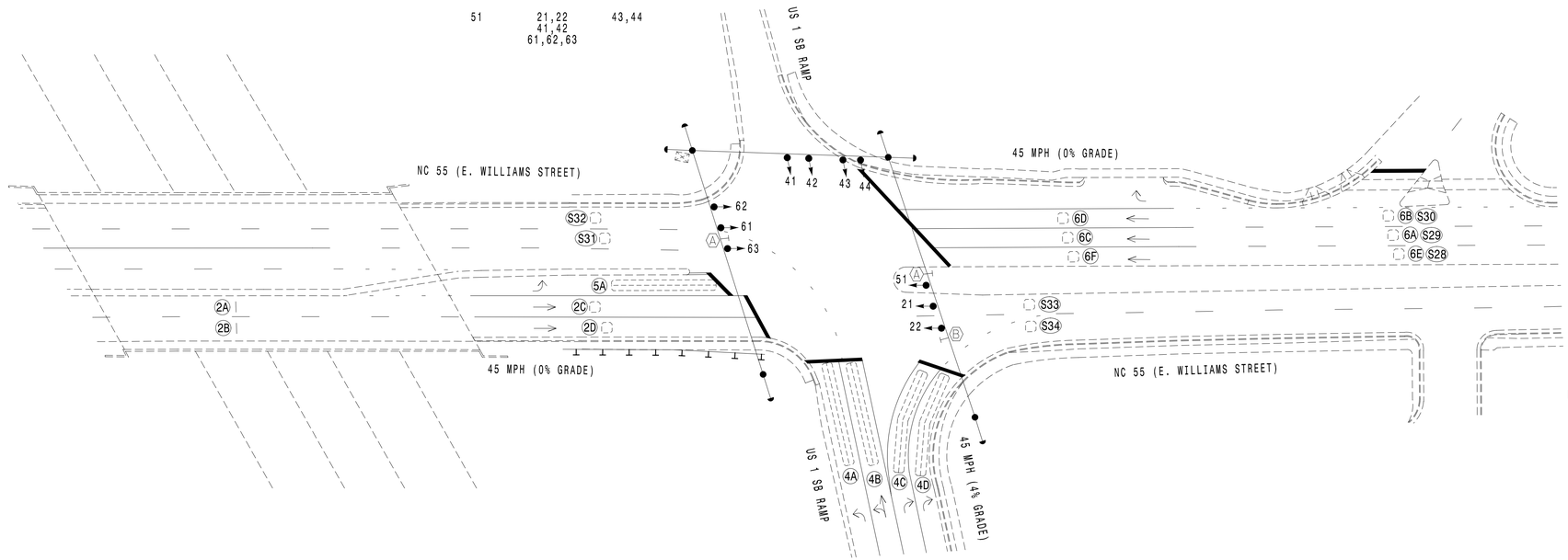
2070 LOOP & DETECTOR INSTALLATION

INDUCTIVE LOOPS					DETECTOR PROGRAMMING						
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
2A,2B	6X6	300	%	%	2	Y	Y	-	1.6	-	-	%
2C,2D	6X6	90	EXIST.	-	2	Y	Y	-	-	-	-	-
4A	6X60	0	EXIST.	-	4	Y	Y	-	-	-	-	-
4B	6X60	0	EXIST.	-	4	Y	Y	-	-	-	-	-
4C	6X60	0	EXIST.	-	4	Y	Y	-	-	15	-	-
4D	6X60	0	EXIST.	-	4	Y	Y	-	-	15	-	-
5A	6X60	0	EXIST.	-	5	Y	Y	-	-	-	-	-
6A/S29	6X6	300	EXIST.	-	6	Y	Y	-	1.6	-	Y	-
6B/S30	6X6	300	EXIST.	-	6	Y	Y	-	1.6	-	Y	-
6C	6X6	90	EXIST.	-	6	Y	Y	-	-	-	-	-
6D	6X6	90	EXIST.	-	6	Y	Y	-	-	-	-	-
6E/S28	6X6	300	EXIST.	-	6	Y	Y	-	1.6	-	Y	-
6F	6X6	90	EXIST.	-	6	Y	Y	-	-	-	-	-
S31	6X6	+150	EXIST.	-	SYS	-	-	-	-	-	Y	-
S32	6X6	+150	EXIST.	-	SYS	-	-	-	-	-	Y	-
S33	6X6	+150	EXIST.	-	SYS	-	-	-	-	-	Y	-
S34	6X6	+150	EXIST.	-	SYS	-	-	-	-	-	Y	-

% Mulitzone microwave detection

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 5 may be lagged.
4. Set all detector units to presence mode.
5. Pavement markings are existing.
6. This intersection features a GPS + Cellular preemption system.
7. Maximum times show in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
8. Closed loop system data:
   Master Asset #: 10523.
   Controller Asset #: 0209.



LEGEND

PROPOSED		EXISTING
○→	Traffic Signal Head	●→
◐→	Modified Signal Head	N/A
⊣	Sign	⊣
⊣	Pedestrian Signal Head With Push Button & Sign	■
○	Signal Pole with Guy	●
○	Signal Pole with Sidewalk Guy	●
▭	Inductive Loop Detector	▭
⊠	Controller & Cabinet	⊠
□	Junction Box	■
----------	2-in Underground Conduit	----------
N/A	Right of Way	----------
→	Directional Arrow	→
———	Loop Emulator Detection Area	———
N/A	Guardrail	⊥⊥
Ⓐ	No U-Turn/ No Left Turn Sign (R3-18)	Ⓐ
Ⓑ	No Right Turn Sign (R3-1)	Ⓑ

OASIS 2070 TIMING CHART

FEATURE	PHASE 2	4	5	6
Min Green 1 *	12	7	7	12
Extension 1 *	2.0	1.0	1.0	2.0
Max Green 1 *	60	30	30	60
Yellow Clearance	4.5	4.2	4.5	4.5
Red Clearance	1.9	1.4	1.0	1.9
Walk 1 *	-	-	-	-
Don't Walk 1	-	-	-	-
Seconds Per Actuation *	-	-	-	-
Max Variable Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	-	-	-	-
Recall Mode	MIN RECALL	-	-	MIN RECALL
Vehicle Call Memory	YELLOW	-	-	YELLOW
Dual Entry	-	-	-	-
Simultaneous Gap	ON	ON	ON	ON

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

OASIS 2070 EV PREEMPT

FUNCTION	PRE 3	PRE 4	PRE 5
Interval 1 – Dwell Green	255	255	255
Interval 1 – Dwell Yellow	0.0*	0.0*	0.0*
Interval 1 – Dwell Red	0.0*	0.0*	0.0*
Interval 5 – Exit Green	1	1	1
Interval 5 – Yellow	0.0	0.0	0.0
Interval 5 – Red	0.0	0.0	0.0
Exit Phase(s)	2+6	2+6	4
Priority	MED	MED	MED
Delay Time	0.0	0.0	0.0
Min Green Before Pre	1	1	1
Ped Clear Before Pre	0*	0*	0*
Yellow Clear Before Pre	0.0*	0.0*	0.0*
Red Clear Before Pre	0.0*	0.0*	0.0*
Dwell Min Time	7	7	7
Enable Backup Protection	N	N	N
Ped Clear Through Yellow	N	N	N
Omit Overlaps	-	-	-
Preempt Extend**	2	2	2

* Time defaults to time used for phase during normal operation
** Program Timing on Optical Detection Unit

$FILE$
$USER$
$TIME$
$DATE$

NC Dept of Transportation
Division of Highways
Final Drawing Date: 07/16/2024
DocuSigned by: Darryl Jones
ITS & Signals Unit

VHB Engineering NC, P.C. (C-3705)
940 Main Campus Drive, Suite 500
Raleigh, NC 27606
919.829.0328

SIGNAL UPGRADE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for the Offices of:
Traffic Engineering Branch, Mobility and Safety Division, NC Department of Transportation, Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

NC 55 (E. WILLIAMS STREET) AT US 1 SB RAMP

DIVISION 5 WAKE COUNTY APEX

PLAN DATE: May 2024 REVIEWED BY: J. L. Lewis
PREPARED BY: M. L. Stygles REVIEWED BY: L. Gottlieb

REVISIONS	INIT.	DATE

SCALE 0 40 1"=40'

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 046057 ENGINEER MATTHEW L. STYGLES
DocuSigned by: Matthew L. Stygles 5/31/2024
REGISTERED ENGINEER DATE

SIG. INVENTORY NO. 05-0209

Docusign Envelope ID: CF700F45-41D4-4F60-A715-F8ED54EA1AA3

PROJECT REFERENCE NO.	SHEET NO.
36249.4757	Sig. 9.0

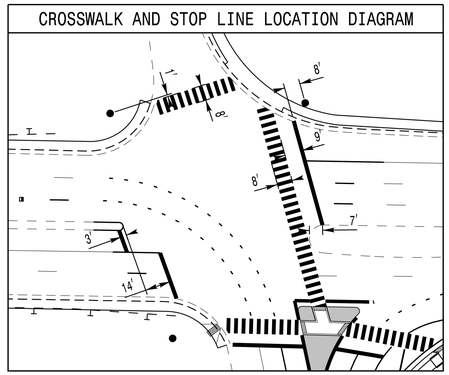
3 Phase
Fully Actuated
NC 55 (Williams St) Apex CLS
Signal System #:D05-23_Apex

MAXTIME DETECTOR INSTALLATION CHART

DETECTOR / ZONE					PROGRAMMING								
LOOP/ ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP / ZONE	CALL PHASE	DELAY TIME	EXTEND TIME	QUEUE LIMIT	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
2A	6X6	300	*	-	2	-	-	-	X	X	X	-	-
2B	6X6	300	*	-	2	-	-	-	X	X	X	-	-
4A	6X40	0	*	-	4	-	-	-	X	-	X	-	-
4B	6X40	0	*	-	4	-	-	-	X	-	X	-	-
4C	6X40	0	*	-	4	-	-	-	X	-	X	-	-
4D	6X40	0	*	-	4	15.0	-	-	X	-	X	-	-
4E	6X40	0	*	-	4	15.0	-	-	X	-	X	-	-
5A	6X60	0	2-4-2	-	5	15.0@	-	-	X	-	X	-	-
					2#	3.0	-	-	X	-	X	X	-
6A	6X6	300	EXIST	-	6	-	-	-	X	X	X	-	-
6B	6X6	300	EXIST	-	6	-	-	-	X	X	X	-	-
6C	6X6	300	EXIST	-	6	-	-	-	X	X	X	-	-
Q1	*	300	*	-	**	**	-	-	X	-	X	-	-
Q2	*	300	*	-	**	**	-	-	X	-	X	-	-
Q3	*	300	*	-	**	**	-	-	X	-	X	-	-
Q4	*	300	*	-	**	**	-	-	X	-	X	-	-
Q5	*	300	*	-	**	**	-	-	X	-	X	-	-

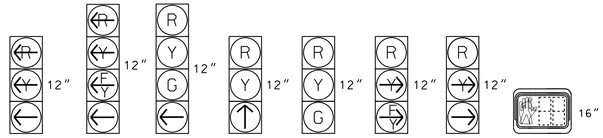
@ Disable Delay during Alternate Phasing operation.
# Disable Phase call for loop during Alternate Phasing opeartion.
* Multizone Microwave Detection
** Queue Detection. See Note 9.

CROSSWALK AND STOP LINE LOCATION DIAGRAM



SIGNAL FACE I.D.

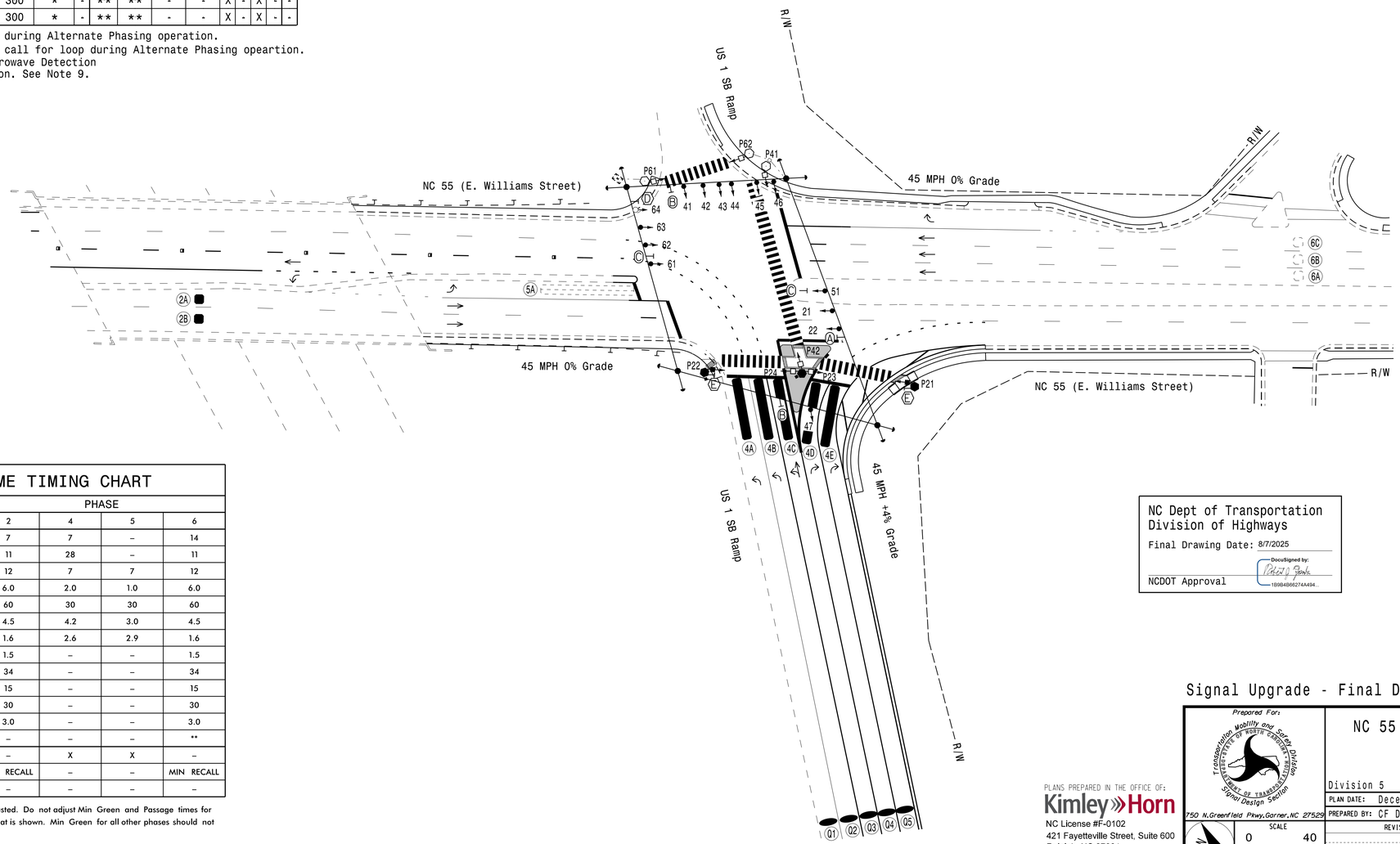
All Heads L.E.D.



41,42 | 51 | 43 | 22, 61 | 21, 44, 62,63 | 64 | 45,46,47 | P21,P22, P23,P24, P41,P42, P61,P62

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024, "Standard Specifications for Roads and Structures" dated January 2024, and all applicable sections of the latest version of the generic Project Special Provisions. The PSP can be accessed at the following website: https://connect.ncdot.gov/resources/safety/Pages/ITS-Design-Resources.aspx
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 5 may be lagged.
4. Set all detector units to presence mode.
5. Pavement markings are existing unless otherwise shown.
6. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
7. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
8. This intersection features a GPS + Cellular preemption system.
9. Zones Q1, Q2, Q3, Q4, & Q5 serve as queue backup detectors. After 5 seconds of constant actuation, the detector unit places a call to the controller, forces off any phase in the cycle, and goes to phase 4 to clear out the storage lanes to prevent the backup of vehicles on US 1.
10. The Division Traffic Engineer will determine the Dwell Green Time for the queue preemption timing, and may field adjust delay timing for queue backup loop.
11. This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
12. The Division Traffic Engineer will determine the hours of use for each phasing plan.
13. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
14. To provide a leading pedestrian interval on Phase 6, program FYA heads 51 & 64 to delay for 7 seconds after the start of the phase 6 Walk interval. See electrical details.
15. Phase 2 pedestrian timing is designed as a 2 stage crossing. The FDW time shown is only intended to get a pedestrian to/from the median during a single crossing.



LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Type II Signal Pedestal	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Non-intrusive Detection Zone	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
N/A	Guardrail	
A	No Right Turn Sign (R3-1)	A
B	Street Name Sign	B
C	No U-Turn/No Left Turn Sign (R3-18)	C
D	"RIGHT TURN SIGNAL" Sign (R10-10R)	D
E	Pedestrian Crossing to Median Push Button Sign (R10-3d)	E

MAXTIME TIMING CHART

FEATURE	PHASE			
	2	4	5	6
Walk *	7	7	–	14
Ped Clear	11	28	–	11
Min Green *	12	7	7	12
Passage *	6.0	2.0	1.0	6.0
Max 1 *	60	30	30	60
Yellow Change	4.5	4.2	3.0	4.5
Red Clear	1.6	2.6	2.9	1.6
Added Initial *	1.5	–	–	1.5
Maximum Initial *	34	–	–	34
Time Before Reduction *	15	–	–	15
Time To Reduce *	30	–	–	30
Minimum Gap	3.0	–	–	3.0
Advance Walk	–	–	–	**
Non Lock Detector	–	X	X	–
Vehicle Recall	MIN RECALL	–	–	MIN RECALL
Dual Entry	–	–	–	–

* These values may be field adjusted. Do not adjust Min Green and Passage times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

** See Note 14.

NC Dept of Transportation
Division of Highways
Final Drawing Date: 8/7/2025
DocuSigned by:
NCDOT Approval
189B4B6B274A494...

Signal Upgrade - Final Design - Sheet 1 of 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PLANS PREPARED IN THE OFFICE OF:
Kimley»Horn
NC License #F-0102
421 Fayetteville Street, Suite 600
Raleigh, NC 27601
(919) 677-2000

Prepared For:
Transportation Mobility and Safety Division
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

NC 55 (E. Williams Street)
at
US 1 SB Ramps

Division 5 | Wake County | Apex

PLAN DATE: December 2024 | REVIEWED BY: SL Phillips
PREPARED BY: CF Davis | REVIEWED BY:

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

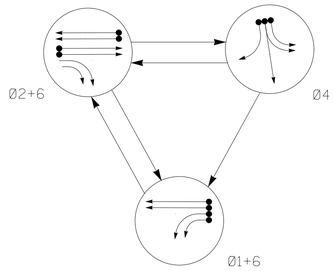
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DocuSigned by:
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SIGNATURE 8/1/2025 DATE
SIG. INVENTORY NO. 05-0209

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PROJECT REFERENCE NO.	SHEET NO.
Apex EVP GPS	Sig.7.0

3 Phase
w/ EV Preemption
Fully Actuated
(Apex NC 55 CLS)
Signal System #: D05-23_Apex

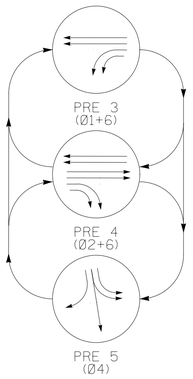
PHASING DIAGRAM



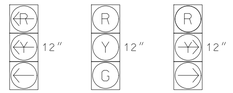
PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

EV PREEMPT PHASES
(Medium Priority)



SIGNAL FACE I.D.



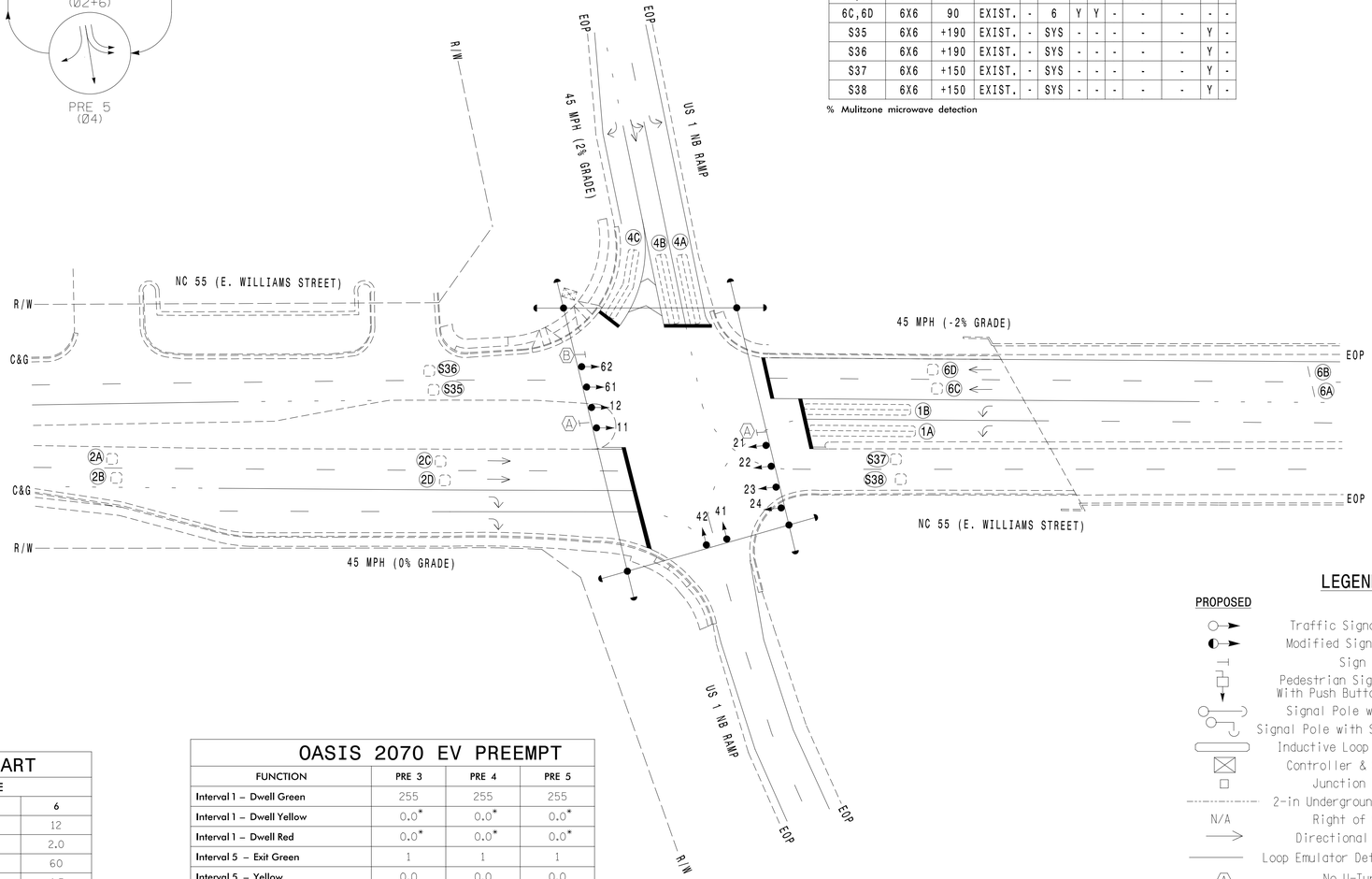
2070 LOOP & DETECTOR INSTALLATION

INDUCTIVE LOOPS					DETECTOR PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
1A	6X60	0	EXIST.	-	1	Y	Y	-	-	-	-	-
1B	6X60	0	EXIST.	-	1	Y	Y	-	-	-	-	-
2A,2B	6X6	300	EXIST.	-	2	Y	Y	-	1.6	-	-	-
2C,2D	6X6	90	EXIST.	-	2	Y	Y	-	-	-	-	-
4A	6X40	0	2-4-2	-	4	Y	Y	-	-	-	-	-
4B	6X40	0	2-4-2	-	4	Y	Y	-	-	-	-	-
4C	6X40	0	2-4-2	-	4	Y	Y	-	-	15	-	-
6A,6B	6X6	300	%	%	6	Y	Y	-	1.6	-	-	%
6C,6D	6X6	90	EXIST.	-	6	Y	Y	-	-	-	-	-
S35	6X6	+190	EXIST.	-	SYS	-	-	-	-	-	Y	-
S36	6X6	+190	EXIST.	-	SYS	-	-	-	-	-	Y	-
S37	6X6	+150	EXIST.	-	SYS	-	-	-	-	-	Y	-
S38	6X6	+150	EXIST.	-	SYS	-	-	-	-	-	Y	-

% Mulitzone microwave detection

TABLE OF OPERATION

SIGNAL FACE	PHASE						
	Ø1+6	Ø2+6	Ø4	PRE3	PRE4	PRE5	FLASH
11,12	←~~R~~	←~~R~~	←~~R~~	←~~R~~	←~~R~~	←~~R~~	←~~R~~
21,22	R	G	R	R	G	R	Y
23,24	R	→	R	R	→	R	~~Y~~
41,42	R	R	G	R	R	G	R
61,62	G	G	R	G	G	R	Y



LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
	Loop Emulator Detection Area	
Ⓐ	No U-Turn/ No Left Turn Sign (R3-18)	Ⓐ
Ⓑ	No Right Turn Sign (R3-1)	Ⓑ

OASIS 2070 TIMING CHART

FEATURE	PHASE			
	1	2	4	6
Min Green 1 *	7	12	7	12
Extension 1 *	1.0	2.0	2.0	2.0
Max Green 1 *	20	60	30	60
Yellow Clearance	3.3	4.5	4.3	4.5
Red Clearance	2.4	1.0	1.7	1.0
Walk 1 *	-	-	-	-
Don't Walk 1	-	-	-	-
Seconds Per Actuation *	-	-	-	-
Max Variable Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	-	-	-	-
Recall Mode	-	MIN RECALL	-	MIN RECALL
Vehicle Call Memory	-	YELLOW	-	YELLOW
Dual Entry	-	-	-	-
Simultaneous Gap	ON	ON	ON	ON

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

OASIS 2070 EV PREEMPT

FUNCTION	PRE 3	PRE 4	PRE 5
Interval 1 – Dwell Green	255	255	255
Interval 1 – Dwell Yellow	0.0*	0.0*	0.0*
Interval 1 – Dwell Red	0.0*	0.0*	0.0*
Interval 5 – Exit Green	1	1	1
Interval 5 – Yellow	0.0	0.0	0.0
Interval 5 – Red	0.0	0.0	0.0
Exit Phase(s)	2+6	2+6	4
Priority	MED	MED	MED
Delay Time	0.0	0.0	0.0
Min Green Before Pre	1	1	1
Ped Clear Before Pre	0*	0*	0*
Yellow Clear Before Pre	0.0*	0.0*	0.0*
Red Clear Before Pre	0.0*	0.0*	0.0*
Dwell Min Time	7	7	7
Enable Backup Protection	N	N	N
Ped Clear Through Yellow	N	N	N
Omit Overlaps	-	-	-
Preempt Extend**	2	2	2

* Time defaults to time used for phase during normal operation
** Program Timing on Optical Detection Unit

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 may be lagged.
4. Set all detector units to presence mode.
5. Pavement markings are existing.
6. This intersection features a GPS + Cellular preemption system.
7. Maximum times show in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
8. Closed loop system data: Controller Asset #: 0900.

VHB Engineering NC, P.C. (C-3705)
940 Main Campus Drive, Suite 500
Raleigh, NC 27606
919.829.0328

NC Dept of Transportation
Division of Highways
Final Drawing Date: 07/16/2024
DocuSigned by: Robert J. Fonk
ITS & Signals Unit

SIGNAL UPGRADE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for the Offices of:
Transportation Mobility and Safety Division
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

NC 55 (E. WILLIAMS STREET)
AT
US 1 NB RAMP

DIVISION 5 WAKE COUNTY APEX

PLAN DATE:	May 2024	REVIEWED BY:	J. L. Lewis
PREPARED BY:	M. L. Styles	REVIEWED BY:	L. Gottlieb

REVISIONS	INIT.	DATE

SCALE 0 40 1"=40'

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 046057 ENGINEER MATTHEW L. STYLES
DocuSigned by: Matthew Styles 5/31/2024
SIGNATURE DATE
SIG. INVENTORY NO. 05-0900

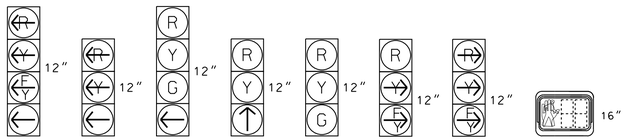
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PROJECT REFERENCE NO.	SHEET NO.
36249.4757	Sig. 6.0

SIGNAL FACE I.D.

All Heads L.E.D.



11 | 41 | 42 | 21, 63 | 22, 43, 61,62 | 44 | 23,24 | P21,P22, P23,P24, P41,P42, P61,P62

MAXTIME DETECTOR INSTALLATION CHART

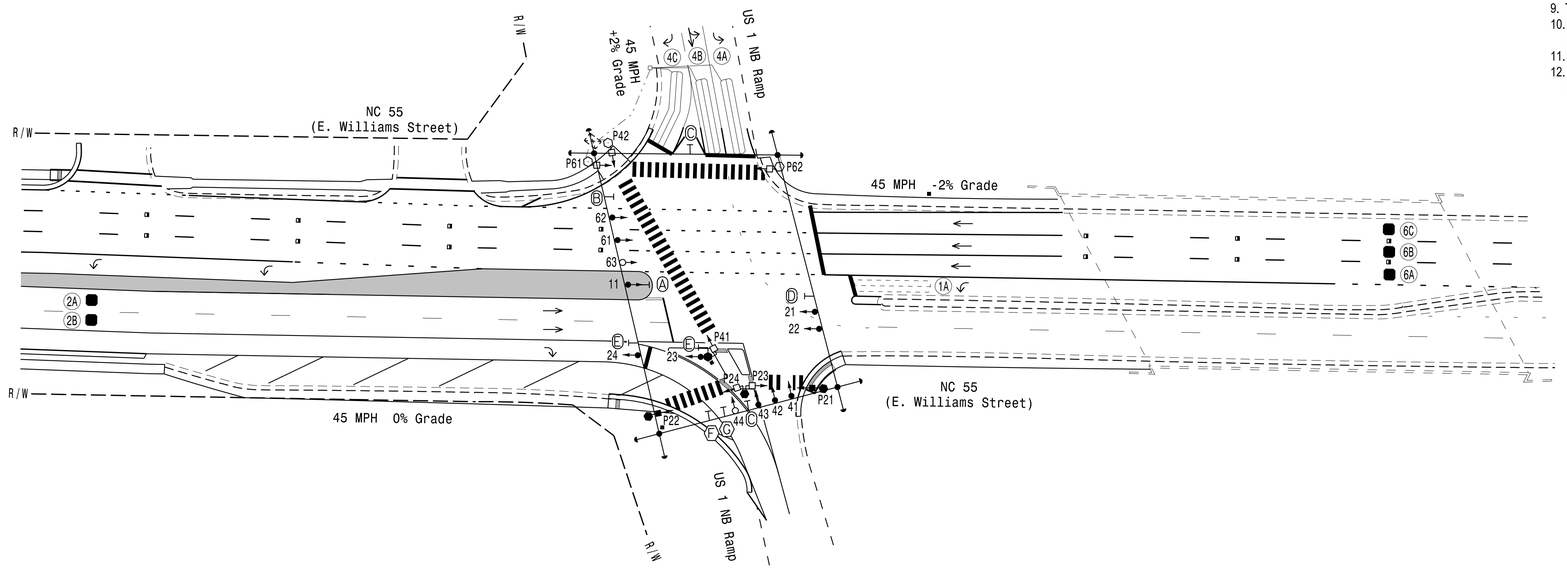
DETECTOR / ZONE					PROGRAMMING							
LOOP / ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP / ZONE	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
1A	6X40	0	2-4-2	-	1	15.0@	-	X	-	X	-	-
					6#	3.0	-	X	-	X	X	-
2A	6X6	300	*	-	2	-	-	X	X	X	-	-
2B	6X6	300	*	-	2	-	-	X	X	X	-	-
4A	6X40	0	2-4-2	-	4	-	-	X	-	X	-	-
4B	6X40	0	2-4-2	-	4	-	-	X	-	X	-	-
4C	6X40	0	2-4-2	-	4	15.0	-	X	-	X	-	-
6A	6X6	300	*	-	6	-	-	X	X	X	-	-
6B	6X6	300	*	-	6	-	-	X	X	X	-	-
6C	6X6	300	*	X	6	-	-	X	X	X	-	X

@ Disable Delay during Alternate Phasing operation.
# Disable Phase call for loop during Alternate Phasing operation.
* Multizone Microwave Detection

3 Phase
Fully Actuated
NC 55 (Williams CLS) Apex CLS
Signal System #: D05-23_Apex

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024, "Standard Specifications for Roads and Structures" dated January 2024, and all applicable sections of the latest version of the generic Project Special Provisions. The PSP can be accessed at the following website: https://connect.ncdot.gov/resources/safety/Pages/ITS-Design-Resources.aspx
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 may be lagged.
4. Set all detector units to presence mode.
5. Pavement markings are existing unless otherwise shown.
6. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
7. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
8. This intersection uses multizone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
9. This intersection features a GPS + Cellular preemption system.
10. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
11. Reposition existing signal head 43.
12. The Division Traffic Engineer will determine the hours of use for each phasing plan.



LEGEND

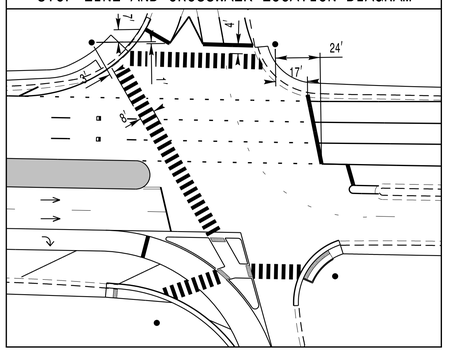
PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Type II Signal Pedestal	
	Inductive Loop Detector	
	Non-intrusive Detection Area	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
DD	Directional Drill	N/A
N/A	Right of Way	
	Directional Arrow	
N/A	Curb Ramp	
Ⓐ	No U-Turn Sign (R3-4)	Ⓐ
Ⓑ	No Right Turn Sign (R3-1)	Ⓑ
Ⓒ	Street Name Sign	Ⓒ
Ⓓ	No U-Turn/No Left Turn Sign (R3-18)	Ⓓ
Ⓔ	"NO TURN ON RED" Sign (R10-11)	Ⓔ
Ⓕ	"RIGHT TURN SIGNAL" Sign (R10-10R)	Ⓕ
Ⓖ	"NO TURN ON RED" L.E.D. Blankout Sign	Ⓖ

MAXTIME TIMING CHART

FEATURE	PHASE			
	1	2	4	6
Walk *	–	7	13	7
Ped Clear	–	6	27	18
Min Green *	7	12	7	12
Passage *	2.0	6.0	2.0	6.0
Max 1 *	20	60	20	60
Yellow Change	3.0	4.7	4.3	4.7
Red Clear	2.4	1.7	2.0	1.7
Added Initial *	–	1.5	–	1.5
Maximum Initial *	–	34	–	34
Time Before Reduction *	–	15	–	15
Time To Reduce *	–	30	–	30
Minimum Gap	–	3.0	–	3.0
Advance Walk	–	–	–	–
Non Lock Detector	X	–	X	–
Vehicle Recall	–	MIN RECALL	–	MIN RECALL
Dual Entry	–	–	–	–

* These values may be field adjusted. Do not adjust Min Green and Passage times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

STOP LINE AND CROSSWALK LOCATION DIAGRAM



NC Dept of Transportation
Division of Highways
Final Drawing Date: 8/7/2025
DocuSigned by:
1B9B4B66274A494...
NCDOT Approval

Signal Upgrade - Final Design
Sheet 1 of 2
(TMP Phase 2)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PLANS PREPARED IN THE OFFICE OF:
Kimley»Horn
NC License #F-0102
421 Fayetteville Street, Suite 600
Raleigh, NC 27601
(919) 677-2000

Prepared For:
NC Department of Transportation Mobility and Safety Division
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

NC 55 (E. Williams Street)
at
US 1 NB Ramps

Division 5 | Wake County | Apex
PLAN DATE: November 2024 | REVIEWED BY: SL Phillips
PREPARED BY: CF Davis | REVIEWED BY:

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

NORTH CAROLINA PROFESSIONAL SEAL 032607 ENGINEER STACIE L. PHILLIPS
DocuSigned by:
DC87A59ED60B437...
8/1/2025
SIGNATURE DATE
SIG. INVENTORY NO. 05-0900

K:\NCDOT_TPTO_SIGNALS\D01326009 - Project Verdea\54 - Signal Design\US1 NB Ramp\D50900g.dgn
7/31/2025 11:13:03 AM Craig.Davis

PROJECT REFERENCE NO.	SHEET NO.
C-5600R	Sig 25.0

PHASING DIAGRAM

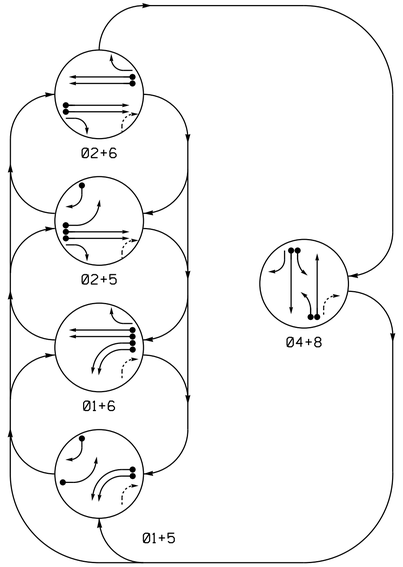
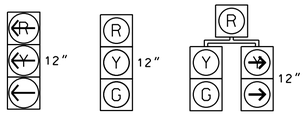


TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	04+8	FLASH
11, 12	←	←	~~R~~	~~R~~	~~R~~	~~R~~
21, 22	R	R	G	G	R	Y
41, 43	R	R	R	R	G	R
42	R/←	R	R/→	R	G	R
51	←	~~R~~	←	~~R~~	~~R~~	~~R~~
61, 62	R	G	R	G	R	Y
81, 82	R	R	R	R	G	R

SIGNAL FACE I.D.

All Heads L.E.D.



11, 12
51

21, 22
41, 43
61, 62
81, 82

42

MAXTIME DETECTOR INSTALLATION CHART

DETECTOR					PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
1A	6X60	0	2-4-2	-	1	-	-	X	-	X	-	-
1B	6X40	0	2-4-2	-	1	-	-	X	-	X	-	-
2A	6X6	420	5	-	2	-	-	X	X	X	-	-
2B	6X6	420	5	-	2	-	-	X	X	X	-	-
4A	6X60	0	2-4-2	-	4	-	-	X	-	X	-	-
4B	6X60	0	2-4-2	-	4	-	-	X	-	X	-	-
5A	6X60	0	2-4-2	-	5	15.0	-	X	-	X	-	-
5B	6X60	0	2-4-2	-	5	15.0	-	X	-	X	-	-
5C	6X6	0	5	-	5	20.0	-	X	-	X	-	-
6A	6X6	420	5	-	6	-	-	X	X	X	-	-
6B	6X6	420	5	-	6	-	-	X	X	X	-	-
8A	6X60	0	2-4-2	-	8	-	-	X	-	X	-	-
8B	6X60	0	2-4-2	-	8	-	-	X	-	X	-	-

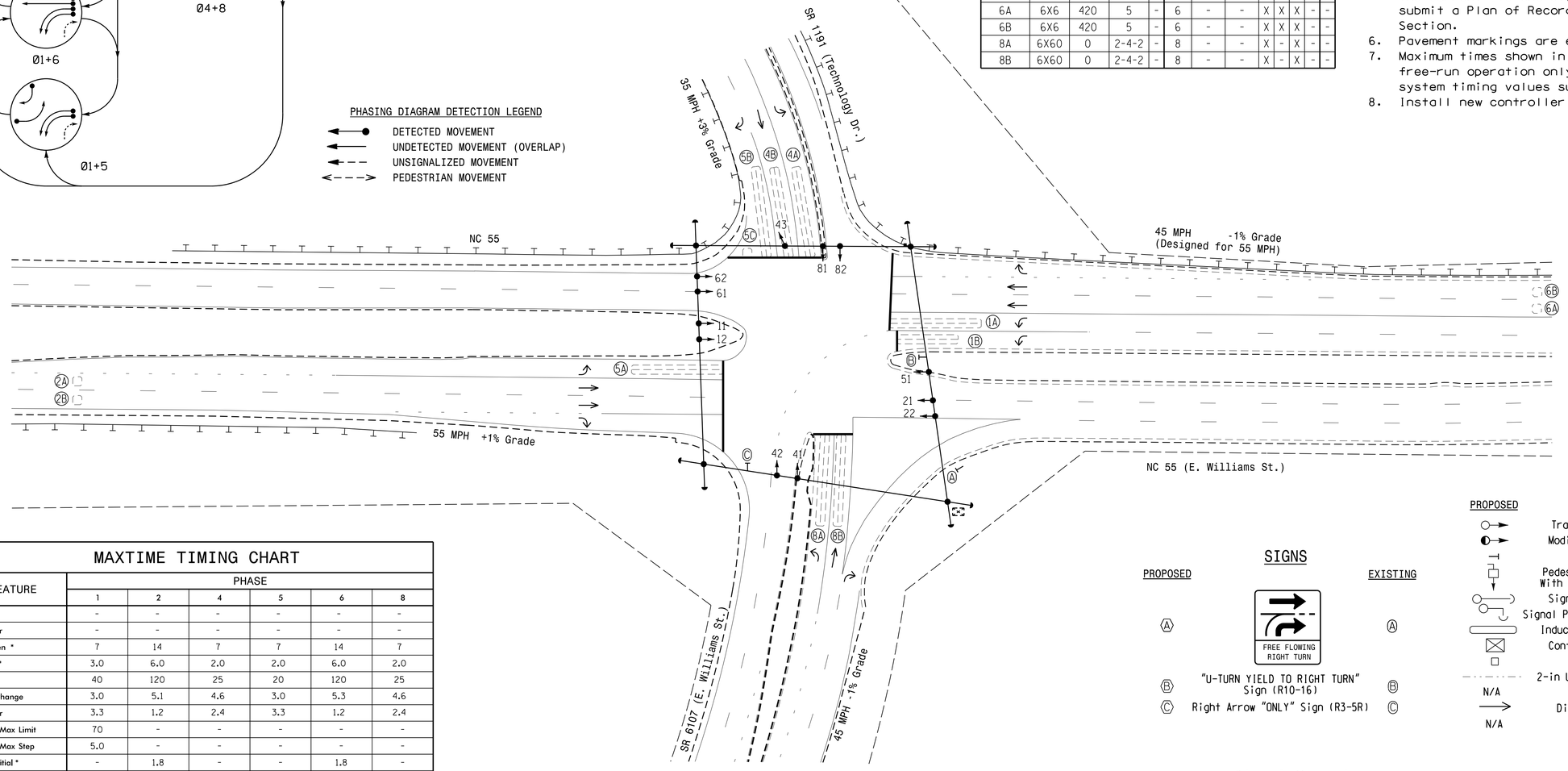
5 Phase
Fully Actuated
(Holly Springs System)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or phase 5 may be lagged.
4. Set all detector units to presence mode.
5. In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
6. Pavement markings are existing.
7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
8. Install new controller in existing cabinet.

PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT



MAXTIME TIMING CHART

FEATURE	PHASE 1	2	4	5	6	8
Walk *	-	-	-	-	-	-
Ped Clear	-	-	-	-	-	-
Min Green *	7	14	7	7	14	7
Passage *	3.0	6.0	2.0	2.0	6.0	2.0
Max 1 *	40	120	25	20	120	25
Yellow Change	3.0	5.1	4.6	3.0	5.3	4.6
Red Clear	3.3	1.2	2.4	3.3	1.2	2.4
Dynamic Max Limit	70	-	-	-	-	-
Dynamic Max Step	5.0	-	-	-	-	-
Added Initial *	-	1.8	-	-	1.8	-
Maximum Initial *	-	46	-	-	46	-
Time Before Reduction *	-	20	-	-	20	-
Time To Reduce *	-	30	-	-	30	-
Minimum Gap	-	3.4	-	-	3.4	-
Advance Walk	-	-	-	-	-	-
Non Lock Detector	X	-	X	X	-	X
Vehicle Recall	-	MIN RECALL	-	-	MIN RECALL	-
Dual Entry	-	-	X	-	-	X

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

SIGNS

PROPOSED		EXISTING
A		A
B	"U-TURN YIELD TO RIGHT TURN" Sign (R10-16)	B
C	Right Arrow "ONLY" Sign (R3-5R)	C

LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
N/A	Guardrail	

Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared In the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy.Garner,NC 27529

NC 55
at
SR 6107 (E. Williams Street)
and SR 1191 (Technology Drive)

Division 5 Wake County Apex

PLAN DATE: February 2024 REVIEWED BY:
PREPARED BY: J.A. Lohr REVIEWED BY:

SCALE 0 40 1"=40"

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 026486 ENGINEER ROBERT J. ZIEMBA
DocuSigned by: Robert J. Ziemba 04/10/2024
DATE

SIG. INVENTORY NO. 05-1999

09-APR-2024 15:02
#\DOT\dfs\dot01\Groups-TECC#ITSASU#ITS Signals#Signal Design Section#Central Region#Div 5#C-5600R Holly Springs#051999_sig_dsn_2024mmd.dgn
JALohr

TOWN OF APEX
POST OFFICE BOX 250
APEX, NORTH CAROLINA 27502
PHONE 919-249-3426

PUBLIC NOTIFICATION OF PUBLIC HEARINGS

CONDITIONAL ZONING #26CZ02
Jessie Commons PUD Amendment

Pursuant to the provisions of North Carolina General Statutes §160D-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Planning Board of the Town of Apex. The purpose of these hearings is to consider the following:

Applicant: Paxton Hollar, Strategic Real Estate Partners
Authorized Agents: Jason Barron and Leticia Shapiro, Morningstar Law Group; Jeff Roach, Peak Engineering and Design; Town of Apex
Property Addresses: 1701, 0, 0, and (a portion of) 1615 E. Williams Street
Acreage: ±64.37 acres
Property Identification Numbers (PINs): 0751003311, 0751011288, 0741915068 & 0741911743 (portion of)
2045 Land Use Map Designation: Commercial Services & Office Employment/Industrial Employment
Existing Zoning of Properties: Planned Unit Development-Conditional Zoning (PUD-CZ #06CZ26)
Proposed Zoning of Properties: Planned Unit Development-Conditional Zoning (PUD-CZ)

Public Hearing Location: Apex Town Hall
Council Chamber, 2nd Floor
73 Hunter Street, Apex, North Carolina

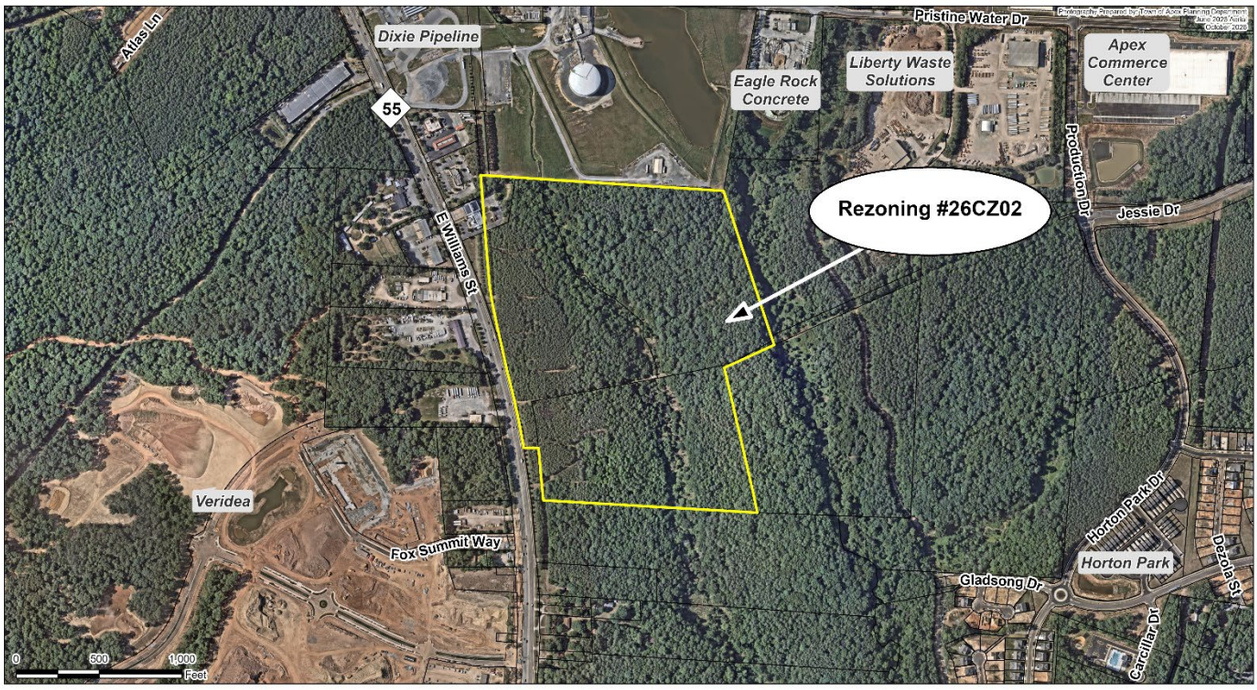
Planning Board Public Hearing Date and Time: October 12, 2026 4:30 PM

You may attend the meeting in person or view the meeting through the Town's YouTube livestream at: https://www.youtube.com/c/townofapexgov.

If you are unable to attend, you may provide a written statement by email to public.hearing@apexnc.org, or submit it to the clerk of the Planning Board, Jeri Pederson (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Planning Board vote. You must provide your name and address for the record. The written statements will be delivered to the Planning Board prior to their vote. Please include the Public Hearing name in the subject line.

A separate notice of the Town Council public hearing on this project will be mailed and posted in order to comply with State public notice requirements.

Vicinity Map:



Property owners, tenants, and neighborhood associations within 500 feet of the proposed conditional zoning have been sent this notice via first class mail. All interested parties may submit comments with respect to the application by the means specified above. In addition to the above map, the location of the property may be viewed online at https://maps.raleighnc.gov/imaps. The 2045 Land Use Map may be viewed online at www.apexnc.org/DocumentCenter/View/478. You may call 919-249-3426, Planning Department, with questions or for further information. To view the petition and related documents on-line: https://www.apexnc.org/DocumentCenter/View/53678.

Dianne F. Khin, AICP
Planning Director

Published Dates: October 2- October 12, 2026

TOWN OF APEX
PO BOX 250
APEX, NORTH CAROLINA 27502
TELÉFONO 919-249-3426

NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

ORDENAMIENTO TERRITORIAL CONDICIONAL #26CZ02
Jessie Commons PUD Amendment

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte §160D-602 y con la Sección 2.2.11 de la Ordenanza de Desarrollo Unificado (UDO) del ayuntamiento de Apex, por la presente se notifican las audiencias públicas ante la Junta de Planificación de Apex. El propósito de estas audiencias es considerar lo siguiente:

Solicitante: Paxton Hollar, Strategic Real Estate Partners
Agente autorizado: Jason Barron and Leticia Shapiro, Morningstar Law Group; Jeff Roach, Peak Engineering and Design; Town of Apex
Dirección de las propiedades: 1701, 0, 0, and (parte de) 1615 E. Williams Street
Superficie: ±64.37 acres
Números de identificación de las propiedades: 0751003311, 0751011288, 0741915068 & 0741911743 (parte de)
Designación actual en el Mapa de Uso Territorial para 2045: Commercial Services and Office Employment/Industrial Employment
Ordenamiento territorial existente de las propiedades: Planned Unit Development-Conditional Zoning (PUD-CZ #06CZ26)
Ordenamiento territorial propuesto para las propiedades: Planned Unit Development-Conditional Zoning (PUD-CZ)

Lugar de la audiencia pública: Ayuntamiento de Apex
Cámara del Consejo, 2º piso
73 Hunter Street, Apex, Carolina del Norte

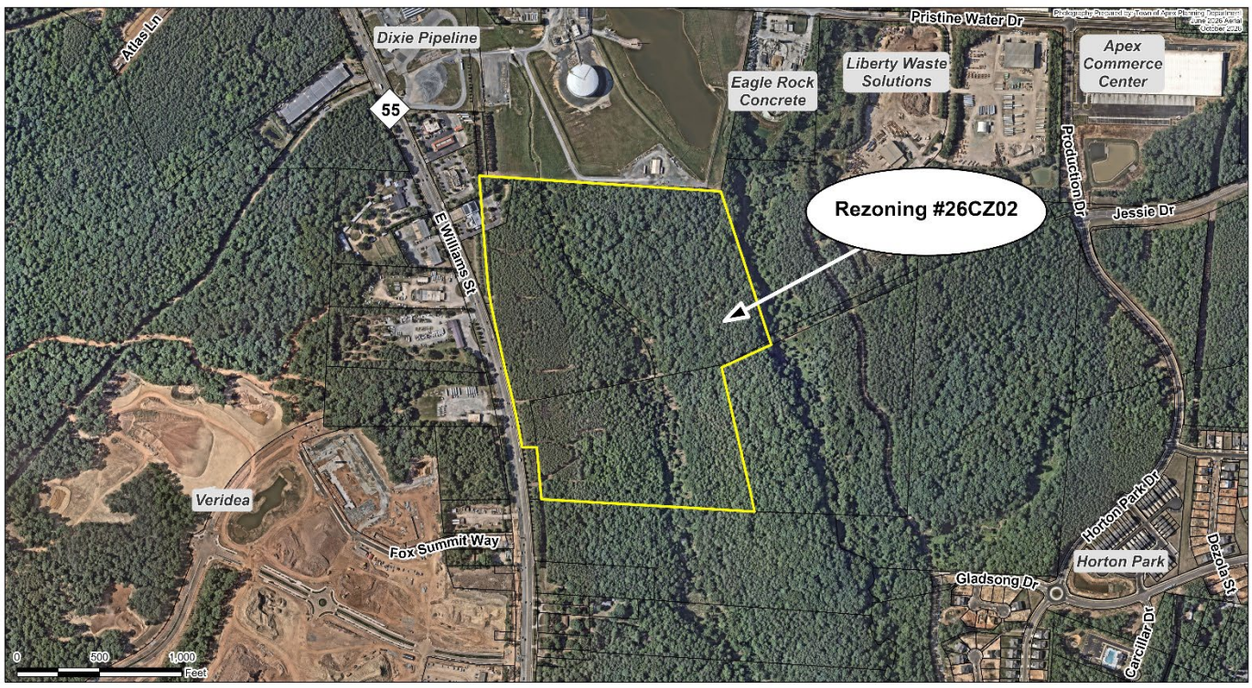
Fecha y hora de la audiencia pública de la Junta de Planificación: 12 de octubre de 2026 4:30 P.M.

Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a public.hearing@apexnc.org, o presentarla a la secretaría de la Junta de Planificación, Jeri Pederson (73 Hunter Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos días hábiles antes de la votación de la Junta de Planificación. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán a la Junta de Planificación antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

De conformidad con los requisitos estatales de notificaciones públicas, se enviará por correo y se publicará por separado una notificación de la audiencia pública del Consejo Municipal sobre este proyecto.

Mapa de las inmediaciones:



Los propietarios, inquilinos y asociaciones de vecinos en un radio de 500 pies del Ordenamiento Territorial Condicional propuesto han recibido esta notificación por correo postal de primera clase. Todas las partes interesadas pueden presentar comentarios sobre la solicitud a través de los medios especificados anteriormente. La ubicación de la propiedad también puede verse aquí: https://maps.raleighnc.gov/imaps. Puede ver el Mapa de Uso Territorial para 2045 aquí: www.apexnc.org/DocumentCenter/View/478. Si tiene preguntas o desea obtener más información, puede comunicarse con el Departamento de Planificación al 919-249-3426. Puede ver la solicitud y otros documentos relacionados aquí: https://www.apexnc.org/DocumentCenter/View/53678.

Dianne F. Khin, AICP
Directora de Planificación

Fechas de publicación: 2 de octubre – 12 de octubre de 2026

AGENDA
https://www.apexnc.org/DocumentCenter/View/56612/26CZ02-PB-Public-Notice-Combined?bidl...
Maps/GIS | Team Apex Landin... | SharePoint Folders | Planning Tools | GeoCivix Home | Unified Developm...
1 of 2

TOWN OF APEX
POST OFFICE BOX 250
APEX, NORTH CAROLINA 27502
PHONE 919-249-3426

PUBLIC NOTIFICATION
OF PUBLIC HEARINGS
CONDITIONAL ZONING #26CZ02
Jessie Commons PUD Amendment

Pursuant to the provisions of North Carolina General Statutes §160D-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Planning Board of the Town of Apex. The purpose of these hearings is to consider the following:

Applicant: Paxton Hollar, Strategic Real Estate Partners
Authorized Agents: Jason Barron and Leticia Shapiro, Morningstar Law Group; Jeff Roach, Peak Engineering and Design; Town of Apex
Property Addresses: 1701, 0, 0, and (a portion of) 1615 E. Williams Street
Acreage: ±64.37 acres
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2045 Land Use Map Designation: Commercial Services & Office Employment/Industrial Employment
Existing Zoning of Properties: Planned Unit Development-Conditional Zoning (PUD-CZ #06CZ26)
Proposed Zoning of Properties: Planned Unit Development-Conditional Zoning (PUD-CZ)

Public Hearing Location: Apex Town Hall
Council Chamber, 2nd Floor
73 Hunter Street, Apex, North Carolina

Planning Board Public Hearing Date and Time: October 12, 2026 4:30 PM

You may attend the meeting in person or view the meeting through the Town's YouTube livestream at: https://www.youtube.com/c/townofapexgov.

If you are unable to attend, you may provide a written statement by email to public.hearing@apexnc.org, or submit it to the clerk of the Planning Board, Jeri Pederson (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Planning Board vote. You must provide your name and address for the record. The written statements will be delivered to the Planning Board prior to their vote. Please include the Public Hearing name in the subject line.

A separate notice of the Town Council public hearing on this project will be mailed and posted in order to comply with State public notice requirements.

Vicinity Map:



Property owners, tenants, and neighborhood associations within 500 feet of the proposed conditional zoning have been sent this notice via first class mail. All interested parties may submit comments with respect to the application by the means specified above. In addition to the above map, the location of the property may be viewed online at https://maps.raleighnc.gov/imaps. The 2045 Land Use Map may be viewed online at www.apexnc.org/DocumentCenter/View/478. You may call 919-249-3426, Planning Department, with questions or for further information. To view the petition and related documents on-line: https://www.apexnc.org/DocumentCenter/View/53678.

Dianne F. Khin, AICP
Planning Director

Published Dates: October 2- October 12, 2026

MIN - NSH
Video highlight
10:39 AM
10/2/2026

AGENDA
https://www.apexnc.org/DocumentCenter/View/56612/26CZ02-PB-Public-Notice-Combined?bidI...
Maps/GIS | Team Apex Landin... | SharePoint Folders | Planning Tools | GeoCivix Home | Unified Developm...
2 of 2

TOWN OF APEX
PO BOX 250
APEX, NORTH CAROLINA 27502
TELÉFONO 919-249-3426

NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS
ORDENAMIENTO TERRITORIAL CONDICIONAL #26CZ02
Jessie Commons PUD Amendment

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte §160D-602 y con la Sección 2.2.11 de la Ordenanza de Desarrollo Unificado (UDO) del ayuntamiento de Apex, por la presente se notifican las audiencias públicas ante la Junta de Planificación de Apex. El propósito de estas audiencias es considerar lo siguiente:

Solicitante: Paxton Hollar, Strategic Real Estate Partners
Agente autorizado: Jason Barron and Leticia Shapiro, Morningstar Law Group; Jeff Roach, Peak Engineering and Design; Town of Apex
Dirección de las propiedades: 1701, 0, 0, and (parte de) 1615 E. Williams Street
Superficie: ±64.37 acres
Números de identificación de las propiedades: 0751003311, 0751011288, 0741915068 & 0741911743 (parte de)
Designación actual en el Mapa de Uso Territorial para 2045: Commercial Services and Office Employment/Industrial Employment
Ordenamiento territorial existente de las propiedades: Planned Unit Development-Conditional Zoning (PUD-CZ #06CZ26)
Ordenamiento territorial propuesto para las propiedades: Planned Unit Development-Conditional Zoning (PUD-CZ)

Lugar de la audiencia pública: Ayuntamiento de Apex
Cámara del Consejo, 2º piso
73 Hunter Street, Apex, Carolina del Norte

Fecha y hora de la audiencia pública de la Junta de Planificación: 12 de octubre de 2026 4:30 P.M.
Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a public.hearing@apexnc.org, o presentarla a la secretaría de la Junta de Planificación, Jeri Pederson (73 Hunter Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos días hábiles antes de la votación de la Junta de Planificación. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán a la Junta de Planificación antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

De conformidad con los requisitos estatales de notificaciones públicas, se enviará por correo y se publicará por separado una notificación de la audiencia pública del Consejo Municipal sobre este proyecto.

Mapa de las inmediaciones:



Los propietarios, inquilinos y asociaciones de vecinos en un radio de 500 pies del Ordenamiento Territorial Condicional propuesto han recibido esta notificación por correo postal de primera clase. Todas las partes interesadas pueden presentar comentarios sobre la solicitud a través de los medios especificados anteriormente. La ubicación de la propiedad también puede verse aquí: https://maps.raleighnc.gov/imaps. Puede ver el Mapa de Uso Territorial para 2045 aquí: www.apexnc.org/DocumentCenter/View/478. Si tiene preguntas o desea obtener más información, puede comunicarse con el Departamento de Planificación al 919-249-3426. Puede ver la solicitud y otros documentos relacionados aquí: https://www.apexnc.org/DocumentCenter/View/53678.

Dianne F. Khin, AICP
Directora de Planificación

Fechas de publicación: 2 de octubre – 12 de octubre de 2026

MIN - NSH
Video highlight
10:40 AM
10/2/2026

TOWN OF APEX
POST OFFICE BOX 250
APEX, NORTH CAROLINA 27502
PHONE 919-249-3426

AFFIDAVIT CERTIFYING
Public Notification – Written (Mailed) Notice

Section 2.2.11
Town of Apex Unified Development Ordinance

Project Name:	Conditional Zoning #26CZ02 Jessie Commons PUD Amendment
Project Location:	1701, 0, 0, and (a portion of) 1615 E. Williams Street
Applicant and Authorized Agent(s):	Paxton Hollar, Strategic Real Estate Partners Jason Barron and Leticia Shapiro, Morningstar Law Group; Jeff Roach, Peak Engineering and Design; Town of Apex
Planning Board Public Hearing Date:	October 12, 2026
Project Planner:	June Cowles, Senior Planner

This is to certify that I, as Planning Director, mailed or caused to have mailed by first class postage for the above mentioned project on October 2, 2026, a notice containing the time and place, location, nature and scope of the application, where additional information may be obtained, and the opportunity for interested parties to be heard, to the property owners and tenants within 500' of the land subject to notification. I further certify that I relied on information from the Wake County Tax Assessor and the Town of Apex Master Address Repository provided to me by Town of Apex GIS Staff as to accuracy of the list and accuracy of mailing addresses of property owners and tenants within 500' of the land subject to notification.

10/5/2026
Date

Planning Director

STATE OF NORTH CAROLINA
COUNTY OF WAKE

Sworn and subscribed before me, LAUREN J SISSON, a Notary Public for the above State and County, this the 5th day of OCTOBER, 2026.

Notary Public

LAUREN J SISSON
Notary Public - North Carolina
Wake County
My Commission Expires Oct 3, 2027

My Commission Expires: 10/3/2027

TOWN OF APEX
POST OFFICE BOX 250
APEX, NORTH CAROLINA 27502
PHONE 919-249-3426

PUBLIC NOTIFICATION OF PUBLIC HEARINGS

CONDITIONAL ZONING #26CZ02
Jessie Commons PUD Amendment

Pursuant to the provisions of North Carolina General Statutes §160D-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Planning Board and Town Council of the Town of Apex. The purpose of these hearings is to consider the following:

Applicant: Paxton Hollar, Strategic Real Estate Partners
Authorized Agents: Jason Barron and Leticia Shapiro, Morningstar Law Group**;** Jeff Roach, Peak Engineering and Design; Town of Apex
Property Addresses: 1701, 0, 0, and (a portion of) 1615 E. Williams Street
Acreage: ±64.37 acres
Property Identification Numbers (PINs): 0751003311, 0751011288, 0741915068, & 0741911743 (portion of)
2045 Land Use Map Designation: Commercial Services and Office Employment/Industrial Employment
Existing Zoning of Properties: Planned Unit Development-Conditional Zoning (PUD-CZ #06CZ26)
Proposed Zoning of Properties: Planned Unit Development-Conditional Zoning (PUD-CZ)

Public Hearing Location: Apex Town Hall
Council Chamber, 2nd Floor
73 Hunter Street, Apex, North Carolina

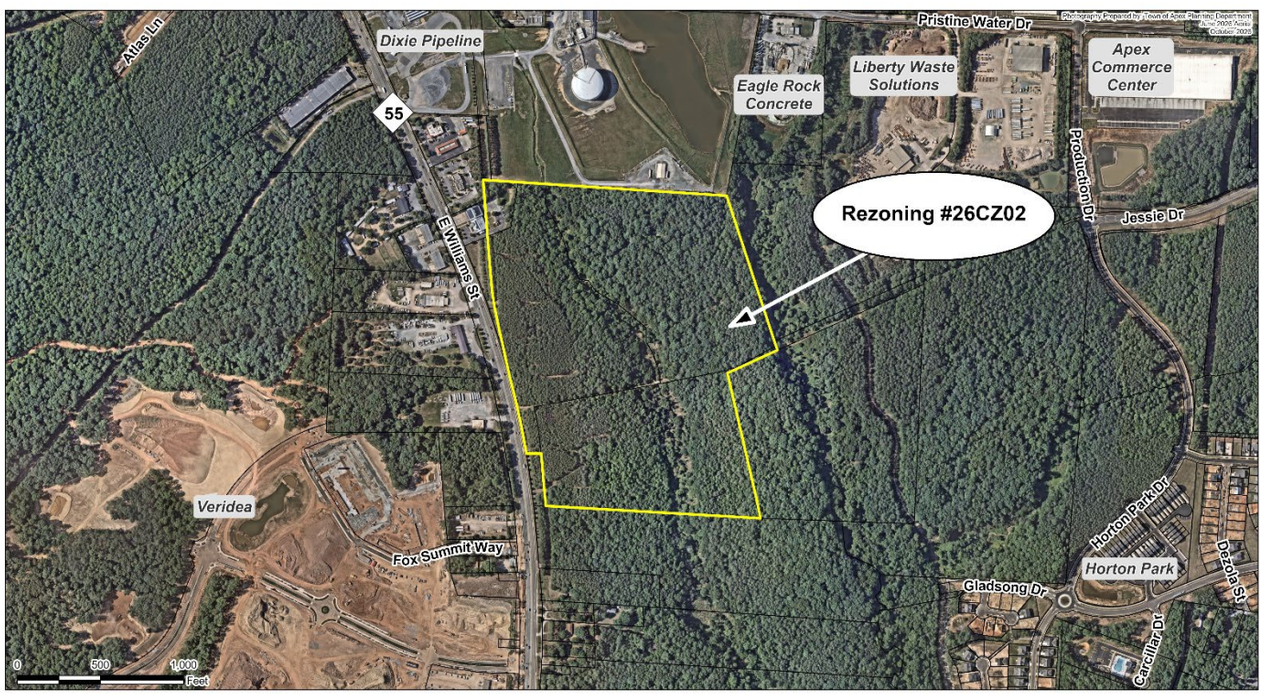
Comments received prior to the Planning Board public hearing will not be provided to the Town Council. Separate comments for the Town Council public hearing must be provided by the deadline specified below.

Town Council Public Hearing Date and Time: October 27, 2026 6:00 PM

You may attend the meeting in person or view the meeting through the Town's YouTube livestream at: https://www.youtube.com/c/townofapexgov.

If you are unable to attend, you may provide a written statement by email to public.hearing@apexnc.org, or submit it to the Office of the Town Clerk (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Town Council vote. You must provide your name and address for the record. The written statements will be delivered to the Town Council prior to their vote. Please include the Public Hearing name in the subject line.

Vicinity Map:



Property owners, tenants, and neighborhood associations within 500 feet of the proposed conditional zoning have been sent this notice via first class mail. All interested parties may submit comments with respect to the application by the means specified above. In addition to the above map, the location of the property may be viewed online at https://maps.raleighnc.gov/imaps. The 2045 Land Use Map may be viewed online at www.apexnc.org/DocumentCenter/View/478. You may call 919-249-3426, Planning Department, with questions or for further information. To view the petition and related documents on-line: https://www.apexnc.org/DocumentCenter/View/53678.

Dianne F. Khin, AICP
Planning Director

Published Dates: October 5– October 27, 2026

TOWN OF APEX
PO BOX 250
APEX, NORTH CAROLINA 27502
TELÉFONO 919-249-3426

NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

ORDENAMIENTO TERRITORIAL CONDICIONAL #26CZ02
Jessie Commons PUD Amendment

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte §160D-602 y con la Sección 2.2.11 de la Ordenanza de Desarrollo Unificado (UDO) del ayuntamiento de Apex, por la presente se notifican las audiencias públicas ante el Consejo Municipal del Ayuntamiento de Apex. El propósito de estas audiencias es considerar lo siguiente:

Solicitante: Paxton Hollar, Strategic Real Estate Partners
Agente autorizado: Jason Barron and Leticia Shapiro, Morningstar Law Group; Jeff Roach, Peak Engineering and Design; Town of Apex
Dirección de las propiedades: 1701, 0, 0, and (parte de) 1615 E. Williams Street
Superficie: ±64.37 acres
Números de identificación de las propiedades: 0751003311; 0751011288; 0741915068 & 0741911743 (parte de)
Designación actual en el Mapa de Uso Territorial para 2045: Commercial Services and Office Employment/Industrial Employment
Ordenamiento territorial existente de las propiedades: Planned Unit Development-Conditional Zoning (PUD-CZ #06CZ26)
Ordenamiento territorial propuesto para las propiedades: Planned Unit Development-Conditional Zoning (PUD-CZ)

Lugar de la audiencia pública: Ayuntamiento de Apex
Cámara del Consejo, 2º piso
73 Hunter Street, Apex, Carolina del Norte

Los comentarios recibidos antes de la audiencia pública de la Junta de Planificación no se proporcionarán al Consejo Municipal. Los comentarios para la audiencia pública del Consejo Municipal deben presentarse por separado en el plazo especificado a continuación.

Fecha y hora de la audiencia pública del Consejo Municipal: 27 de octubre de 2026 6:00 P.M.

Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a public.hearing@apexnc.org, o presentarla a la oficina del Secretario Municipal (73 Hunter Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos días hábiles antes de la votación del Consejo Municipal. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán al Consejo Municipal antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

Mapa de las inmediaciones:



Los propietarios, inquilinos y asociaciones de vecinos en un radio de 500 pies del Ordenamiento Territorial Condicional propuesto han recibido esta notificación por correo postal de primera clase. Todas las partes interesadas pueden presentar comentarios sobre la solicitud a través de los medios especificados anteriormente. La ubicación de la propiedad también puede verse aquí: https://maps.raleighnc.gov/imaps. Puede ver el Mapa de Uso Territorial para 2045 aquí: www.apexnc.org/DocumentCenter/View/478. Si tiene preguntas o desea obtener más información, puede comunicarse con el Departamento de Planificación al 919-249-3426. Puede ver la solicitud y otros documentos relacionados aquí: https://www.apexnc.org/DocumentCenter/View/53678.

Dianne F. Khin, AICP
Directora de Planificación

Fechas de publicación: 5 de octubre- 27 de octubre de 2026

Legal Notice of Public Hearings / C
AGENDA
https://www.apexnc.org/DocumentCenter/View/56649/26CZ02-TC-Publi...
Update
Maps/GIS
Team Apex Landin...
SharePoint Folders
Planning Tools
GeoCivix Home
1 of 2

TOWN OF APEX
POST OFFICE BOX 250
APEX, NORTH CAROLINA 27502
PHONE 919-249-3426

PUBLIC NOTIFICATION
OF PUBLIC HEARINGS
CONDITIONAL ZONING #26CZ02
Jessie Commons PUD Amendment

Pursuant to the provisions of North Carolina General Statutes §160D-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Planning Board and Town Council of the Town of Apex. The purpose of these hearings is to consider the following:

Applicant: Paxton Hollar, Strategic Real Estate Partners
Authorized Agents: Jason Barron and Leticia Shapiro, Morningstar Law Group; Jeff Roach, Peak Engineering and Design; Town of Apex
Property Addresses: 1701, 0, 0, and (a portion of) 1615 E. Williams Street
Acreage: ±64.37 acres
Property Identification Numbers (PINs): 0751003311, 0751011288, 0741915068, & 0741911743 (portion of)
2045 Land Use Map Designation: Commercial Services and Office Employment/Industrial Employment
Existing Zoning of Properties: Planned Unit Development-Conditional Zoning (PUD-CZ #06CZ26)
Proposed Zoning of Properties: Planned Unit Development-Conditional Zoning (PUD-CZ)

Public Hearing Location: Apex Town Hall
Council Chamber, 2nd Floor
73 Hunter Street, Apex, North Carolina

Comments received prior to the Planning Board public hearing will not be provided to the Town Council. Separate comments for the Town Council public hearing must be provided by the deadline specified below.

Town Council Public Hearing Date and Time: October 27, 2026 6:00 PM

You may attend the meeting in person or view the meeting through the Town's YouTube livestream at: https://www.youtube.com/c/townofapexgov.

If you are unable to attend, you may provide a written statement by email to public.hearing@apexnc.org, or submit it to the Office of the Town Clerk (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Town Council vote. You must provide your name and address for the record. The written statements will be delivered to the Town Council prior to their vote. Please include the Public Hearing name in the subject line.

Vicinity Map:



Property owners, tenants, and neighborhood associations within 500 feet of the proposed conditional zoning have been sent this notice via first class mail. All interested parties may submit comments with respect to the application by the means specified above. In addition to the above map, the location of the property may be viewed online at https://maps.raleighnc.gov/imaps. The 2045 Land Use Map may be viewed online at www.apexnc.org/DocumentCenter/View/478. You may call 919-249-3426, Planning Department, with questions or for further information. To view the petition and related documents on-line: https://www.apexnc.org/DocumentCenter/View/53678.

Dianne F. Khin, AICP
Planning Director

Published Dates: October 5– October 27, 2026

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10/5/2026

Legal Notice of Public Hearings / C
AGENDA
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Update
Maps/GIS
Team Apex Landin...
SharePoint Folders
Planning Tools
GeoCivix Home
2 of 2

TOWN OF APEX
PO BOX 250
APEX, NORTH CAROLINA 27502
TELÉFONO 919-249-3426

NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS
ORDENAMIENTO TERRITORIAL CONDICIONAL #26CZ02
Jessie Commons PUD Amendment

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte §160D-602 y con la Sección 2.2.11 de la Ordenanza de Desarrollo Unificado (UDO) del ayuntamiento de Apex, por la presente se notifican las audiencias públicas ante el Consejo Municipal del Ayuntamiento de Apex. El propósito de estas audiencias es considerar lo siguiente:

Solicitante: Paxton Hollar, Strategic Real Estate Partners
Agente autorizado: Jason Barron and Leticia Shapiro, Morningstar Law Group; Jeff Roach, Peak Engineering and Design; Town of Apex
Dirección de las propiedades: 1701, 0, 0, and (parte de) 1615 E. Williams Street
Superficie: ±64.37 acres
Números de identificación de las propiedades: 0751003311; 0751011288; 0741915068 & 0741911743 (parte de)
Designación actual en el Mapa de Uso Territorial para 2045: Commercial Services and Office Employment/Industrial Employment
Ordenamiento territorial existente de las propiedades: Planned Unit Development-Conditional Zoning (PUD-CZ #06CZ26)
Ordenamiento territorial propuesto para las propiedades: Planned Unit Development-Conditional Zoning (PUD-CZ)

Lugar de la audiencia pública: Ayuntamiento de Apex
Cámara del Consejo, 2º piso
73 Hunter Street, Apex, Carolina del Norte

Los comentarios recibidos antes de la audiencia pública de la Junta de Planificación no se proporcionarán al Consejo Municipal. Los comentarios para la audiencia pública del Consejo Municipal deben presentarse por separado en el plazo especificado a continuación.

Fecha y hora de la audiencia pública del Consejo Municipal: 27 de octubre de 2026 6:00 P.M.
Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a public.hearing@apexnc.org, o presentarla a la oficina del Secretario Municipal (73 Hunter Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos días hábiles antes de la votación del Consejo Municipal. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán al Consejo Municipal antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

Mapa de las inmediaciones:



Los propietarios, inquilinos y asociaciones de vecinos en un radio de 500 pies del Ordenamiento Territorial Condicional propuesto han recibido esta notificación por correo postal de primera clase. Todas las partes interesadas pueden presentar comentarios sobre la solicitud a través de los medios especificados anteriormente. La ubicación de la propiedad también puede verse aquí: https://maps.raleighnc.gov/imaps. Puede ver el Mapa de Uso Territorial para 2045 aquí: www.apexnc.org/DocumentCenter/View/478. Si tiene preguntas o desea obtener más información, puede comunicarse con el Departamento de Planificación al 919-249-3426. Puede ver la solicitud y otros documentos relacionados aquí: https://www.apexnc.org/DocumentCenter/View/53678.

Dianne F. Khin, AICP
Directora de Planificación

Fechas de publicación: 5 de octubre- 27 de octubre de 2026

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10/5/2026

TOWN OF APEX
POST OFFICE BOX 250
APEX, NORTH CAROLINA 27502
PHONE 919-249-3426

AFFIDAVIT CERTIFYING
Public Notification – Written (Mailed) Notice

Section 2.2.11
Town of Apex Unified Development Ordinance

Project Name:	Conditional Zoning #26CZ02 Jessie Commons PUD Amendment
Project Location:	1701, 0, 0, and (a portion of) 1615 E. Williams Street
Applicant or Authorized Agent:	Paxton Hollar, Strategic Real Estate Partners Jason Barron and Leticia Shapiro, Morningstar Law Group; Jeff Roach, Peak Engineering and Design; Town of Apex
Town Council Public Hearing Date:	October 27, 2026
Project Planner:	June Cowles, Senior Planner

This is to certify that I, as Planning Director, mailed or caused to have mailed by first class postage for the above mentioned project on October 5, 2026, a notice containing the time and place, location, nature and scope of the application, where additional information may be obtained, and the opportunity for interested parties to be heard, to the property owners and tenants within 500' of the land subject to notification. I further certify that I relied on information from the Wake County Tax Assessor and the Town of Apex Master Address Repository provided to me by Town of Apex GIS Staff as to accuracy of the list and accuracy of mailing addresses of property owners and tenants within 500' of the land subject to notification.

10/5/2026
Date

Planning Director

STATE OF NORTH CAROLINA
COUNTY OF WAKE

Sworn and subscribed before me, LAUREN J SISSON, a Notary Public for the above State and County, this the 5th day of OCTOBER, 2026.

Notary Public

LAUREN J SISSON
Notary Public - North Carolina
Wake County
My Commission Expires Oct 3, 2027

My Commission Expires: 10/3/2027



Public Hearing Sign Posted By:

Signature

3/18/26

Date

Attachment 1: Applicant's Proposed Conditions Compared to Staff's Requested Conditions

Jessie Commons Condition Comparison (Difference)	
Applicant's Proposed Conditions:	**Apex TID Proposed Conditions**
NC 55 at Jessie Drive Extension: • Construct the new intersection as a full-movement configuration and designed to allow for future conversion of this intersection (by others) to RCI. • Terminate one of the westbound lanes of Jessie Drive Extension as a right-turn lane and the other westbound lane as a left-turn lane. Construct a second westbound left-turn lane with 350 feet of full width storage and appropriate tapers, subject to NCDOT approval. • Construct an exclusive northbound right-turn lane on NC 55 with 100 feet of full width storage, 50 feet of deceleration, and 100 feet of taper. • Construct dual southbound left-turn lanes on NC 55, each with 250 feet of full width storage, 50 feet of deceleration, and 100 feet of taper. • Install a traffic signal for the full-movement intersection configuration.	**NC 55 at Jessie Drive Extension:** • Developer shall construct the intersection of NC 55 (E. Williams St) and Jessie Drive as a Reduced Conflict Intersection (RCI) allowing left-in/right-in/right-out movements paired with a northern U-turn location meeting NCDOT standards. a. The intersection configuration of NC 55 at Jessie Drive shall consist of: i. Dual westbound right-turn lanes on Jessie Drive. ii. An exclusive northbound right-turn lane with 100 feet of full width storage, 50 feet of deceleration and 100 feet of taper. iii. An additional (third) northbound through lane from the southern property line terminating as a right-turn lane at Site Access A. iv. An additional (third) southbound through lane from approximately 1,200 feet north of Site Access A (where previously approved frontage widening planned for Veridea terminates) to the approved frontage widening planned for Veridea to the south of the site. v. Dual southbound left-turn lanes each with 250 feet of full width storage, 50 feet of deceleration and 100 feet of taper. vi. Dual northbound left-turn lanes each with 200 feet of full width storage, 50 feet of deceleration and 100 feet of taper at the U-turn location. vii. Installation of traffic signals.

Attachment 1

	b. If Offsite ROW cannot be obtained for construction of the northern dual lane U-turn to serve the RCI according to the process in Condition 6, then Developer shall pay the applicable fee in lieu and construct a full movement signalized intersection as described below and designed to allow for future conversion to a RCI. ~~o~~ Terminate one of the westbound lanes of Jessie Drive Extension as a right-turn lane and the other westbound lane as a left-turn lane. Construct a second westbound left-turn lane with 350 feet of full width storage plus 50 feet of deceleration and 100 feet of taper. ~~o~~ Construct an additional (third) northbound through lane from the southern property line terminating as a right-turn lane at Site Access A. o Construct northbound right-turn lane on NC 55 with 100 feet of full width storage plus 50 feet of deceleration and 100 feet of taper~~s~~. o Construct an additional (third) southbound through lane from Site Access A to the approved frontage widening planned for Veridea to the south of the site subject to the ability to acquire Offsite ROW according to the process in Condition 6. o Construct dual southbound left-turn lanes on NC 55, each with 250 feet of full width storage, 50 feet of deceleration and 100 feet of taper~~s~~. o Install a traffic signal. • If any of the committed transportation improvements require acquisition of offsite rights of way, easements, or other property interests (the "Offsite ROW"), Developer shall make good faith efforts to acquire the Offsite ROW. If Developer is unable to acquire any Offsite ROW through private negotiation

Attachment 1

	and the Town is unwilling or unable to assist in the acquisition, Developer shall pay a fee in lieu for the transportation improvement that cannot be completed, including estimated cost of acquisition, permitting fees, and construction, subject to Town review and approval of an engineer's estimate provided by the Developer.
Jessie Drive Extension at Site Access C: • Construct Site Access C approximately 700 feet east of NC 55 with full-movement access accommodations to both parcels subject to NCDOT approval. - Construct the northern and southern legs of the intersection with one ingress lane and two egress lanes (exclusive left-turn lane and a shared through/right lane). - Provide 100 feet of IPS on both approaches. • Provide an exclusive eastbound left-turn lane with 150 feet of storage and appropriate tapers, subject to NCDOT approval on Jessie Drive Extension. • Provide an exclusive westbound left-turn lane with 150 feet of storage and appropriate tapers, subject to NCDOT approval on Jessie Drive Extension.	**Jessie Drive Extension at Site Access C** • Developer shall construct Jesse Drive Extension at Site Access C as a directional crossover restricting the northbound approach to right turn only. Southbound left turns and through movements would be accommodated subject to NCDOT design approval. Roadway design plans for all portions of Jessie Drive including private driveway access are required to be reviewed and approved by both Apex and NCDOT to be eligible for future state maintenance when ultimately accepted by NCDOT as a state route.
Jessie Drive Extension at Site Access E: • Construct the easternmost site driveway on the north and south side of Jessie Drive (Site Access E), approximately 1,300 feet east of NC 55, as a full movement intersection with 100 feet of IPS.	**Jessie Drive Extension at Site Access E** • Developer shall provide an eastbound left-turn lane with a minimum of 150 feet of full-width storage plus appropriate taper. • The intersection shall be designed to accommodate

Attachment 1

• Provide an exclusive eastbound left-turn lane on Jessie Drive with 100 feet of full width storage plus 50 feet of deceleration and 100 feet of taper. • Provide a westbound left-turn lane on Jessie Drive to the extent possible until Jessie Drive terminates in advance of the property boundary.	eastbound U-turns based on a minimum BUS-40 design vehicle subject to NCDOT design approval.