

STAFF REPORT

Rezoning #19CZ25 Jenks & Wimberly Mixed Use PUD

February 18, 2020 Town Council Meeting



All property owners within three hundred (300) feet of this rezoning have been notified per UDO Sec. 2.2.11 *Public Notification*.

BACKGROUND INFORMATION:

Location: 7912, 8000, & 8016 Jenks Road & 1533 Wimberly Road
Applicant: Jeremy Medlin, Taylor Morrison of Carolinas, Inc.
Authorized Agent: Jason Barron, Morningstar Law Group
Owners: Michael & Alison Cleary, Charles & Frances Lewis, Teresa Kirkpatrick, and Richard & Trisha Hinesley

PROJECT DESCRIPTION:

Acreeage: +/- 14.86 acres
PINs: 0722788252, 0722784193, 0722780191, 0722687241
Current Zoning: Rural Residential (RR)
Proposed Zoning: Planned Unit Development-Conditional Zoning (PUD-CZ)
2045 Land Use Map: Mixed Use: High Density Residential, Office Employment & Commercial Services
Town Limits: In ETJ

ADJACENT ZONING & LAND USES:

	Zoning	Land Use
North:	Planned Unit Development-Conditional Zoning (PUD-CZ #16CZ30)	Single-family & Townhomes (The Preserve at White Oak Creek)
South:	Planned Unit Development-Conditional Zoning (PUD-CZ #18CZ31)	Jenks Road; Townhomes (Townes at Westford)
East:	Planned Unit Development-Conditional Zoning (PUD-CZ #16CZ30 & 18CZ31) Rural Residential (RR)	Single-family & Townhomes (The Preserve at White Oak Creek & Townes at Westford)
West:	Rural Residential (RR)	Wimberly Road; Single-family

EXISTING CONDITIONS:

The site consists of four (4) parcels totaling +/- 14.86 acres. It is located on the northeast quadrant of the intersection of Jenks Road and Wimberly Road. The site contains single-family dwellings and a few outbuildings. The properties are wooded with a few cleared areas and patches of wetlands. The Cardinal and Colonial pipelines run through a portion of the subject properties.

NEIGHBORHOOD MEETING:

The applicant conducted a neighborhood meeting on October 23, 2019. The meeting report is attached to the staff report.

2045 LAND USE MAP:

The 2045 Land Use Map designates the site as Mixed Use: High Density Residential, Office Employment & Commercial Services. The applicant has proposed a rezoning to Planned Unit Development-Conditional Zoning with a maximum density of 8.5 dwelling units per acre. The proposed rezoning also designates approximately 4.53 acres (30%) of the site as non-residential. The proposed rezoning is generally consistent with the Land Use Map designation.

PLANNED UNIT DEVELOPMENT PLAN:

The applicant is proposing a Planned Unit Development with uses and development standards as follows:

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Proposed Uses:

The Rezoned Lands may be used for, and only for, the uses listed immediately below. The permitted uses are subject to the limitations and regulations stated in the UDO and any additional limitations or regulations stated below. For convenience, some relevant sections of the UDO may be referenced; such references do not imply that other sections of the UDO do not apply.

Residential Tract:

- Accessory apartment
- Townhomes
- Greenway
- Recreation Facility, private
- Park, active
- Park, passive
- Utility, minor
- Nursing or convalescent facility

Commercial Tract:

- Day care facility
- Botanical garden
- Entertainment, indoor
- Youth or day camps
- Restaurant, general
- Medical or dental office or clinic
- Office, business or professional
- Publishing office
- Artisan Studio
- Barber and beauty shop
- Book store
- Dry cleaners and laundry service
- Farmer's market
- Financial institution
- Floral shop
- Greenhouse or nursery, retail
- Grocery, general
- Grocery, specialty
- Health/fitness center or spa
- Laundromat
- Newsstand or gift shop
- Personal service
- Pharmacy
- Printing and copying service
- Real estate sales
- Retail sales, general
- Studio for art
- Tailor shop
- Upholstery shop
- Pet services
- Microbrewery
- Greenway
- Recreation Facility, private
- Park, active
- Park, passive
- Utility, minor

Conditions:

- A. A maximum of 87 townhome units shall be permitted upon the property.
- B. A maximum of 22,000 square feet of nonresidential uses shall be permitted upon the property.
- C. All buildings constructed on the property shall provide solar conduit for the installation of rooftop solar panels.
- D. No covenant shall be placed on the property which prohibits accessory apartment as a use.
- E. All dwelling units constructed on the property shall provide solar conduit for the installation of rooftop solar panels.

Architectural Conditions:

The proposed development offers the following architectural controls to ensure a consistency of character throughout the development, while allowing for enough variety to create interest and avoid monotony. Changes

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to the exterior materials, roof, windows, doors, process, trim, etc. are allowable with administrative approval at the staff level. Further details shall be provided at the time of development plan submittal. The following conditions shall apply:

A. For Residential Development:

1. Vinyl siding is not permitted; however, vinyl windows, decorative elements and trim are permitted.
2. Primary building materials will be brick, stone, and fiber cement siding.
3. Windows that are not recessed shall be trimmed. Windows shall vary in size and/or type.
4. At least four of the following decorative features shall be used on each building: decorative shake, board and batten siding, decorative porch rails and posts, shutters, decorative functional foundation and roof vents, recessed windows, decorative windows, decorative brick or stone, decorative gables, decorative cornices, or metal roofing.
5. A varied color palette shall be utilized throughout the development to include a minimum of three-color families for siding and shall include varied trim, shutter, and accent colors complementing the siding color.
6. The rear and side elevations of the units that can be seen from the right-of-way shall have trim around the windows.
7. Front facing garage doors must have windows, decorative details, or carriage-style adornments.
8. Entrances for units with front-facing garages shall have a prominent covered porch/stoop area leading to the front door.
9. Porches constructed with a dwelling unit shall be a minimum of six feet (6') deep.
10. The front façade of any front-loaded garage shall not protrude farther than one foot forward of (i) the front façade of the dwelling unit, or (ii) the front porch of the dwelling unit, whichever is closer to the right-of-way from which the dwelling unit is addressed.

B. For Commercial Development:

- A. The predominant exterior building materials shall be brick, wood, stone, and tinted/textured concrete masonry units.
- B. The building exterior shall have more than one (1) material color.
- C. No more than 20% of any building façade may consist of EIFS material.
- D. EIFS or synthetic stucco shall not be used in the first 4 feet above grade.

Proposed Design Controls:

	Non-Residential Tract	Residential Tract
Parcel Size:	+/- 4.53 acres	+/- 10.33 acres
Maximum Density:	22,000 ft ²	8.5 units/acre
Maximum Residential Units:	N/A	87
Minimum Lot Width:	N/A	22 ft
Maximum Building Height:	50 ft	3 stories/45 ft
Maximum Built-Upon Area:	70%	70%
Building Setbacks:		
Front:	20 ft	15 ft
To garage door:	N/A	20 ft

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	Non-Residential Tract	Residential Tract
Side:	20 ft	5 ft for end units; otherwise 0 ft
Rear:	20 ft	10 ft
Building side to side:	N/A	10 ft
From Buffers/RCA:		
For buildings:	20 ft	10 ft
For parking areas:	10 ft	5 ft

Proposed Resource Conservation Area (RCA) & Buffers:

The project complies with the UDO requirement to preserve or establish at least 25% of the project as RCA. Since townhomes are exempt from the mass grading penalty, the proposed project is not required to follow the new 5% RCA requirement.

Buffers:	Proposed Residential:	UDO Residential:	Proposed Non-residential:	UDO Non-residential:
North boundary	20 ft Type A	15 ft Type A	50 ft Type A	20 ft Type A
Wimberly Road: Thoroughfare	30 ft Type A	30 ft Type B	N/A	N/A
Jenks Road: Thoroughfare	30 ft Type A	30 ft Type B	30 ft Type E	30 ft Type E

Public Facilities:

The Jenks and Wimberly Mixed Use PUD will be served by Town of Apex water, sanitary sewer, and electrical systems. The utility design will be finalized at Master Subdivision Plan review. A conceptual plan is included in the PUD Plan for reference. Public water is currently provided by a water main in Wimberly Road and Jenks Road. Two existing sanitary sewer stubs are provided from the Preserve at White Oak Creek to the north.

Public Art:

The applicant shall provide a 6' x 6' Public Art easement to the Town of Apex along the Jenks Road frontage of the subject property. The precise location for this easement will be determined at the time of development plan review.

Apex Transportation Plan/Access and Circulation:

The proposed development is consistent with the Apex Transportation Plan. Per the Apex Thoroughfare and Collector Street Plan, Wimberly Road is designated as an existing 2-lane Thoroughfare and Jenks Road as a widening 3-lane Thoroughfare. The developer will dedicate right-of-way along their property frontage to meet the minimum right-of-way widths designated in Advance Apex.

The proposed PUD is also in compliance with the Bicycle, Pedestrian and Equestrian Plan. Per the plan, the project is proposing to build a 10-foot wide sidepath along the eastside of Wimberly Road and the north side of Jenks Road. The development shall also provide sidewalks along both sides of all internal streets. The PUD allows for future connectivity, as depicted on the plan sheets.

A traffic study has been performed as part of this PUD rezoning consistent with the Town's standards for the same. Based upon the traffic study, the following traffic improvements are proposed for this development:

- Subject to NCDOT review and approval, Developer shall restripe the two-way left turn (TWLT) lane on the eastbound approach of Jenks Road at the Site Access to accommodate a left turn lane with 100 feet of storage.

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- Subject to NCDOT review and approval, Developer shall construct a southbound left turn lane on Wimberly Road at Jenks Road with 50 feet of storage and appropriate deceleration length and taper.

PARKS, RECREATION, AND CULTURAL RESOURCES ADVISORY COMMISSION:

Based on the Bike Apex and the Parks, Recreation, Greenways, and Open Space Master Plan Maps, greenways and parks are not identified on this property. On January 29, 2020, the Town of Apex Parks, Recreation & Cultural Resources Advisory Commission recommended with Parks, Recreation & Cultural Resources staff support, the acceptance of a fee-in-lieu of public land dedication for the project. The estimated total fee-in-lieu is:

$$87 \text{ townhomes} \quad \times \quad \$2,321.54 \quad = \quad \$201,973.95$$

PLANNING BOARD RECOMMENDATION:

Planning Board heard this proposal at the February 10, 2020 public meeting and recommended approval with a vote of 6-2.

PLANNING STAFF RECOMMENDATION:

Planning staff recommends approval of rezoning #19CZ25 Jenks & Wimberly Mixed Use PUD as submitted by the applicant.

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:

The 2045 Land Use Map designates the site as Mixed Use: High Density Residential, Office Employment & Commercial Services. Located in close proximity to major commercial areas and transportation corridors, the proposed rezoning to Planned Unit Development-Conditional Zoning will have a maximum density of 8.5 dwelling units per acre and designates approximately 4.53 acres (30%) of the site as non-residential. The proposed rezoning is generally consistent with the Land Use Map designation.

The proposed rezoning is reasonable and in the public interest because it will allow this property to develop in a way that is consistent with the surrounding areas, to build sidepaths along Jenks Road and Wimberly Road, to build sidewalks along both sides of internal streets, and to provide increased perimeter buffer widths over the UDO standards.

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 two percent (2%) provided that:
- (i) The PD Plan for PUD-CZ includes a non-residential component; or
 - (ii) The PD Plan for PUD-CZ has an overall density of 6 residential units per acre or more.



- 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 Planned Unit Development–Conditional Zoning (PUD-CZ) designation demonstrates compliance with the following standards. 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.



November 18, 2019

Earl Randall Lewellyn, P.E.
Kimley-Horn and Associates, Inc.
300 West Morgan Street, Suite 1500
Durham, NC 27701

Subject: **Staff summary and comments for the Jenks Road Assemblage TIA,
10/30/2019**

Mr. Lewellyn:

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 studied access to the proposed development at the following two intersections:

- Jenks Road and Site Access 1
- Wimberly Road and Site Access 2

The intersection of Jenks Road and Wimberly Road was also studied in the TIA.

Trip Generation

The proposed development is expected to consist of 88 townhome units as well as 10,440 square feet of medical office and 10,440 square feet of general retail space. It's projected to generate approximately 81 new external trips entering and 66 new external trips exiting the site during the weekday A.M. peak hour and 50 new external trips entering and 57 new external trips exiting the site during the weekday P.M. peak hour. A small portion of internal capture trips was assumed in the TIA, as well as 16% pass-by-trips in the P.M. peak hour. The proposed development is projected to generate a total of 1,424 new trips on the adjacent roadway network.

Background traffic

Background traffic consists of 3% annual background traffic growth compounded to build out year 2023, and the following approved developments:

- Lake Castleberry (40% built, 60% development traffic)
- The Preserve at White Oak Creek (75% built, 25% development traffic)
- Westford Residential (50% built, 50% development traffic)
- Westford Commercial

Trip Distribution and Assignment

The trip distribution to and from the development was assumed to be as follows:

- 50% to/from the northeast via Jenks Road
- 40% to/from the southwest via Jenks Road
- 10% to/from the north via Wimberly Road

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. 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 3 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:

- **Existing 2019** - Existing year 2019 traffic.
- **No Build 2023** – Projected year (2023) with background growth, approved development traffic from others, and committed transportation improvements by others where applicable.
- **Build 2023** – Projected year (2023) with background traffic, background improvements, and site build-out including recommended improvements where applicable.

Jenks Road and Westford Street C/Site Access 1 (unsignalized)

Table 1. A.M. / P.M. Unsignalized Peak Hour Levels of Service Jenks Road and Westford Street C/Site Access 1		
	No Build 2023	Build 2023
<u>Overall</u>	<u>NA</u>	<u>NA</u>
<i>Eastbound (Jenks Road)</i>	NA	A / A ¹
<i>Westbound (Jenks Road)</i>	A / A ¹	A / A ¹
<i>Northbound (Westford Street C)</i>	B / B ²	B / B ²
<i>Southbound (Site Drive 1)</i>	NA	B / B ²

1. Level of service for left turn movement on free-flowing approach.
2. Level of service for stop-controlled minor street approach.

TIA recommendations:

- The TIA recommends construction of a full movement southbound approach across from Westford Street C (Hutch Lane) with a single lane of ingress and a single lane of egress. Additionally the TIA recommends restriping the two-way left turn (TWLT) lane on the eastbound approach of Jenks Road to accommodate a left turn lane with 100 feet of storage.

Apex staff recommendations:

- Apex staff concurs with the recommendations. Based on the analysis, the minor street approaches will operate at LOS B or better during both A.M. and P.M. peak hours, with 95th percentile queues of 25 feet or less. Per NCDOT guidance provide 100 feet of storage and 100 feet of taper for the left turn on Jenks Road.

Wimberly Road and Site Access 2 (unsignalized)

Table 2. A.M. / P.M. Unsignalized Peak Hour Levels of Service Wimberly Road and Site Access 2	
	Build 2023
<u>Overall</u>	<u>NA</u>
<i>Westbound (Site Access 2)</i>	<i>A / A²</i>
<i>Northbound (Wimberly Road)</i>	<i>NA</i>
<i>Southbound (Wimberly Road)</i>	<i>A / A¹</i>

1. Level of service for left turn movement on free-flowing approach.
2. Level of service for stop-controlled minor street approach.

TIA recommendations:

- The TIA recommends construction of a full movement westbound approach approximately 480 feet north of Jenks Road with a single lane of ingress and a single lane of egress.

Apex staff recommendations:

- Apex staff concurs with the full movement driveway, subject to NCDOT review and approval, but recommends the driveway be relocated further north to provide 500 feet of spacing between the centerline of the Site Access driveway and the centerline of the Jenks Road and Wimberly Road intersection. Staff agrees that no other turn lane improvements are necessary at this intersection.

Jenks Road and Wimberly Road (unsignalized)

Table 3. A.M. / P.M. Unsignalized Peak Hour Levels of Service Jenks Road and Wimberly Road/Westford Street B			
	Existing 2019	No Build 2023	Build 2023
<u>Overall</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
<i>Eastbound (Jenks Road)</i>	<i>A / A¹</i>	<i>A / A¹</i>	<i>A / A¹</i>
<i>Westbound (Jenks Road)</i>	<i>A / A¹</i>	<i>A / A¹</i>	<i>A / A¹</i>
<i>Northbound (Westford Street B)</i>	<i>A / B²</i>	<i>B / B²</i>	<i>B / C²</i>
<i>Southbound (Wimberly Road)</i>	<i>B / B²</i>	<i>B / C²</i>	<i>B / C²</i>

1. Level of service for left turn movement on free-flowing approach.
2. Level of service for stop-controlled minor street approach.

TIA recommendations:

- The TIA does not recommend any improvements at this intersection. The analysis results indicated both minor street approaches to operate at LOS C or better during both A.M. and P.M. peak hours with 95th percentile queues to be less than 100 feet in length.

Apex staff recommendations:

- Based on NCDOT's *Warrants for Left and Right Turn Lanes*, the southbound approach of Wimberly Road warrants a left turn lane with 50 feet of storage and appropriate deceleration length and taper. Apex staff recommends construction of the left turn lane subject to NCDOT review and approval.

Please coordinate with the NCDOT District Engineer's Office concerning recommended improvements. Town staff will be available for meetings with NCDOT staff to discuss improvements on state maintained roadways as needed. All recommendations are subject to review by Town Council prior to approval.

Sincerely,



Serge Grebenschikov
Traffic Engineer
919-372-7448



The Preserve at White Oak Creek

Caitlin Pond

Sunnybrook Farms

Townes at Westford

Westford Apartments

Rezoning #19CZ25

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 #:	<u>19CZ25</u>	Submittal Date:	<u>11/1/2019</u>
Fee Paid	<u>\$ 1650-App \$1000-TIA</u>	Check #	<u>20017 & 20018</u>

PETITION TO AMEND THE OFFICIAL ZONING DISTRICT MAP

Project Name: Jenks and Wimberly Mixed Use PUD
 Address(es): 7912, 8000, & 8016 Jenks Road & 1533 Wimberly Road
 PIN(s) 0722-78-8252; 0722-78-4193; 0722-78-0191; & 0722-68-7241

Acreage: 14.86
 Current Zoning: RR Proposed Zoning: PUD
 Current 2045 LUM Designation: Mixed Use
 Requested 2045 LUM Designation: Mixed Use
 See next page for LUM amendment

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:	<u>14.86</u>
Area proposed as non-residential development:	Acreage:	<u>1.53</u>
Percent of mixed use area proposed as non-residential:	Percent:	<u>10%</u>

Applicant Information

Name: Taylor Morrison of Carolinas, Inc.
 Address: 15501 Weston Parkway | Ste 100
 City: Cary State: NC Zip: 27513
 Phone: _____ E-mail: _____

Owner Information

Name: SEE ATTACHED
 Address: _____
 City: _____ State: _____ Zip: _____
 Phone: _____ E-mail: _____

Agent Information

Name: Jason Barron
 Address: 421 Fayetteville St | Ste 530
 City: Raleigh State: NC Zip: 27601
 Phone: 919-590-0371 E-mail: jbarron@morningstarlawgroup.com
 Other contacts: Nil Ghosh - nghosh@morningstarlawgroup.com
Robbie Bell - Robbie.Bell@bnkinc.com

Property Owners Information

PIN	REID	Site Address	Owner	Mail Address 1	Mail Address 2	Deed Acres
0722-68-7241	164032	1533 WIMBERLY RD	RICHARD L & TRISHA S HINESLEY	4070 RANEY WAY DR	STEM NC 27581-9651	1.68
0722-78-0191	173563	8016 JENKS RD	TERESA L KIRKPATRICK	591 BENT OAK TRL	CONCORD NC 28027-9715	6.22
0722-78-4193	173564	8000 JENKS RD	CHARLES K & FRANCES J LEWIS	323 SCENIC MOUNTAIN DR	SPARTA NC 28675-9434	3.55
0722-78-8252	173565	7912 JENKS RD	MICHAEL D & ALISON N CLEARY	7912 JENKS RD	APEX NC 27523-7821	3.41

CERTIFIED LIST OF NEIGHBORING PROPERTY OWNERS

Application #: 19CZ25

Submittal Date: 11/1/2019

Provide a certified list of property owners subject to this application and all property owners within 300' of the subject property and HOA Contacts.


Owner's Name	PIN(s)	Owner's Name	PIN(s)
1 AMUNDSEN, MARY	0722-78-2474	38 MISHRA, NEHA MISHRA, VAIBHAV	0722-68-7692
2 TOWN OF APEX	0722-67-1588; 0722-67-8629	MUDEMALA, NARESH KUMAR REDDY	
3 ARORA, VISHIT THAREJA, MEDHA	0722-68-7415	39 GANGAVARAM, VENKATA	0722-88-0416
4 ASHLAND, REBECCA	0722-78-8486	NELAPATI, MADHUSUDHANARAO	
5 BANGALORE, RAJESH	0722-78-3455	40 CHUNCHU, ASWINI	0722-68-7473
6 BARRETT, PAUL	0722-78-8467	OTTAWAY, DANNY L OTTAWAY, JOAN	
7 BIYYAM, YOGANAND RAGIREDDY, KEERTHI	0722-78-8684	41 M	0722-68-2430
8 BLESSINGER, JEFF S BLESSINGER, PAMELA KAY	0722-78-7556	42 PANG, LIJUN LIU, LIWU	0722-78-9476
9 BRAY, TONY BRAY, SHARON	0722-78-6690	43 PAREKH, GEET PAREKH, SUCHI	0722-78-4405
10 CASCIOLI, MARGARET A	0722-88-0456	44 PARK, JAE HYUNG PARK, ALICIA N	0722-88-1459
11 CHEN, XUE MEI	0722-88-1561	PASIMUTHU, JAYAKHANNA	
12 CHIGURUPATI, POOJA ALURI, VENKAT SUMAN	0722-68-6533	45 CHOCKALINGAM, SHANMUGAPRIYA	0722-78-7592
13 CICHOCKI, TERRY	0722-67-3959	46 PATEL, PARVEEN PATEL, IMRAN	0722-78-2495
14 CLEARY, MICHAEL DUANE CLEARY, ALISON N	0722-78-8252	PENMETSA, DILEEP KUMAR	
15 CREWS, MARK L CREWS, CYNTHIA E	0722-78-7574	47 NADIMPALLI, ARUNA	0722-68-6508
16 DHOOM DHADAKA LLC	0722-78-9712	48 PINO, HECTOR F PINO, ANA M	0722-78-2424
17 DONAHUE, WILLIAM M DONAHUE, AUDREY A	0722-78-1484	49 POONIA, KAMALKUMAR KADIAN, MEENAKSHI	0722-68-5672
18 DWORKIN, JEFFREY J DWORKIN, GAYLE ANN	0722-88-1604	50 PORE, DAMONT PORE, MICHELE	0722-68-8433
19 FAN, ZHUORAN QU, RAN	0722-88-0663	51 PUNURU, VANI VARADHARAJ, SATHYA	0722-78-2444
20 FOSTER, KEVIN	0722-78-0494	RAILTON, DEBORAH L LITTLEFIELD, THOMAS A	0722-78-8520
21 FRANKLIN, DANA FRANKLIN, ROBIN	0722-88-1582	52 RAMAIYAN, VENKATESHKUMAR POONGAVANAME, THAMIZHARASI SELVAME	0722-88-0436
22 GAUTAM, DEEPALI GAUTAM, NITIN	0722-88-0487	53 REN, LEI SUN, JIA	0722-78-9744
23 GUO, ZHIHONG	0722-78-3485	54 ROMAN, RUBEN BADILLO-VELEZ, NORMARIE	0722-88-2526
24 HINESLEY, TRISHA S HINESLEY, RICHARD L	0722-68-7241	55 SEVER, MICHELLE LYNN	0722-78-1454
25 HOBBS, RONALD SCOTT HOBBS, JANET H	0722-88-6419	56 SHARMA, PRIYANKA SHARMA, TARUN	0722-88-1407
		57 SHENG, WANQING TIAN, YUAN	0722-78-9456
		58 SHI, JING SHI, KARL	0722-78-9436
		59 SING, JAMIE HUSTACE, JESSICA	0722-78-8656
		60 SRIVASTAVA, SUJIT VIJAYKUMAR	
		61 SRIVASTAVA, PRIYANKA SUJIT	0722-68-8549
		SUTRADHAR, DIPAN SUTRADHAR, KANCHI	0722-68-6479
			0722-68-9944; 0722-77-6175; 0722-77-1624; 0722-78-1519; 0722-78-2404; 0722-78-3415; 0722-78-5873; 0722-78-6700;
26 HOU, JIE	0722-78-8665	63 TAYLOR MORRISON OF CAROLINAS INC	0722-78-6700;

0722-78-6722;
0722-78-7527;
0722-78-9678;
0722-78-9670;
0722-88-0611;
0722-88-2455;
0722-88-3808

27	KASIVISWANATHAN, MUTHURAMAN MUTHURAMAN LAKSHMANAN, YEGAMMAI	0722-68-5645	64	VEMULAPALLI, MADHAVI KODALI, PRASHANT	0722-78-3435
28	KASTELBERG, CAROLINE SCHNEYDER	0722-78-0424	65	WANG, QIN HE, RUI	0722-78-9602
29	KIRKPATRICK, TERESA L	0722-78-0191	66	WESTFORD APARTMENTS WEH LP WESTFORD WEH LP LIMITED	0722-67-4129
30	KUMAR, ASHOK VERMA, ROME	0722-88-2504	67	PARTNERSHIP	0722-87-5709
31	LEWIS, CHARLES KENNETH LEWIS, FRANCES J	0722-78-4193	68	WILBORN, LACHELLE RACHEL	0722-88-0632
32	LING, LEI	0722-78-9406	69	XU, XIN LI, ZHE	0722-68-7656
33	MAYSONET, MARIBEL SANTIAGO	0722-78-8628	70	CAIRA, RICHARD JOSEPH JR CAIRA, MELISSA B	0722-78-0579
34	BOOTES, RICHARD WAYNE	0722-78-1424	71	FENG, DAN	0722-78-5679
35	FLECHSIG, BRADLEY D FLECHSIG, KRISTIN P	0722-78-2519	72	KOHL, DANIEL WILLIAM KOHL, TIFFANY ROBYN	0722-78-2559
36	LENT, JENNIFER EILEEN	0722-78-2680	73	LITTLE, BENJAMIN LITTLE, REBECCA	0722-78-1549
37	PAYE, ROBERT S III	0722-78-1579	74	RUSSELL, JUDY ROSEMARIE	0722-78-0464

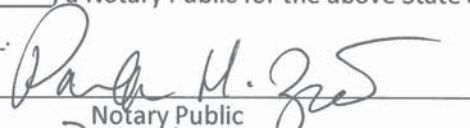
I, NEL GHOST, certify that this is an accurate listing of all property owners and property owners within 300' of the subject property.

Date: 1/27/2020

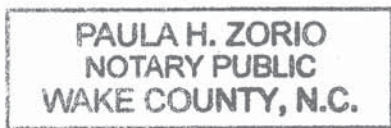
By: 

COUNTY OF WAKE STATE OF NORTH CAROLINA

Sworn and subscribed before me, Paula H. Zorio, a Notary Public for the above State and County, on this the 27th day of January, 2020.


Notary Public
Paula H. Zorio
Print Name

SEAL



My Commission Expires: 03/26/2024

DEVELOPMENT NAME APPROVAL APPLICATIONApplication #: 19CZ25Submittal Date: 11/1/2019

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 #: 19CZ25

Submittal Date: 11/1/2019

Proposed Subdivision/Development Information

Description of location: Northeast quadrant of intersection of Jenks Road and Wimberly Road

Nearest intersecting roads: Jenks Road & Wimberly Road

Wake County PIN(s): 0722-78-8252; 0722-78-4193; 0722-78-0191; & 0722-68-7241

Township: White Oak

Contact Information (as appropriate)

Contact person: Jason Barron

Phone number: 919-590-0371 Fax number: _____

Address: 421 Fayetteville St | St 530 Raleigh, NC 27601

E-mail address: jbarron@morningstarlawgroup.com

Owner: _____

Phone number: _____ Fax number: _____

Address: _____

E-mail address: _____

Proposed Subdivision/Development Name

1st Choice: RETRGAT AT THE PROSEING AT WHITE OAK

2nd Choice (Optional): _____

Town of Apex Staff Approval:

Town of Apex Planning Department Staff

Date

STREET NAME APPROVAL APPLICATION

Application #: 19CZ25 Submittal Date: 11/1/2019

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: Northeast quadrant of intersection of Jenks Road and Wimberly Road

Nearest intersecting roads: Jenks Road & Wimberly Road

Wake County PIN(s): 0722-78-8252; 0722-78-4193; 0722-78-0191; & 0722-68-7241

Township: White Oak

Contact information (as appropriate)

Contact person: Jason Barron

Phone number: 919-590-0371 Fax number: _____

Address: 421 Fayetteville St | St 530 Raleigh, NC 27601

E-mail address: jbarron@morningstarlawgroup.com

Owner: _____

Phone number: _____ Fax number: _____

Address: _____

E-mail address: _____

STREET NAME APPROVAL APPLICATION

Application #: 19CZ25 Submittal Date: 11/1/2019

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 _____	11 _____
2 _____	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 #: 19CZ25

Submittal Date: 11/1/2019

**Town of Apex
73 Hunter Street
P.O. Box 250 Apex, NC 27502
919-249-3400**

WAKE COUNTY, NORTH CAROLINA CUSTOMER SELECTION AGREEMENT

7912, 8000, & 8016 Jenks Road & 1533 Wimberly Road

(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.

_____, 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: Taylor Morrison

CUSTOMER: JP [Signature] UP TOWN OF APEX

BY: Gregory D. Mosley
Authorized Agent

BY: _____
Authorized Agent

DATE: Oct 29, 2019

DATE: _____

AGENT AUTHORIZATION FORM

Application #: 19CZ25 Submittal Date: 11/1/2019

MICHAEL D & ALISON N CLEARY is the owner of the property for which the attached application is being submitted:

- Land Use Amendment
- Rezoning
- Site Plan
- Subdivision
- Variance
- Other: _____

The property is located at: 7912 Jenks Rd

The agent for this project is: Jeremy Medlin

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

Agent Name: Jeremy Medlin

Address: 15501 Weston Parkway | Suite 100 | Cary, NC 27513

Telephone Number: 919-291-3819

Fax Number: _____

E-Mail Address: jmedlin@taylormorrison.com

Signature(s) of Owner(s)

DocuSigned by:

4E4C324F6D304DA

Alison N Cleary 10/29/2019
Type or print name Date

DocuSigned by:

5DD73C3F0A0492

Michael Duane Cleary 10/29/2019
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.**

AGENT AUTHORIZATION FORM

Application #: 19CZ25

Submittal Date: 11/1/2019

CHARLES K & FRANCES J LEWIS is the owner of the property for which the attached application is being submitted:

- Land Use Amendment
- Rezoning
- Site Plan
- Subdivision
- Variance
- Other: _____

The property is located at: 8000 Jenks Rd

The agent for this project is: Jeremy Medlin

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

Agent Name: Jeremy Medlin

Address: 15501 Weston Parkway | Suite 100 | Cary, NC 27513

Telephone Number: 919-291-3819

Fax Number: _____

E-Mail Address: jmedlin@taylormorrison.com

Signature(s) of Owner(s)

DocuSigned by:

08990178CC2847F...

Charles Kenneth Lewis 10/29/2019
Type or print name Date

DocuSigned by:

08990178CC2847F...

Frances Johnson Lewis 10/29/2019
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.**

AGENT AUTHORIZATION FORM

Application #: 19CZ25

Submittal Date: 11/1/2019

TERESA L KIRKPATRICK is the owner of the property for which the attached application is being submitted:

- Land Use Amendment
- Rezoning
- Site Plan
- Subdivision
- Variance
- Other: _____

The property is located at: 8016 Jenks Rd

The agent for this project is: Jeremy Medlin

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

Agent Name: Jeremy Medlin

Address: 15501 Weston Parkway | Suite 100 | Cary, NC 27513

Telephone Number: 919-291-3819

Fax Number: _____

E-Mail Address: jmedlin@taylormorrison.com

Signature(s) of Owner(s)

DocuSigned by:

BAC3498CB32747B...

Teresa Costner 10/29/2019

 Type or print name Date

 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.**

AGENT AUTHORIZATION FORM

Application #: 19CZ25 Submittal Date: 11/1/2019

RICHARD L & TRISHA S HINESLEY is the owner of the property for which the attached application is being submitted:

- Land Use Amendment
- Rezoning
- Site Plan
- Subdivision
- Variance
- Other: _____

The property is located at: 1533 Wimberly Rd

The agent for this project is: Jeremy Medlin

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

Agent Name: Jeremy Medlin

Address: 15501 Weston Parkway | Suite 100 | Cary, NC 27513

Telephone Number: 919-291-3819

Fax Number: _____

E-Mail Address: jmedlin@taylormorrison.com

Signature(s) of Owner(s)

DocuSigned by:

FD4EEC1005B14CF...

Richard Hinesley 10/29/2019
Type or print name Date

DocuSigned by:

FD4EEC1005B14CF...

Trisha Hinesley 10/29/2019
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.**

AFFIDAVIT OF OWNERSHIP

Application #: _____

Submittal Date: _____

The undersigned, Jeremy Medlin (the "Affiant") first being duly sworn, hereby swears or affirms as follows:

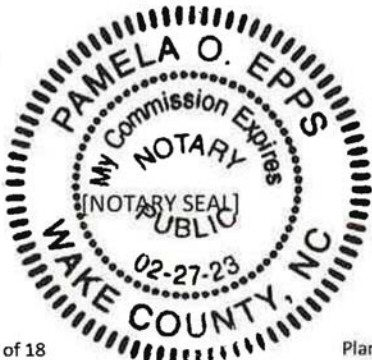
- Affiant is over eighteen (18) years of age and authorized to make this Affidavit. The Affiant is the sole owner, or is the authorized agent of all owners, of the property located at 7912, 8000, & 8016 Jenks Road & 1533 Wimberly Road and legally described in **Exhibit "A"** attached hereto and incorporated herein (the "Property").
- This Affidavit of Ownership is made for the purpose of filing an application for development approval with the Town of Apex.
- If Affiant is the owner of the Property, Affiant acquired ownership by deed, dated _____, and recorded in the Wake County Register of Deeds Office on _____, in Book _____ Page _____.
- 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).
- If Affiant is the owner of the Property, from the time Affiant was deeded the Property on _____, 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 _____, 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 27th day of Oct, 2019.

[Signature] V.P. (seal)
Jeremy D. Medlin
 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 Jeremy D. Medlin, 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.



[Signature]
 Notary Public
 State of North Carolina
 My Commission Expires: 2-27-23

DESCRIPTION FOR REZONING OF JENKS ASSEMBLAGE

BOOK OF MAPS 1987 PAGE 1048

BEGINNING at an iron pipe set in the northern right-of-way of Jenks Road, N.C.S.R. No. 1601, a 60 ft. public right-of-way, said iron pipe is at the intersection with the eastern right-of-way of Joe Wimberly Road, N.C.S.R. 1603, a 60 ft. public right-of-way, as referenced in Book of Maps 1987, Page 1048 and recorded in the Wake County Registry; thence leaving the said right-of-way of Jenks Road and with the said right-of-way of Joe Wimberly Road, N 32°15'15"W a distance of 59.96 feet to an existing iron pipe being the southern common corner with the Richard Allison Lewis Jr. property as referenced in Deed Book 3323, Page 385 and recorded in the Wake County Registry; thence with the common line of the said Lewis property, N 00°11'15"W a distance of 537.66 feet to an existing iron pipe being the southwest corner of the Warren T. Tunstall property as referenced in Deed Book 1892, Page 530 and recorded in the Wake County Registry; thence with the common line of the said Tunstall property, N 87°58'34"E a distance of 1370.03 feet to an existing iron pipe; thence S 01°37'28"E a distance of 61.09 feet to an iron pipe set in the northern right-of-way of said Jenks Road; thence with the said right-of-way, S 37° 28' 08" W a distance of 58.01 feet to a point; thence S 38°21'00"W a distance of 51.98 feet to a point; thence S 20°24'13"W a distance of 52.61 feet to a point; thence S 45°24'17"W a distance of 50.80 feet to a point; thence S 50°37'17"W a distance of 51.72 feet to a point; thence S 54°32'12"W a distance of 56.84 feet to a point; thence S 56°57'25"W a distance of 50.16 feet to a point; thence S 58°50'58"W a distance of 53.70 feet to a point; thence S 61°32'35"W a distance of 54.37 feet to a point; thence S 65°47'47"W a distance of 52.80 feet to a point; thence S 69°41'29"W a distance of 53.91 feet to a point; thence S 73° 32'01"W a distance of 44.67 feet to an iron pipe set; thence S 75°40'54"W a distance of 862.49 feet to the Point and Place of BEGINNING and containing 13.176 acres and being all of Lots 1, 2 & 3 of the Sunnybrook Farms "Section I" as referenced in said Book of Maps 1987 Page 1048.

BOOK OF MAPS 1987 PAGE 1291

BEGINNING at an existing nail in the centerline of Joe Wimberly Road, N.C.S.R. 1603, a 60 ft. public right-of-way, said nail being at the intersection with the northern right-of-way of Jenks Road, N.C.S.R. 1601, a 60 ft. public right-of-way as referenced in Book of Maps 1987, Page 1291 and recorded in the Wake County Registry; thence with the said centerline of Joe Wimberly Road, N 31°59'44"W a distance of 51.05 feet to an existing nail; thence N 31°59'44"W a distance of 179.43 feet to an existing nail; thence N 22°04'13"W a distance of 425.44 feet to an iron pipe set; thence leaving the said centerline of Joe Wimberly Road, N 88° 00'32"E a distance of 32.91 feet to an iron pipe set on the eastern right-of-way of said Joe Wimberly Road and being the southwest corner of the Beverly W. Harris property as referenced in Deed Book 2219, Page 349 and recorded in the Wake County Registry; thence with the common line of the said Beverly W. Harris property, N 88° 00'32"E a distance of 247.61 feet to an existing iron pipe being the northwest corner of the property of Joel V. Perry as referenced in Deed Book 2643, Page 137 and recorded in the Wake County Registry; thence with the common line of the said Perry property, S

00°09'18"E a distance of 599.49 feet to the Point and Place of BEGINNING and containing 2.12 acres minus 0.44 acres in the right-of-way leaving a net area of 1.68 acres and being Tract 8A as referenced in said Book of Maps 1987, Page 1291.

Total area to be re-zoned is 13.176 acres plus 1.68 acres equals grand total of 14.856 acres.



Instruction Packet and Affidavit for Neighborhood Meetings

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

T: 919-249-3426
F: 919-249-3338

This packet consists of instructions and templates for conducting a required Neighborhood Meeting. Planning Department 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 prior to submittal to the Planning Department per the standards found in UDO Sec. 2.2.7. The intention 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 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?

- Rezoning (including Planned Unit Developments);
- Major Site Plans;
- Residential Master Subdivision Plans (excluding exempt subdivisions); or
- Special Use Permits

INSTRUCTIONS

Prior to submitting an application for a Rezoning, Major Site Plan, residential Master Subdivision Plan (excluding exempt subdivisions), or Special Use Permit, the applicant must conduct at least one (1) Neighborhood Meeting. The applicant shall submit all forms included in this packet with the initial application submittal.

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 within 300 feet of the subject property, and any neighborhood association that represents citizens in the area via first class mail a minimum of 10 days in advance of the neighborhood meeting, not including the day of mailing. The applicant shall use their own return address on the envelopes as the meeting is a private meeting between the applicant and the neighbors.
- The applicant shall include with the meeting notice a vicinity map in addition to either the existing zoning map of the area or preliminary plans of the proposed development (see Handout requirements below).

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

- 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. The meeting cannot be held on a Town recognized holiday (which coincide with the State of North Carolina recognized holidays).
- The 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.
- Handout requirements:
 - For rezonings (excluding rezonings to PUD-CZ, TND-CZ and MEC-CZ), a vicinity map and existing zoning map of the area must be provided to help facilitate discussion.
 - For rezonings to PUD-CZ, TND-CZ and MEC-CZ; Major Site Plans; residential Master Subdivision Plans; and Special Use Permits, preliminary plans of the proposed development must be available at the meeting to help facilitate discussion. 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.
 - Printed copies 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 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. Provide blank comment sheets or notecards for neighbors to submit written comments. 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 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 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 reduced copy of the maps and/or plans 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.

10/11/19

Date

Dear Neighbor:

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

7912, 8000, & 8016 Jenks Rd & 1533 Wimberly Rd 0722-78-8252; 0722-78-4193; 0722-78-0191; & 0722-68-7241

Address(es)

PIN(s)

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. 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 www.apexnc.org.

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

Application Type		Approving Authority
<input checked="" type="checkbox"/>	Rezoning (including Planned Unit Development)	Town Council
<input type="checkbox"/>	Major Site Plan	Town Council (QJPH*)
<input type="checkbox"/>	Special Use Permit	Town Council (QJPH*)
<input checked="" type="checkbox"/>	Residential Master Subdivision Plan (excludes exempt subdivisions)	Technical Review Committee (staff)

*Quasi-Judicial Public Hearing: The Town Council 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)):

A mixed-use community consisting of up to 90 townhomes and 21,000 sf of non-residential uses

Estimated submittal date: November 1

MEETING INFORMATION:

Property Owner(s) name(s):	RICHARD L & TRISHA S HINESLEY; TERESA L KIRKPATRICK; CHARLES K & FRANCES J LEWIS; & MICHAEL D & ALISON N CLEARY
Applicant(s):	Jason Barron - Attorney for Applicant
Contact information (email/phone):	919-590-0371 / jbarron@morningstarlawgroup.com
Meeting Address:	237 N Salem St Apex, NC
Date of meeting**:	October 23, 2019
Time of meeting**:	6:15 PM

MEETING AGENDA TIMES:

Welcome: 6:15 PM - 6:18 PM Project Presentation: 6:18 PM - 6:25 PM Question & Answer: 6:25 PM - end

**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/Planning>.

VICINITY MAP AND PRELIMINARY PLAN



- Up to 90 Townhomes on Residential Tract
- Up to 21,000sf on Non-Residential Tract

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: Jenks Assemblage Zoning: PUD
 Location: 7912, 8000, & 8016 Jenks Road & 1533 Wimberly Road
 Property PIN(s): 0722-78-8252; 0722-78-4193; 0722-78-0191; & 0722-68-7241 Acreage/Square Feet: 14.86

Property Owner: RICHARD L & TRISHA S HINESLEY; TERESA L KIRKPATRICK; CHARLES K & FRANCES J LEWIS; & MICHAEL D & ALISON N CLEARY
 Address: _____
 City: _____ State: _____ Zip: _____
 Phone: _____ Email: _____

Developer: Jason Barron - Attorney for Developer
 Address: 421 Fayetteville St | Ste 530
 City: Raleigh State: NC Zip: 27601
 Phone: 919-590-0371 Fax: _____ Email: jbarron@morningstarlawgroup.com

Engineer: Robbie Bell
 Address: 6310 Chapel Hill Road, Suite 250
 City: Raleigh State: NC Zip: 27607
 Phone: 919-851-4422 Fax: _____ Email: Robbie.bell@bnkinc.com

Builder (if known): _____
 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 Planner	(919) 249-7468
Public Works - Transportation Russell Dalton, Senior Transportation Engineer	(919) 249-3358
Water Resources Department Mike Deaton, Stormwater & Utility Engineering Manager Stan Fortier, Senior Engineer (Sedimentation & Erosion Control)	(919) 249-3413 (919) 249-1166
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 1st and 3rd Tuesdays of each month at 7:00 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
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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 a.m. to 8:30 p.m. 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 through Friday from 8:00 a.m. to 5:00 p.m. Report violations of construction hours and other noise complaints to the Non-Emergency Police phone number at 919-362-8661.

Construction Traffic:	James Misciagno	919-372-7470
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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:	Water Resources – Infrastructure Inspections	919-362-8166
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There can be issues with roadway damage, roadway improvements, and traffic control. Potholes, rutting, inadequate lanes/signing/stripping, poor traffic control, blocked sidewalks/paths are all common issues that should be reported to Water Resources – Infrastructure Inspections at 919-249-3427. The Town will get NCDOT involved if needed.

Parking Violations:	Non-Emergency Police	919-362-8661
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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:	James Misciagno	919-372-7470
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Sediment (dirt) and mud gets into the existing roads due to rain events and/or vehicle traffic. These incidents should be reported to James Misciagno. He will coordinate the cleaning of the roadways with the developer.

Dirt on Properties or in Streams:	James Misciagno Danny Smith	919-372-7470 Danny.Smith@ncdenr.gov
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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 to James Misciagno at 919-372-7470 so that he can coordinate the appropriate repairs with the developer. Impacts to the streams and stream buffers should also be reported to Danny Smith (danny.smith@ncdenr.gov) with the State.

Dust:	James Misciagno	919-372-7470
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During dry weather dust often becomes a problem blowing into existing neighborhoods or roadways. These incidents should be reported to James Misciagno at 919-372-7470 so that he can coordinate the use of water trucks onsite with the grading contractor to help control the dust.

Trash:	James Misciagno	919-372-7470
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Excessive garbage and construction debris can blow around on a site or even off of the site. These incidents should be reported to James Misciagno at 919-372-7470. He will coordinate the cleanup and trash collection with the developer/home builder.

Temporary Sediment Basins:	James Misciagno	919-372-7470
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Temporary sediment basins during construction (prior to the conversion to the final stormwater pond) are often quite unattractive. Concerns should be reported to James Misciagno at 919-372-7470 so that he can coordinate the cleaning and/or mowing of the slopes and bottom of the pond with the developer.

Stormwater Control Measures:	Mike Deaton	919-249-3413
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Post-construction concerns related to Stormwater Control Measures (typically a stormwater pond) such as conversion and long-term maintenance should be reported to Mike Deaton at 919-249-3413.

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

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: 237 N. Salem Street, Apex (The Halle)
 Date of meeting: October 23, 2019 Time of meeting: 6:00pm
 Property Owner(s) name(s): Hinesly, Kirkpatrick, Lewis and Cleary
 Applicant(s): Taylor Morrison Homes

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.

	NAME/ORGANIZATION	ADDRESS	PHONE #	EMAIL	SEND PLANS & UPDATES
1.	Mary Amundsen	2563 Rambling Creek			
2.	Carla Schneider	2581 Rambling Creek Rd			
3.	Ahsan Cleary	7912 Jenks Rd			
4.	Michael Cleary	7912 Jenks Rd			
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): Hinesly, Kirkpatrick, Lewis and Cleary

Applicant(s): Taylor Morrison Homes

Contact information (email/phone): c/o Jason Barron, Attorney (jbarron@morningstarlawgroup.com)

Meeting Address: 237 N. Salem Street, Apex

Date of meeting: October 23, 2019

Time of meeting: 6:00pm

Please summarize the questions/comments and your response from the Neighborhood Meeting 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:

What is the distance between the proposed development and the existing homes on Rambling Creek Drive?

Applicant's Response:

Fifty feet

Question/Concern #2:

Where will the sidewalks be located?

Applicant's Response:

There will be sidewalks on both sides of the street internal to the development, and a streetside trail will be constructed along Jenks Road and Wimberly Road that will connect to the existing streetside trails

Question/Concern #3:

How will the units layout on the site?

Applicant's Response:

We are still working on that, but generally speaking the units along the northern edge of the site will back up to existing townhomes

Question/Concern #4:

Where will stormwater drain, and timing of overall approvals and construction?

Applicant's Response:

Preliminary engineering has the site draining to a low spot along the northern edge of the site, slightly to the right of the center of the property. One year of permitting, and then approximately four years to build all of infrastructure and homes.

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, Jason Barron, do hereby declare as follows:

Print Name

1. I have conducted a Neighborhood Meeting for the proposed Rezoning, Major Site Plan, Master Subdivision Plan, or Special Use Permit in accordance with UDO Sec. 2.2.7 *Neighborhood Meeting*.
2. The meeting invitations were mailed to the Apex Planning Department, all property owners within 300 feet of the subject property and any neighborhood association that represents citizens in the area via first class mail a minimum of 10 days in advance of the Neighborhood Meeting.
3. The meeting was conducted at 237 N. Salem Street, Apex (location/address) on October 23, 2019 (date) from 6:00pm (start time) to 8:00pm (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.

OCTOBER 31, 2019
Date

By: _____

STATE OF NORTH CAROLINA
COUNTY OF WAKE

Sworn and subscribed before me, Kayla Pagan, a Notary Public for the above State and County, on this the 31st day of October, 2019.



Kayla Pagan
Notary Public
Kayla Pagan
Print Name

My Commission Expires: 12-8-2023

Jenks and Wimberly Mixed Use PUD

PD PLAN
APEX, NORTH CAROLINA

Submitted:
November 1, 2019

Revised:
December 6, 2019
January 26, 2020

PREPARED BY:



Section 1: Table of Contents – PUD Text

Section 1: Table of Contents

Section 2: Vicinity Map

Section 3: Project Data

Section 4: Purpose Statement

Section 5: Permitted Uses

Section 6: Design Controls

Section 7: Architectural Controls

Section 8: Parking and Loading

Section 9: Signage

Section 10: Natural Resource and Environmental Data

Section 11: Stormwater Management

Section 12: Parks and Recreation

Section 13: Public Facilities

Section 14: Phasing Plan

Section 15: Consistency with 2045 Land Use Plan

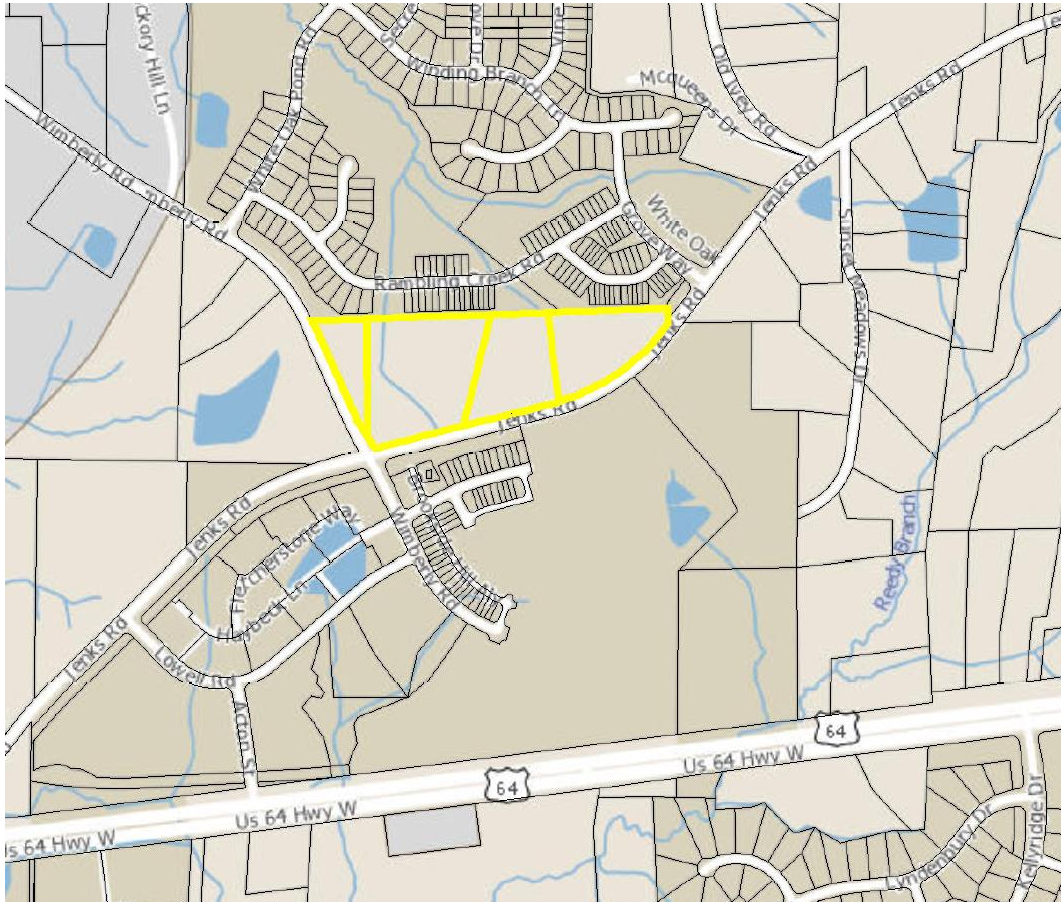
Section 16: Compliance with UDO

Section 17: Compliance with Apex Bicycle Plan

Section 18: Public Art

Jenks & Wimberly PUD

Section 2: Vicinity Map



The Jenks and Wimberly Mixed Use PUD is located in the Town of Apex, north of Jenks Road at its intersection with Wimberly Road. The subject properties are south of White Oak Preserve, a residential community being developed by Taylor Morrison, and to the north of the Westford planned unit development. Westford is currently being developed for a combination of apartments and townhomes and is planned to include commercial uses along its westernmost boundary. To the west of the subject properties is a single-family home on an approximately 10 acre parcel, and to the east of the site as you head east on Jenks Road are a scattering of parcels that have been developed for single family residential uses to Wake County standards.

Section 3: Project Data

A. Name of Project:

Jenks and Wimberly Mixed Use PUD

B. Property Owners:

Richard and Trisha Hinesly (0722-68-7241)
Teresa Kirkpatrick (0722-78-0191)
Charles and Frances Lewis (PIN 0722-78-4193)
Michael and Alison Cleary (PIN 0722-78-8252)

C. Prepared By:

Jason Barron, Partner
Morningstar Law Group
421 Fayetteville St | Ste 530
Raleigh, NC 27601

D. Current Zoning Designation:

Rural Residential (RR)

E. Proposed Zoning Designation:

Planned Unit Development – Conditional Zoning (PUD-CZ)

F. Current 2045 Land Use Map Designation:

Mixed Use High Density Residential, Office Employment, Commercial

G. Proposed 2045 Land Use Map Designation:

Mixed Use High Density Residential, Office Employment, Commercial

H. Proposed Use

Up to 22,000 square feet of commercial uses and 87 dwelling units, along with associated open space, recreational amenities and infrastructure.

Non-residential development area proposed: 4.53 of 14.68 ac (30%)

I. Size of Project

Wake County Tax Identification Number	Acreage
0722-68-7241, 0722-78-0191, 0722-78-4193, 0722-78-8252	14.68 acres

Section 4: Purpose Statement

The Jenks and Wimberly Mixed Use PUD development will be a mix of non-residential and high-density residential uses consistent with the Town's plans for this area. The non-residential will be located on a minimum of 30% of the subject property and will be zoned to include up to 22,000 square feet of uses. The townhome portion of the development will include a maximum of 87 dwelling units to be located on 10.33 acres, for a gross maximum density of 8.5 dwelling units per acre in the residential portion.

This concept is consistent with the Town's stated PUD goal to provide site-specific, high-quality neighborhoods that preserve natural feature and exhibit compatibility with, and connectivity to, surrounding land uses. More specifically, this plan will:

- Allow uses that are compatible with Section 4.2.2, *Use Table* of the UDO
- Provide for the preservation of existing environmentally sensitive areas.
- Provide appropriate buffering and screening from the proposed use to the existing residential areas.
- Offer a mix of high density residential and commercial uses in an area planned for the same.
- Demonstrate dimensional standards that are consistent with the UDO, and where variations occur, said variations will be included herein and subject to Council approval.
- Provide a high-quality community that is linked by a network of connected streets and pedestrian sidewalks that promotes connectivity, walkability and healthy lifestyles.
- Exhibit character and quality that is compatible with surrounding communities, which is expected to enhance the value of surrounding land uses.
- Provide open space and walkable trails to promote pedestrian activity, while appropriately buffering adjacent residential areas.
- Extend the town's pedestrian facilities by including a multi-use path along the Wimberly Road and Jenks Road frontages, connecting to and completing the gap in the multi-use path that has been constructed as part of the Preserve at White Oak.

All site-specific standards and conditions of this PUD Plan shall be consistent with all Conditional Zoning (CZ) District standards set forth in the UDO Section 2.3.3, *Conditional Zoning Districts* and UDO Section 2.3.4.F.1, *Planned Unit Development (PUD-CZ) District*. The proposed PUD will provide a development density and intensity that is consistent with principles found throughout the recently updated Advance Apex 2045.

Section 5: Permitted Uses

The development will include office, retail and residential uses. The Rezoned Lands may be used for, and only for, the uses listed below. The permitted uses are subject to the limitation and regulations stated in the UDO and any additional limitation or regulations stated below. For convenience, some relevant sections of the UDO may be referenced; such references do not imply that other sections of the UDO do not apply. Specifically, the permitted uses include:

A. Residential Tract:

- Accessory apartment
- Townhomes
- Greenway
- Recreation Facility, private
- Park, active
- Park, passive

- Utility, minor
- Nursing or convalescent facility

B. Commercial Tract:

- Day care facility
- Botanical garden
- Entertainment, indoor
- Youth or day camps
- Restaurant, general
- Medical or dental office or clinic
- Office, business or professional
- Publishing office
- Artisan Studio
- Barber and beauty shop
- Book store
- Dry cleaners and laundry service
- Farmer's market
- Nursing or convalescent facility
- Financial institution
- Floral shop
- Greenhouse or nursery, retail
- Grocery, general
- Grocery, specialty
- Health/fitness center or spa
- Laundromat
- Newsstand or gift shop
- Personal service
- Pharmacy
- Printing and copying service
- Real estate sales
- Retail sales, general
- Studio for art
- Tailor shop
- Upholstery shop
- Pet services
- Microbrewery
- Greenway
- Recreation Facility, private
- Park, active
- Park, passive
- Utility, minor

The following conditions shall also apply:

- A. A maximum of 87 townhome units shall be permitted upon the property.
- B. A maximum of 22,000 square feet of nonresidential uses shall be permitted upon the property.
- C. All buildings constructed on the property shall provide solar conduit for the installation of rooftop solar panels.
- D. No covenant shall be placed on the property which prohibits accessory apartment as a use.
- E. All dwelling units constructed on the property shall provide solar conduit for the installation of rooftop solar panels.

Section 6: Proposed Design Controls

A. Non-Residential Design Controls

Parcel Size: +/- 4.53 acres

Density: The overall maximum nonresidential uses permitted upon the property shall be 22,000 square feet

Design Controls: At a minimum, all nonresidential uses shall comply with the following dimensional standards:

Maximum Built-Upon Area:	70%
Maximum Building Height:	50'
Minimum Building Setbacks:	

Jenks & Wimberly PUD

- Street 20 feet
- Rear 20 feet
- Side 20 feet
- From Buffer/RCA: 20 feet for Buildings
10 feet for Parking Areas

B. Residential Design Controls

Parcel Size: +/-10.33 acres

Density: The overall gross residential density shall not exceed 8.5 units per acre.

Design Controls: At a minimum, all residential uses shall comply with the following dimensional standards:

- Maximum Density: 8.5 Units/Acre
(includes RCA and rights-of-way in residential portion)
- Maximum Number of Units: 87
- Maximum Built-Upon Area: 70%
- Minimum Lot Size: n/a
- Minimum Lot Width: 22 feet
- Maximum Building Height: three (3) stories (45')

Note: Porches, patios, decks and other accessory structures may encroach into building setbacks as allowed by the Town of Apex UDO.

Minimum Building Setbacks:

- Street 15 feet
 - To garage door 20 feet
- Rear 10 feet
- Side 5 feet for end units, otherwise 0 feet
- From Building to Building 10 feet
- From Buffer/RCA 10 feet for Buildings
5 feet for Parking Areas

C. Buffers

Perimeter Buffers:

	Residential	Non-residential
North boundary	20' Type A	50' Type A
Wimberly Road	30' Type A	30' Type A
Jenks Road	30' Type A	30' Type E

Note: Where perimeter buffers coincide with stream buffers or 100-year floodplain, existing vegetation will be used to meet the buffer width and opacity.

Thoroughfare Buffers:

As depicted on the PD Plan, a 30' Buffer (Type A along the residential portion, Type E along the non-residential) shall be established along Jenks Road.

Section 7: Proposed Architectural Controls

The proposed development offers the following architectural controls to ensure a consistency of character throughout the development, while allowing for enough variety to create interest and avoid monotony. Changes to the exterior materials, roof, windows, doors, process, trim, etc. are allowable with administrative approval at the staff level.

Jenks & Wimberly PUD

Further details shall be provided at the time of development plan submittal. The following conditions shall apply:

A. For Residential Development

1. Vinyl siding is not permitted; however, vinyl windows, decorative elements, and trim are permitted.
2. Primary building materials will be brick, stone, and fiber cement siding.
3. Windows that are not recessed shall be trimmed. Windows shall vary in size and/or type.
4. At least four of the following decorative features shall be used on each building: decorative shake, board and batten siding, decorative porch rails and posts, shutters, decorative functional foundation and roof vents, recessed windows, decorative windows, decorative brick or stone, decorative gables, decorative cornices, or metal roofing.
5. A varied color palette shall be utilized throughout the development to include a minimum of three-color families for siding and shall include varied trim, shutter, and accent colors complementing the siding color.
6. The rear and side elevations of the units that can be seen from the right-of-way shall have trim around the windows.
7. Front facing garage doors must have windows, decorative details, or carriage-style adornments.
8. Entrances for units with front-facing garages shall have a prominent covered porch/stoop area leading to the front door.
9. Porches constructed with a dwelling unit shall be a minimum of six feet (6') deep.
10. The front façade of any front-loaded garage shall not protrude farther than one foot forward of (i) the front façade of the dwelling unit, or (ii) the front porch of the dwelling unit, whichever is closer to the right-of-way from which the dwelling unit is addressed.

B. For Commercial Development

1. The predominant exterior building materials shall be brick, wood, stone, and tinted/textured concrete masonry units.
2. The building exterior shall have more than one (1) material color.
3. No more than 20% of any building façade may consist of EIFS material.
4. EIFS or synthetic stucco shall not be used in the first 4 feet above grade.

Section 8: Parking and Loading

Parking for the development shall meet the requirements of UDO Section 8.3.

Section 9: Signage

All signage for this PUD shall comply with Section 8.7, *Signs*, of the Town of Apex UDO.

Section 10: Natural Resource and Environmental Data

A. River Basins and Watershed Protection Overlay Districts

The project is located within the Beaver Creek drainage basin, which is within the Cape Fear River Basin. The site is within the primary Watershed Protection Overlay District but does not contain any FEMA designations and is not within the 100-year floodplain.

B. Resource Conservation Areas (RCA) – Required and Provided

Jenks & Wimberly PUD

This PUD will be subject to, and meet the requirements of Section 8.1.2 of the UDO, *Resource Conservation Area* and Section 2.3.4, *Planned Development Districts*.

The site is located on the west side of the 540 corridor and therefore is required to preserve a minimum of 25% Resource Conservation Area (RCA). Designated RCA areas will be consistent with the items listed in Section 8.1.2(B) of the Town's UDO. Preserved streams, wetlands, and associated riparian buffers provide the primary RCA's throughout the site. Additional RCA area provided may include stormwater management areas, perimeter buffers, and greenway trails within the walkable community.

C. Any historic structures present

As confirmed by the North Carolina State Historic Preservation Office and Capital Area Preservation, Inc. there are no historic structures present within the project boundary.

Section 11: Stormwater Management

This PUD shall meet all stormwater management requirements for quality and quantity treatment in accordance with Section 6.1.7 of the UDO, such that:

- A. Post development peak runoff shall not exceed pre-development peak runoff conditions for the 1-year and 10-year 24-hour storm events.

Section 12: Parks and Recreation

The Parks, Recreation and Cultural Resources Advisory Commission reviewed the Jenks and Wimberly Mixed Use PUD at the January 29, 2020, public meeting. The Advisory Commission unanimously recommended a fee-in-lieu for the project calculated as follows:

$$87 \text{ Single Family Attached units} \times \$2,321.54 \text{ per unit} = \mathbf{\$201,973.98}$$

Section 13: Public Facilities

The proposed PUD shall meet all Public Facilities requirements as set forth in UDO Section 2.3.4(F)(1)(f) and be designed according to sound engineering standards and shall comply with Town of Apex Sewer and Water Master Plan and the Town of Apex Standards and Specifications. Specifically, road and utility infrastructure shall be as follows:

A. General Roadway Infrastructure

Developer shall provide minimum dedication of public right-of-way along each of Jenks Road and Wimberly Road based on an 80-ft right-of-way, or 40 feet from roadway centerline. Cul-de-sacs will be avoided except where environmental features make through streets unfeasible. Sidewalks will be provided on both sides of streets internal to the site and along street frontage. In compliance with the 2045 Bike Apex Plan, a 10-foot wide Sidepath shall be constructed along the project frontage on the eastern side of Wimberly Road and the northern side of Jenks Road. \Please refer to the concept plan of the PUD plan for proposed access points, stub streets and planned vehicular connectivity. All access and circulation is conceptual and will be finalized at the time of development plan review and approval.

B. Transportation Improvements

Roadway improvements are subject to modification and final approval by the Town of Apex and NCDOT as part of the site plan and construction plan approval process.

Jenks & Wimberly PUD

A traffic study has been performed as part of this PUD rezoning consistent with the Town's standards for the same. Based upon the traffic study, the following traffic improvements are proposed for this development:

- Subject to NCDOT review and approval, Developer shall restripe the two-way left turn (TWLT) lane on the eastbound approach of Jenks Road at the Site Access to accommodate a left turn lane with 100 feet of storage.
- Subject to NCDOT review and approval, Developer shall construct a southbound left turn lane on Wimberly Road at Jenks Road with 50 feet of storage and appropriate deceleration length and taper.

C. Water and Sanitary Sewer

All lots within the project will be served by the Town of Apex for water and sanitary sewer. The utility design will be finalized at the time of development plan review and approval based upon available facilities adjacent to the site at that time. A conceptual utility plan is included in the PUD plan for reference. All utility infrastructure shall meet current Town water and sewer master plans.

D. Other Utilities

Electricity will be provided by Apex Electric. Phone, cable and gas will be provided by the developer and shall meet the Town of Apex standards as outlined in the UDO.

Section 14: Phasing Plan

This PUD may be completed in multiple phases, with construction anticipated to begin in 2020. Project phasing will be planned to ensure the points of access are provided in accordance with the UDO.

Section 15: Consistency with the 2045 Land Use Map

The proposed land use is consistent with the 2045 Land Use Map.

Section 16: Compliance with the UDO

The development standards adopted for this PUD are in compliance with those set forth in the current version of the Town's Unified Development Ordinance (UDO). Any deviations from UDO requirements have been specifically defined within this document.

Section 17: Compliance with Comprehensive Transportation Plan and Bicycle Plan

Development plan review for any development to be made pursuant to this amendment to the Official Zoning District Map shall comply with the adopted Comprehensive Transportation Plan in effect at the time of the development plan approval as provided for in the Unified Development Ordinance. Further, development of the Property shall be consistent with the Town's adopted Bicycle Plan.

Section 18: Public Art

The applicant shall provide a 6' x 6' Public Art easement to the Town of Apex along the Jenks Road frontage of the subject property. The precise location for this easement will be determined at the time of development plan review.

JENKS AND WIMBERLY MIXED USE PUD



VICINITY MAP
N.T.S.

SITE DATA	
PROJECT NAME:	JENKS AND WIMBERLY MIXED USE PUD
PREPARER'S CONTACT INFORMATION:	BASS, NIXON, AND KENNEDY, INC. 6310 CHAPEL HILL ROAD, STE 250 RALEIGH, NC 27607 PHONE: (919) 851-4422 FAX: (919) 851-8968 CONTACT PERSON: K. ROBERT BELL, JR., PE CPESC EMAIL ADDRESS: robbie.bell@bnkinc.com
DEVELOPER CONTACT INFORMATION:	TAYLOR MORRISON 15501 WESTON PARKWAY STE 100 CARY, NC 27513 PHONE: (919) 291-3819 EMAIL ADDRESS: jmedlin@taylor Morrison.com
CURRENT ZONING:	RR
CURRENT 2045 LAND USE MAP DESIGNATION:	MIXED USE
PROPOSED ZONING DESIGNATION:	PUD-CZ
WAKE COUNTY PINS:	(1) 0722687241 (2) 0722780191 (3) 0722784193 (4) 0722788252
TOTAL PROJECT AREA:	14.68 ACRES
REQUIRED RCA/BUFFER AREA	3.72 AC (25%)
PROVIDED RCA/BUFFER AREA	3.94 AC (26.4%)
COMMERCIAL PARCEL AREA	4.53 AC (30.5%)
RESIDENTIAL PARCEL AREA	10.33 ACRES
RIGHT-OF-WAY DEDICATION	0.24 ACRES
MAXIMUM NUMBER OF RESIDENTIAL UNITS	87 UNITS
MAXIMUM COMMERCIAL SQUARE FOOTAGE	22,000 SF
OFF STREET PARKING	PER TOWN OF APEX UDO REQUIREMENTS
WATERSHED INFORMATION	PRIMARY; BEAVER CREEK BASIN
HISTORIC STRUCTURE?	NO
FEMA FLOODPLAIN INFORMATION	MAP # 3720072200J - DATED 05/02/2006 PROJECT IS NOT WITHIN 100 YEAR FLOODPLAIN

PD PLAN - DRAWING SHEET INDEX

1. COVER SHEET
2. CC-1 - PRELIMINARY LAYOUT PLAN
3. CC-2 - EXISTING CONDITIONS PLAN
4. CC-3 - PRELIMINARY UTILITY PLAN

BUFFERS

NORTH BOUNDARY (TOWNHOMES)	20' TYPE A
NORTH BOUNDARY (COMMERCIAL)	50' TYPE A
WIMBERLY ROAD	30' TYPE A
JENKS ROAD (TOWNHOMES)	30' TYPE A
JENKS ROAD (COMMERCIAL)	30' TYPE E
EAST BOUNDARY	20' TYPE A

TRANSPORTATION ZONING CONDITIONS:

- SUBJECT TO NCDOT REVIEW AND APPROVAL, DEVELOPER SHALL RESTRIPE THE TWO-WAY LEFT TURN (TWL) LANE ON THE EASTBOUND APPROACH OF JENKS ROAD AT THE SITE ACCESS TO ACCOMMODATE A LEFT TURN LANE WITH 100 FEET OF STORAGE.
- SUBJECT TO NCDOT REVIEW AND APPROVAL, DEVELOPER SHALL CONSTRUCT A SOUTHBOUND LEFT TURN LANE ON WIMBERLY ROAD AT JENKS ROAD WITH 50 FEET OF STORAGE AND APPROPRIATE DECELERATION LENGTH AND TAPER.

MINIMUM BUILDING SETBACKS FOR RESIDENTIAL	
STREET	20' TO GARAGE DOOR
REAR	10' (EXCLUDING OUTDOOR STORAGE)
FROM BUILDING TO BUILDING	10'
FROM BUFFER/RCA	10' FOR BUILDINGS 5' FOR PARKING AREAS
MAXIMUM BUILDING HEIGHT	3 STORIES/45 FEET

MINIMUM BUILDING SETBACKS NON-RESIDENTIAL	
STREET	20'
REAR	10'
SIDE	20'
FROM BUFFER/RCA	20' FOR BUILDINGS 10' FOR PARKING AREAS
MAXIMUM BUILDING HEIGHT	3 STORIES/45 FEET



RIGHT OF WAY DEDICATION:
JENKS: 3 LANE THOROUGHFARE, 80'
WIMBERLY: 2- LANE COLLECTOR, 60'
INTERNAL RESIDENTIAL STREETS: 50'
IF REQUIRED, MINIMUM SHOULDER WIDTH: 5'
FRONTAGE:
10' SIDE PATH ALONG JENKS & WIMBERLY

NOTE:
THE PARKS, RECREATION AND CULTURAL RESOURCES ADVISORY COMMISSION WILL REVIEW THIS PROPOSAL AT THE JANUARY 29, 2020 PUBLIC MEETING AND SUBSEQUENTLY THIS SECTION WILL BE UPDATED WITH THEIR RECOMMENDATION

**PRELIMINARY PLANS NOT
FOR CONSTRUCTION**

**THIS SHEET IS FOR
ILLUSTRATIVE PURPOSES ONLY**

ENGINEER:

BNK

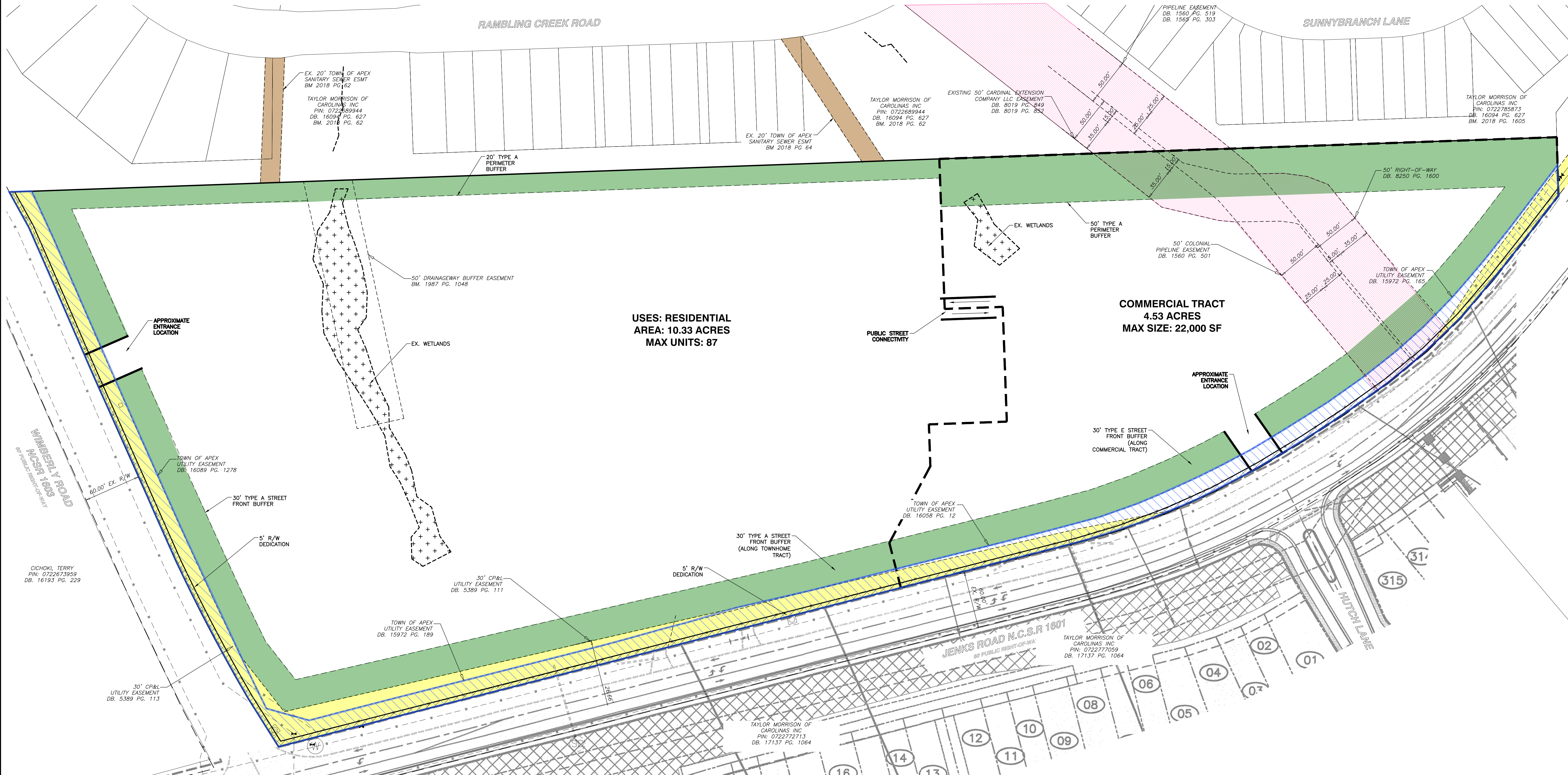
**BASS, NIXON & KENNEDY, INC.
CONSULTING ENGINEERS**

**6310 CHAPEL HILL ROAD, SUITE 250
RALEIGH, NORTH CAROLINA 27607**

**TELEPHONE: (919) 851-4422
FAX: (919) 851-8968**

**CERTIFICATION NUMBERS: NCBELS (C-0110)
NCBOLA (C-0267)**

**CONTACT: K. ROBERT BELL, JR., PE CPESC
EMAIL: Robbie.Bell@BNKinc.com**



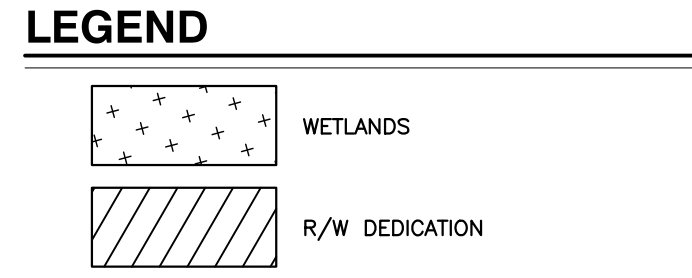
USES: RESIDENTIAL
 AREA: 10.33 ACRES
 MAX UNITS: 87

COMMERCIAL TRACT
 4.53 ACRES
 MAX SIZE: 22,000 SF

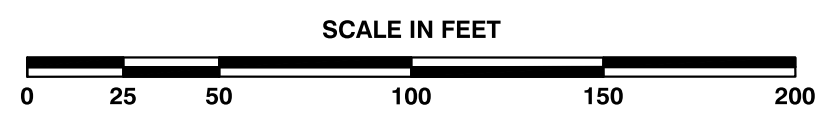
- PLANNING NOTES:**
- ENTRANCE LOCATIONS SHOWN HEREON ARE PRELIMINARY AND MAY CHANGE AT THE TIME OF MASTER PLAN APPROVAL.
 - THE RESOURCE CONSERVATIVE AREA (RCA) SHOWN REASON IS PRELIMINARY AND MAY CHANGE AT TIME OF MASTER PLAN APPROVAL.
 - THE MAINTENANCE OF RCA, LANDSCAPE BUFFERS, PASSIVE OPEN SPACE, COMMON AREAS, AND THE STORMWATER DEVICES SHALL BE THE RESPONSIBILITY OF THE PROPERTY ASSOCIATION.
 - ALL SIGNAGE SHALL COMPLY WITH TOA UDO SECTION 8.7, SIGNS.
 - THE PUD SHALL MEET TOWN OF APEX STORMWATER REQUIREMENTS OUTLINED IN TOA UDO SECTION 6.1.7 SUCH THAT POST-DEVELOPMENT RUNOFF SHALL NOT EXCEED PRE-DEVELOPMENT RUNOFF FOR THE 1-YEAR, 10-YEAR, AND 25-YEAR, 24 HOUR STORM EVENTS.

- NOTES:**
- BOUNDARY AND EXISTING CONDITIONS INFORMATION WAS TAKEN FROM A SURVEY BY BASS, NIXON AND KENNEDY, INC.
 - TOPOGRAPHIC INFORMATION FOR THE SITE WAS TAKEN FROM WAKE COUNTY GIS. THE SITE HAS BEEN EVALUATED FOR THE EXISTENCE OF WETLANDS AND STREAMS BY BASS, NIXON AND KENNEDY, INC. THE LOCATION OF THESE ENVIRONMENTAL FEATURES AREA SHOWN AS SURVEYED.

- TOWN REQUIRED PUD NOTES:**
- 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 WAY 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 THE ZONING ENFORCEMENT OFFICER; SUCH AREAS MAY INCLUDE BUT NOT LIMITED TO COMMON PROPERTY LINES OR NEAR PUBLIC AREAS (SIDEWALKS, ETC.).
 - SITE ELEMENTS REQUIRED TO SATISFY RECREATIONAL REQUIREMENTS SUCH AS BUT NOT LIMITED TO PLAY FIELDS AND GREENWAY TRAILS AND ITEMS TYPICALLY ASSOCIATED WITH THEM (BENCHES, TRASH CONTAINERS, SIGNS, ETC.) MUST MEET ANY APPLICABLE STANDARDS FOUND IN THE TOWN OF APEX STANDARD SPECIFICATIONS AND CONSTRUCTION DETAILS AND THE REQUIREMENTS OF THE TOWN OF APEX PARKS AND RECREATION DEPARTMENT.
 - 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.
 - NO SIGNS ARE APPROVED AS PART OF A PUD PLAN APPROVAL. A SEPARATE SIGN PERMIT MUST BE OBTAINED.



**PRELIMINARY PLANS NOT FOR CONSTRUCTION
 THIS SHEET IS FOR ILLUSTRATIVE PURPOSES ONLY**



BASS, NIXON & KENNEDY, INC.
CONSULTING ENGINEERS
 6310 CHABEL HILL ROAD, SUITE 250, RALEIGH, NC 27607
 TELEPHONE: (919) 851-1222 FAX: (919) 851-8866
 CERTIFICATION NUMBERS: NCBELS (C-0110); NCBOLA (C-0267)

NO.	DATE	DESCRIPTION	BY
1	12-06-19	PER TOWN OF APEX COMMENTS	IP
2	01-24-20	PER TOWN OF APEX COMMENTS	IP
3	01-31-20	PER TOWN OF APEX COMMENTS	IP

JOB NO.	DATE	DRAWN BY	IP
03-18201	11-01-19		

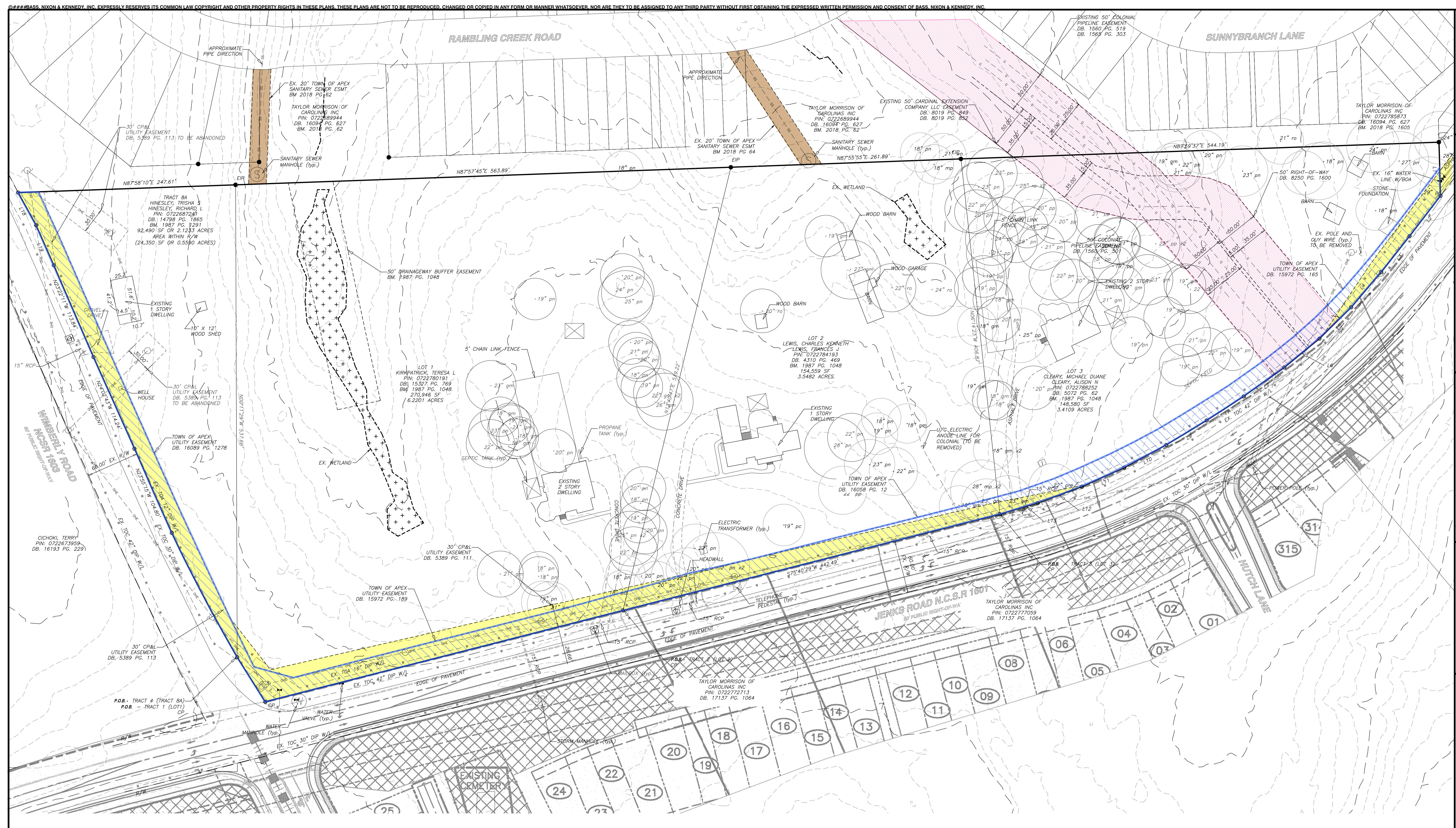
MASTER PLAN

SCALE: 1" = 80'

CHK BY: KRB

**JENKS AND WIMBERLY
 MIXED USE PUD
 JENKS ROAD AT WEMBERLY ROAD**
 TOWN OF APEX, WAKE COUNTY, NORTH CAROLINA

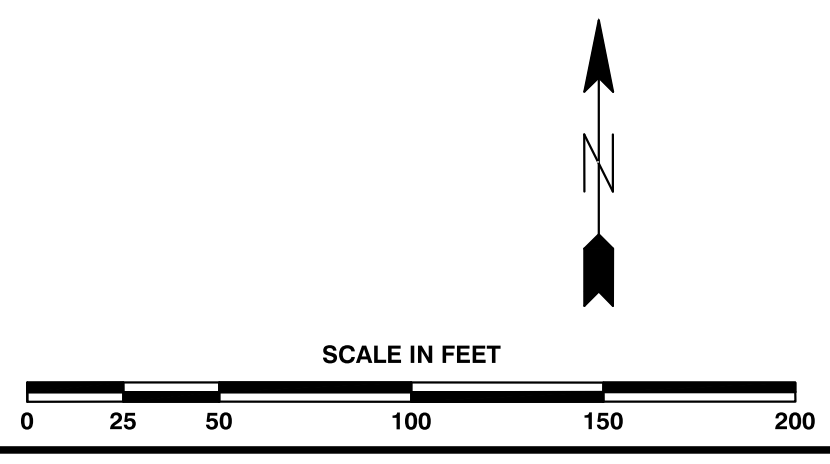
SHEET CC-1



SYMBOLS

- EXISTING 18" OR GREATER TREE LOCATION
- EXISTING COLONIAL ANODE LINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING GATE VALVE
- EXISTING WATER MANHOLE
- EXISTING STORM DRAINAGE MANHOLE
- EXISTING SAN SEWER MANHOLE
- EXISTING ELECTRICAL TRANSFORMER
- EXISTING POWER POLE W/GUY
- EXISTING TELEPHONE PEDESTAL
- EXISTING MAILBOX
- EXISTING WETLANDS

**PRELIMINARY PLANS NOT
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BASS, NIXON & KENNEDY, INC.
CONSULTING ENGINEERS
 6310 CHASE HILL ROAD, SUITE 250, RALEIGH, NC 27607
 TELEPHONE: (919) 851-1222 FAX: (919) 851-8866
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NO.	DATE	DESCRIPTION	BY
3	01-31-20	PER TOWN OF APEX COMMENTS	IP
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1	12-06-19	PER TOWN OF APEX COMMENTS	IP

JOB NO.	DATE	DRAWN BY	IP
03-18201	11-01-19		

**EXISTING
CONDITIONS PLAN**

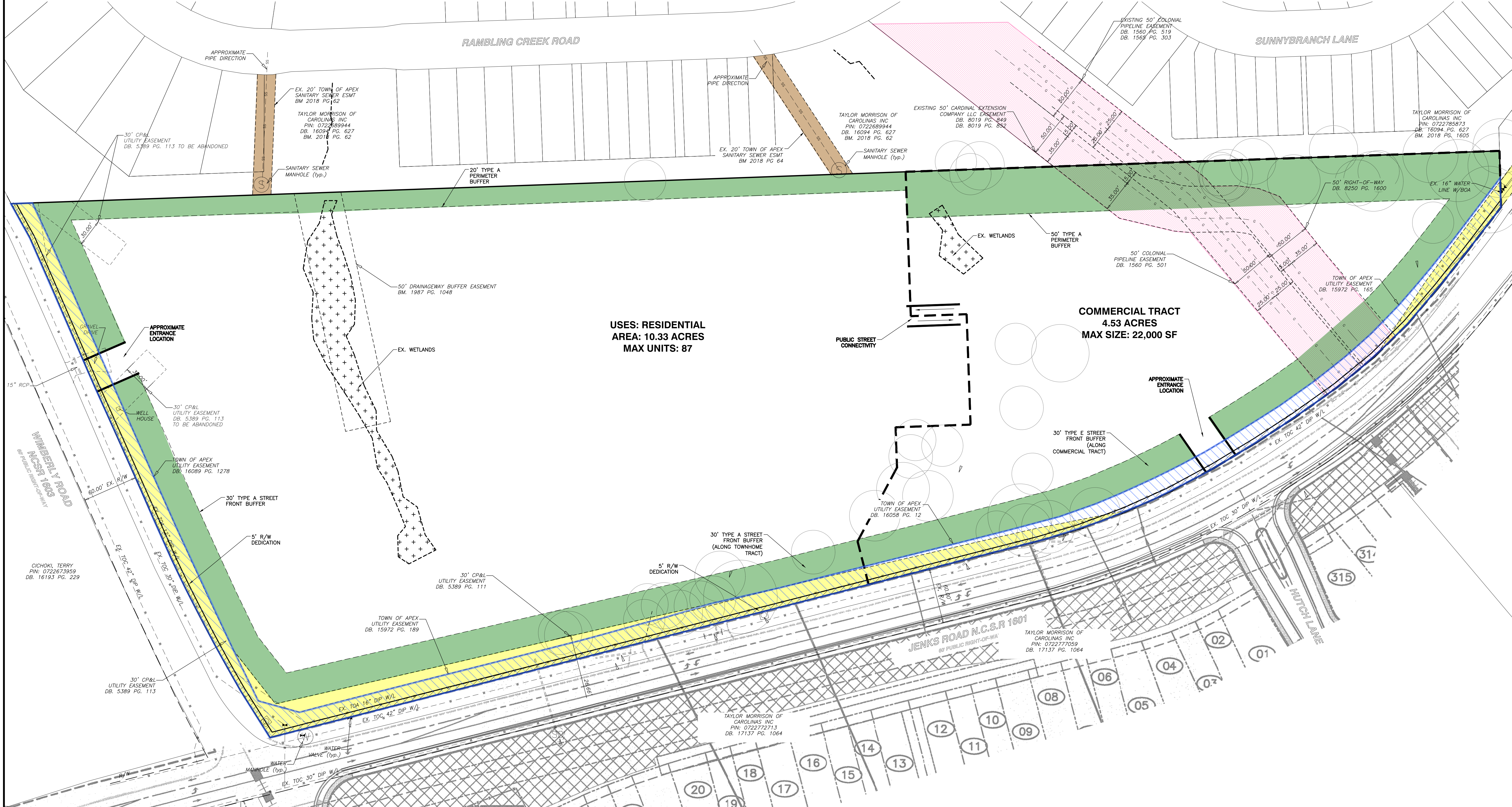
SCALE: 1" = 80'

CHK BY: KRB

**JENKS AND WIMBERLY
MIXED USE PUD
JENKS ROAD AT WIMBERLY**
 TOWN OF APEX, WAKE COUNTY, NORTH CAROLINA

**SHEET
CC-2**

NOT RELEASED FOR CONSTRUCTION OR BID SOLICITATION



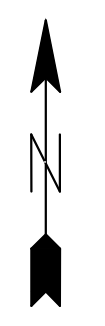
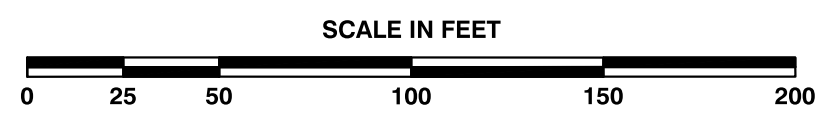
USES: RESIDENTIAL
AREA: 10.33 ACRES
MAX UNITS: 87

COMMERCIAL TRACT
4.53 ACRES
MAX SIZE: 22,000 SF

- TOWN REQUIRED PUD NOTES:**
1. 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 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 THE ZONING ENFORCEMENT OFFICER. SUCH AREAS MAY INCLUDE BUT NOT LIMITED TO COMMON PROPERTY LINES OR NEAR PUBLIC AREAS (SIDEWALKS, ETC.).
 2. SITE ELEMENTS REQUIRED TO SATISFY RECREATIONAL REQUIREMENTS SUCH AS BUT NOT LIMITED TO PLAY FIELDS AND GREENWAY TRAILS AND ITEMS TYPICALLY ASSOCIATED WITH THEM (BENCHES, TRASH CONTAINERS, SIGNS, ETC.) MUST MEET ANY APPLICABLE STANDARDS FOUND IN THE TOWN OF APEX STANDARD SPECIFICATIONS AND CONSTRUCTION DETAILS AND THE REQUIREMENTS OF THE TOWN OF APEX PARKS AND RECREATION DEPARTMENT.
 3. 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.
 4. NO SIGNS ARE APPROVED AS PART OF A PUD PLAN APPROVAL. A SEPARATE SIGN PERMIT MUST BE OBTAINED.

- NOTES:**
1. BOUNDARY AND EXISTING CONDITIONS INFORMATION WAS TAKEN FROM A SURVEY BY BASS, NIXON AND KENNEDY, INC.
 2. TOPOGRAPHIC INFORMATION FOR THE SITE WAS TAKEN FROM WAKE COUNTY GIS.
 3. THE SITE HAS BEEN EVALUATED FOR THE EXISTENCE OF WETLANDS AND STREAMS BY BASS, NIXON AND KENNEDY, INC. THE LOCATION OF THESE ENVIRONMENTAL FEATURES AREA SHOWN AS SURVEYED.
 4. THIS PUD IS REQUESTING FULL TOWN SERVICES - WATER, SEWER, AND ELECTRICITY.
 5. THIS PUD SHALL MEET ALL STORMWATER MANAGEMENT REQUIREMENTS FOR QUALITY AND QUANTITY TREATMENT IN ACCORDANCE WITH SECTION 6.1.7 OF THE UDO, SUCH THAT: POST DEVELOPMENT PEAK RUNOFF SHALL NOT EXCEED PRE-DEVELOPMENT PEAK RUNOFF CONDITIONS FOR THE 1 YEAR, 10 YEAR, 24-HOUR STORM EVENTS.

PRELIMINARY PLANS NOT FOR CONSTRUCTION **THIS SHEET IS FOR ILLUSTRATIVE PURPOSES ONLY**



BASS, NIXON & KENNEDY, INC.
CONSULTING ENGINEERS
6310 CHAREL HILL ROAD, SUITE 250, RALEIGH, NC 27607
TELEPHONE: (919) 851-1222 FAX: (919) 851-8866
CERTIFICATION NUMBERS: NCBELS (C-0110); NCBOLA (C-0267)

NO.	DATE	DESCRIPTION	BY
3	01-31-20	PER TOWN OF APEX COMMENTS	IP
2	01-24-20	PER TOWN OF APEX COMMENTS	IP
1	12-06-19	PER TOWN OF APEX COMMENTS	IP

JOB NO.	DATE	IP	DRAWN BY
03-18201	11-01-19	IP	IP

PRELIMINARY UTILITY PLAN

SCALE: 1" = 80'

CHK BY: KRB

JENKS AND WIMBERLY MIXED USE PUD
JENKS ROAD AT WIMBERLY ROAD
TOWN OF APEX, WAKE COUNTY, NORTH CAROLINA

SHEET CC-3



84' x 64' Commercial Building-1 Front Elevation

Note: Maximum Building Height = 45 Feet, Maximum Number of Stories = 3

Proposed
Jenks and Wimberly Mixed Use PUD
Apex, North Carolina



84' x 64' Commercial Building-2 Front Elevation

Note: Maximum Building Height = 45 Feet, Maximum Number of Stories = 3

Proposed
Jenks and Wimberly Mixed Use PUD
Apex, North Carolina



Proposed
Jenks and Wimberly Mixed Use PUD
Apex, North Carolina





Kingston "B"

Bennington "A"

Stowe "A"

Bennington "A"



Left - Kingston "B"



Bennington "A"

Stowe "A"

Bennington "A"

Kingston "B"



Right - Bennington "A"

Traffic Impact Analysis

Jenks Road Assemblage Apex, NC

Prepared for:

TaylorMorrison

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Traffic Impact Analysis for
Jenks Road Assemblage
Apex, North Carolina

Prepared for:

Taylor Morrison
Cary, North Carolina

Prepared by:

Kimley-Horn and Associates, Inc.
NC License #F-0102
300 West Morgan Street, Suite 1500
Durham, NC 27701
(919) 682-3583

October 2019

017270007



Earl Randall Jewell
10/30/2019

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

The proposed Jenks Road Assemblage project is located generally northeast of the Jenks Road – Wimberly Road intersection in Apex, North Carolina. As currently envisioned, the project will consist of 87 townhomes and 20,880 square feet of commercial space, which for the purposes of this analysis was assumed to include 10,440 SF of medical office space and 10,440 SF of general retail space. The development is proposed to be accessed by one full-movement driveway on Jenks Road and one full-movement driveway on Wimberly Road, and build-out is expected in 2023.

This report presents trip generation, distribution, traffic analyses, and recommendations for transportation improvements required to meet anticipated project traffic demands. This report examines the existing (2019) traffic condition and the projected (2023) background and build-out traffic conditions.

As shown in Table ES-1, the proposed development has the potential to generate 147 net new external trips (81 entering and 66 exiting) in the AM peak hour and 107 net new external trips (50 entering and 57 exiting) in the PM peak hour on a typical weekday.

Table ES-1 ITE Traffic Generation (Vehicles)							
Land Use Code	Land Use	Intensity		AM Peak Hour		PM Peak Hour	
				In	Out	In	Out
221	Multifamily Low-Rise (Townhomes)	87	d.u.	10	32	33	19
720	Medical Office	10,440	s.f.	23	7	10	27
820	Shopping Center	10,440	s.f.	52	31	49	53
Subtotal				85	70	92	99
Internal Capture				4	4	9	9
Pass-by Trips				0	0	16	16
Total Net New External Trips				81	66	50	57

Capacity analyses were performed using Synchro Version 10 software. Table ES-2 summarizes the operation of the study intersections for the AM and PM peak hour traffic conditions.

Table ES-2 Level-of-Service Summary		
Condition	AM Peak-Hour LOS (Delay)	PM Peak-Hour LOS (Delay)
Jenks Road – Wimberly Road/Westford Street B (Unsignalized)*		
Existing (2019) Traffic	NB – A (9.9) SB – B (10.1) EBL – A (7.5) WBL – A (7.4)	NB – B (10.6) SB – B (11.0) EBL – A (7.5) WBL – A (7.4)
Projected (2023) Background Traffic	NB – B (12.6) SB – B (12.0) EBL – A (7.7) WBL – A (7.5)	NB – B (14.4) SB – C (16.3) EBL – A (7.8) WBL – A (7.7)
Projected (2023) Build-out Traffic	NB – B (13.7) SB – B (12.5) EBL – A (7.8) WBL – A (7.6)	NB – C (15.4) SB – C (17.4) EBL – A (7.9) WBL – A (7.7)
Jenks Road – Westford Street C/Site Driveway (Unsignalized)*		
Projected (2023) Background Traffic	NB – B (10.4) WBL – A (7.7)	NB – B (10.9) WBL – A (7.8)
Projected (2023) Build-out Traffic	NB – B (12.0) SB – B (12.4) EBL – A (7.7) WBL – A (7.7)	NB – B (13.1) SB – B (13.7) EBL – A (7.8) WBL – A (7.8)
Wimberly Road – Site Driveway (Unsignalized)*		
Projected (2023) Build-out Traffic	WB – A (9.6) SBL – A (7.5)	WB – A (9.9) SBL – A (7.5)

* Note: HCM methodology does not report an overall level of service for unsignalized intersections. The level of service and delay for the worst approach are reported above for unsignalized intersections.

The following improvement is committed by the Westford residential project:

Jenks Road – Westford Street C/Site Driveway:

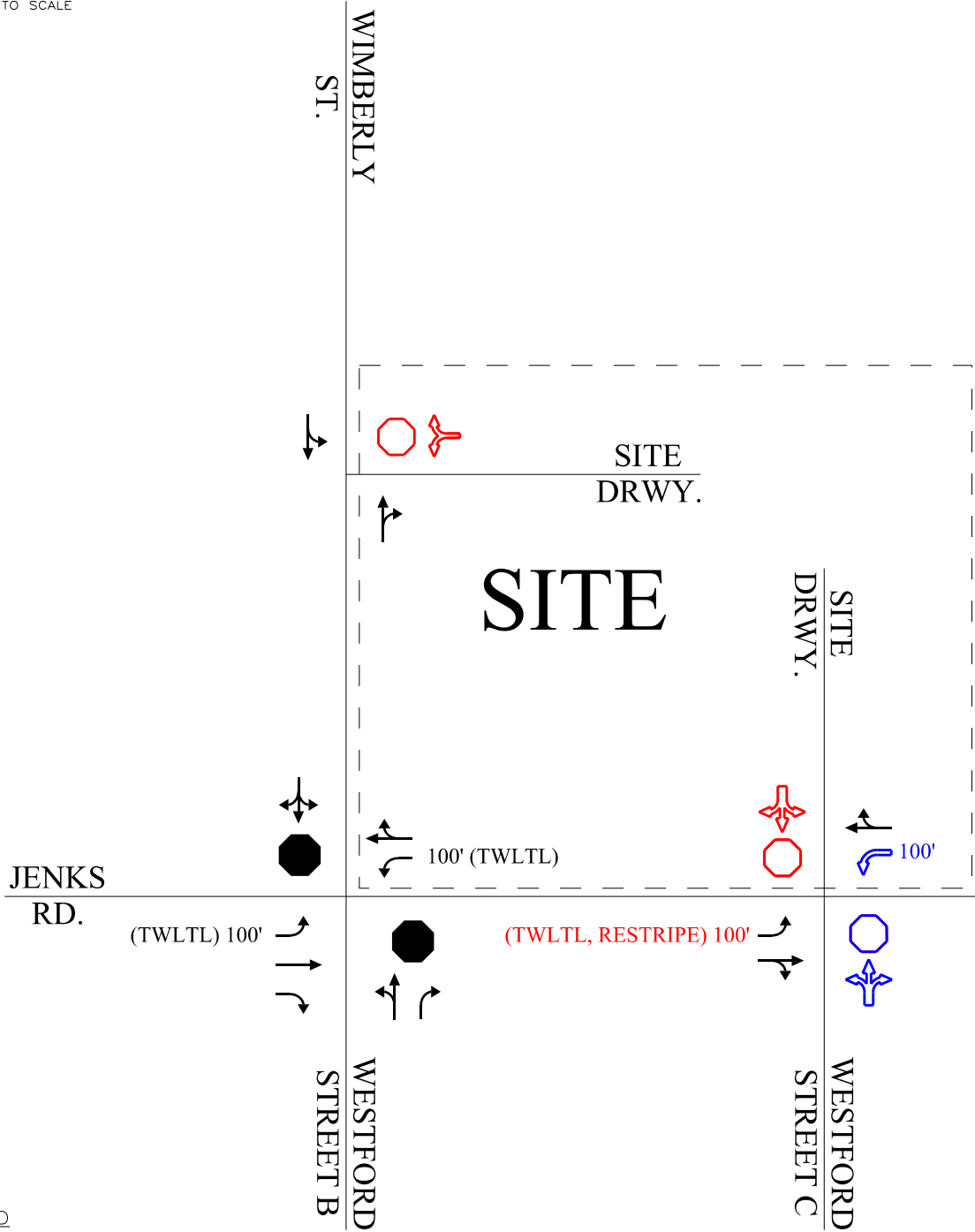
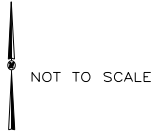
- Provide a westbound left-turn lane with a minimum of 100 feet of storage on Jenks Road

The following improvement is recommended as part of the Jenks Road Assemblage:

Jenks Road – Westford Street C/Site Driveway:

- Restripe the eastbound approach of Jenks Road to provide a left-turn lane with 100 feet of storage

Analyses indicate that with the committed and recommended improvements in place, all of the study intersections are expected to operate acceptably at project build-out. Additionally, both Synchro and SimTraffic indicate that queues are expected to be less than 100’ on each stop-controlled approach in the study area at project build-out.



LEGEND

- EXISTING LANE
- EXISTING STOP SIGN
- EXISTING TRAFFIC SIGNAL
- XX' STORAGE LENGTH
- COMMITTED LANE (BY OTHERS)
- COMMITTED STOP SIGN (BY OTHERS)
- RECOMMENDED LANE
- RECOMMENDED STOP SIGN



JENKS ROAD ASSEMBLAGE
APEX, NC
TRAFFIC CAPACITY ANALYSIS

BUILD-OUT
ROADWAY LANEAGE

FIGURE
ES-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.

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1.0 Introduction

The proposed Jenks Road Assemblage project is located generally northeast of the Jenks Road – Wimberly Road intersection in Apex, North Carolina. As currently envisioned, the project will consist of 87 townhomes and 20,880 square feet of commercial space, which for the purposes of this analysis was assumed to include 10,440 SF of medical office space and 10,440 SF of general retail space. The development is proposed to be accessed by one full-movement driveway on Jenks Road and one full-movement driveway on Wimberly Road, and build-out is expected in 2023.

This report presents trip generation, distribution, traffic analyses, and recommendations for transportation improvements required to meet anticipated project traffic demands. This report examines the existing (2019) traffic condition and the projected (2023) background and build-out traffic conditions.

The Town of Apex and the North Carolina Department of Transportation (NCDOT) provided background information and were consulted regarding the elements to be covered in this analysis. The Memorandum of Understanding is included in the Appendix of this report.

2.0 Inventory

2.1 Study Area

The study area for this development includes the following intersections:

- Jenks Road – Wimberly Road/Westford Street B
- Jenks Road – Westford Street C/Site Driveway
- Wimberly Road – Site Driveway

This study area was determined based upon discussions with Town of Apex and NCDOT staff. **Figure 1** shows the site location.

2.2 Existing Conditions

The proposed development is located in Apex, North Carolina generally northeast of the Jenks Road – Wimberly Road intersection, and major roadways in the vicinity of the site include Jenks Road and Wimberly Road. The existing roadway laneage is shown on **Figure 2**.

Jenks Road is generally a three-lane undivided roadway with a posted speed limit of 45 mph in the vicinity of the site. The estimated 2019 average daily traffic (ADT) volume is approximately 2,300 vehicles per day (vpd) east of Wimberly Road.

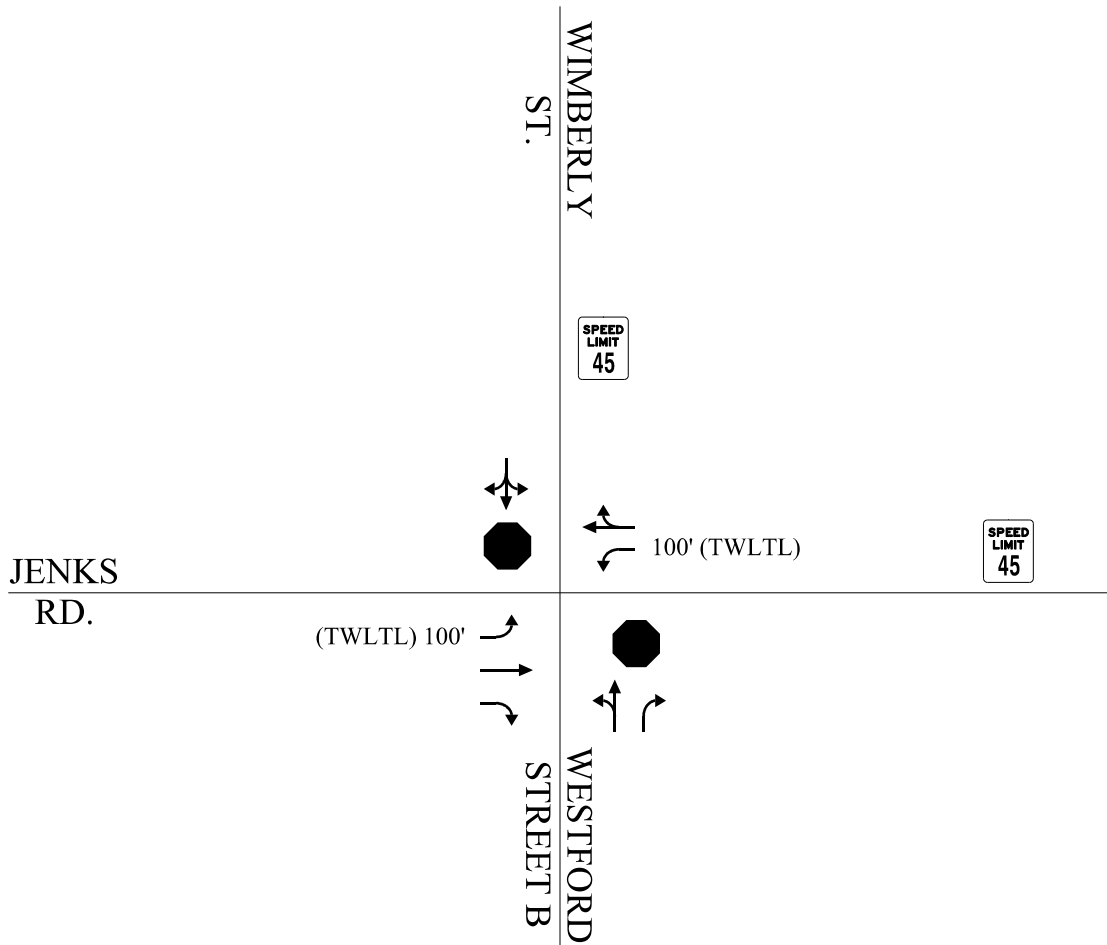
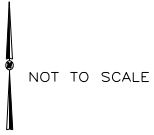
Wimberly Road is generally a two undivided roadway with a posted speed limit of 45 mph in the vicinity of the site. The estimated 2019 ADT volume is approximately 1,400 vpd at Jenks Road.



JENKS ROAD ASSEMBLAGE
APEX, NC
TRAFFIC CAPACITY ANALYSIS

SITE LOCATION

FIGURE
1



LEGEND

- ← EXISTING LANE
- EXISTING STOP SIGN
- XX' STORAGE LENGTH
- POSTED SPEED LIMIT



JENKS ROAD ASSEMBLAGE
APEX, NC
TRAFFIC CAPACITY ANALYSIS

EXISTING ROADWAY LANEAGE

FIGURE
2

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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). As currently envisioned, the site will include approximately 87 townhomes and 20,880 square feet of commercial space, which for the purposes of this analysis was assumed to include 10,440 SF of medical office space and 10,440 SF of general retail space. Table 3.0 summarizes the estimated traffic generation for the proposed development. It should be noted that, as the equation provided in ITE for the AM peak hour of general retail (LUC 820) has a very high y-intercept, trip generation for the AM peak hour was calculated using an average of the rate and equation for that peak.

Land Use Code	Land Use	Intensity		AM Peak Hour		PM Peak Hour	
				In	Out	In	Out
221	Multifamily Low-Rise (Townhomes)	87	d.u.	10	32	33	19
720	Medical Office	10,440	s.f.	23	7	10	27
820	Shopping Center	10,440	s.f.	52	31	49	53
Subtotal				85	70	92	99
Internal Capture				4	4	9	9
Pass-by Trips				0	0	16	16
Total Net New External Trips				81	66	50	57

As shown in Table 3.0, the proposed development has the potential to generate 147 net new external trips (81 entering and 66 exiting) in the AM peak hour and 107 net new external trips (50 entering and 57 exiting) in the PM peak hour on a typical weekday.

Internally captured trips are trips that begin and end on the project site and do not access the external roadway network. Institute of Transportation Engineers (ITE) capture rates published in the *Trip Generation Handbook* indicate that the internal capture between the proposed land uses will be approximately 5% in the AM peak hour and 27% in the PM peak hour. However, to be conservative, internal capture was limited to 10% in the PM peak hour.

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. The ITE *Trip Generation handbook* indicates that approximately 34% of shopping center trips will be pass-by traffic in the PM peak hour. Based on the proposed land uses, approximately 17% of the total PM peak hour traffic will be pass-by traffic, with no pass-by capture in the AM peak. Pass-by trips were assigned based on existing traffic patterns.

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

4.0 Site Traffic Distribution

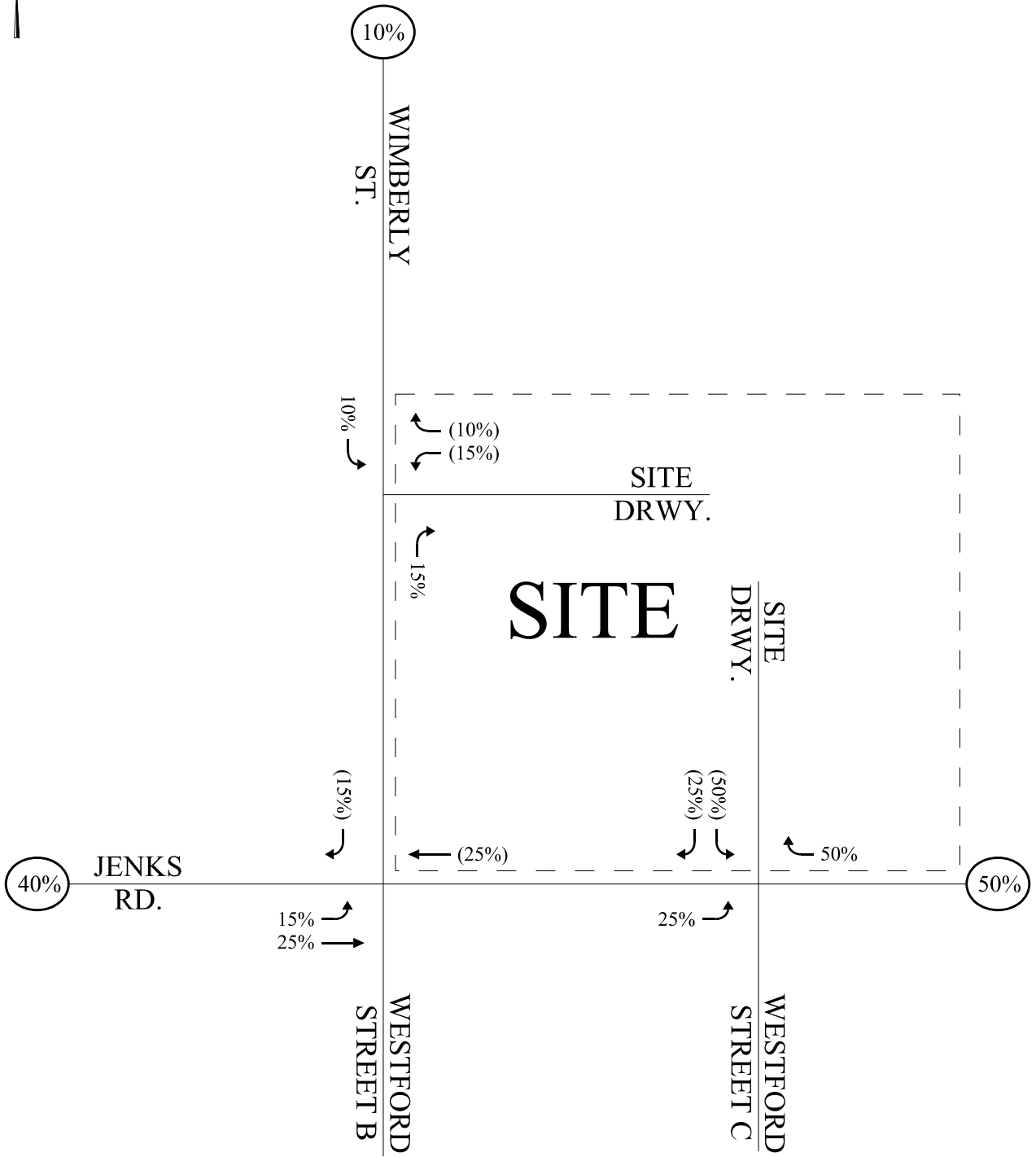
The proposed generated trips were assigned to the surrounding roadway network. The directional distribution and assignment are based on a review surrounding land uses and existing travel patterns as well as through discussions with Town staff. The distribution used for the development is listed below:

- 50% to/from the northeast on Jenks Road
- 40% to/from the southwest on Jenks Road
- 10% to/from the north on Wimberly Road

The site traffic distribution and percent assignment is shown on **Figure 3**.



NOT TO SCALE



LEGEND

- XX% EXISTING TRAFFIC SIGNAL
- (XX%) OUTBOUND PERCENT ASSIGNMENT
- (XX%) OVERALL DISTRIBUTION



JENKS ROAD ASSEMBLAGE
APEX, NC
TRAFFIC CAPACITY ANALYSIS

SITE TRAFFIC DISTRIBUTION
AND PERCENT ASSIGNMENT

FIGURE
3

5.0 Projected Traffic Volumes

5.1 Existing Traffic

AM peak hour (7:00 to 9:00 AM) and PM peak hour (4:00 to 6:00 PM) turning movement counts were performed at the following intersection:

- Jenks Road & Wimberly Road October 3, 2019

The existing AM and PM peak-hour traffic volumes are shown on **Figures 4 and 5**, respectively, and the traffic count data are included in the Appendix.

5.2 Historic Growth Traffic

Historic growth traffic is the increase in traffic due to usage increases and non-specific growth throughout the area. Based on discussions with the Town of Apex, a 3% annual growth rate was applied to the existing traffic to calculate background traffic volumes expected in 2023.

5.3 Approved Development Traffic

Approved development traffic is generated by approved, but not yet constructed, projects in the vicinity of the proposed project. Based on discussions with Town of Apex staff, four approved developments in the area were identified for inclusion in the analysis as background traffic: the Lake Castleberry development, the Preserve at White Oak Creek development (originally Tunstall Property), the Westford residential development, and the Westford commercial development.

The Lake Castleberry residential development proposes the construction of 172 single-family homes west of Wimberly Road between Green Level West Road and Castleberry Road. Town staff indicated that the project is approximately 40% built-out, and the development is expected to be fully occupied prior to the build-out of the Jenks Road Assemblage project. Traffic volumes were obtained from the *Traffic Impact Analysis for Lake Castleberry* (VHB Engineering NC, January 2014).

The Preserve at White Oak Creek, originally known as the Tunstall Property, proposes the construction of 250 single-family homes on the north side of Jenks Road and east of Wimberly Road. Town staff indicated that the project is approximately 75% built-out, and the development is expected to be fully occupied prior to the build-out of the Jenks Road Assemblage project. Traffic volumes for this development were obtained from the *Traffic Impact Analysis for Tunstall Property* (Kimley-Horn, June 2013).

The Westford residential project proposes the construction of 90 single-family homes, 300 apartments, and 225 townhomes between US 64 and Jenks Road at Wimberly Road. Town staff indicated that the project is approximately 50% built-out, and the development is expected to be occupied prior to the build-out of the Jenks Road Assemblage project. While the site is partially occupied, not all site driveways are open to development traffic at this time. Therefore, approved development volumes for this project were calculated as the difference between full build-out volumes (from the TIA) and existing driveway volumes (from the counts) along Jenks Road and are therefore not necessarily limited to 50% the site trips from that TIA at the driveways. Full build-out site traffic volumes for this development were obtained from the *Westford TIA* (Kimley-Horn, December 2016).

The Westford commercial project proposes the construction of 100,000 SF of general retail space between US 64 and Jenks Road generally west of the residential portion of the Westford project. Construction on that project has not begun, so 100% of site traffic will be included in this study as background traffic. Site traffic volumes for this development were obtained from the *Westford TIA Addendum – Commercial Parcel* (Kimley-Horn, June 2017).

Background traffic volumes consisting of existing, historic growth, and approved development traffic are shown on **Figures 4 and 5** for the AM and PM peak hours, respectively.

5.4 Site Traffic

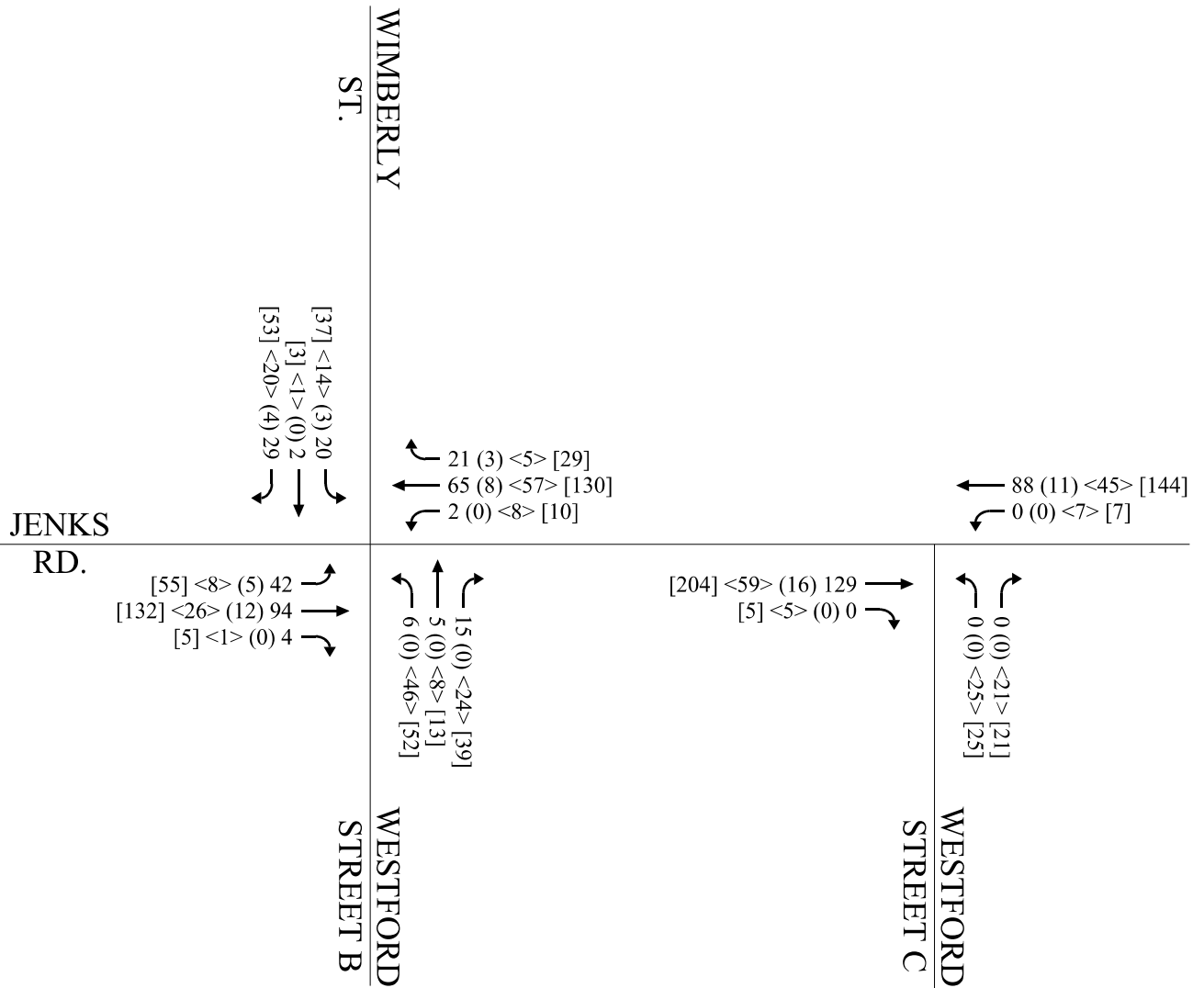
Traffic from the proposed development was generated and assigned to the adjacent roadway network per the distribution described in Section 4.0. **Figures 6 and 7** show the site trips at the study intersections for the AM and PM peak hour, respectively.

5.5 Total Traffic

To obtain the 2023 build-out traffic volumes, the projected site traffic was added to the projected (2023) background traffic. Traffic volume calculations are detailed in intersection spreadsheets in the Appendix of this report. **Figures 6 and 7** show the projected (2023) AM and PM peak hour build-out peak-hour traffic volumes at the study intersections, respectively.



NOT TO SCALE



LEGEND

- XX EXISTING TRAFFIC
- (XX) BACKGROUND GROWTH
- <XX> APPROVED DEVELOPMENT TRAFFIC
- [XX] TOTAL BACKGROUND TRAFFIC



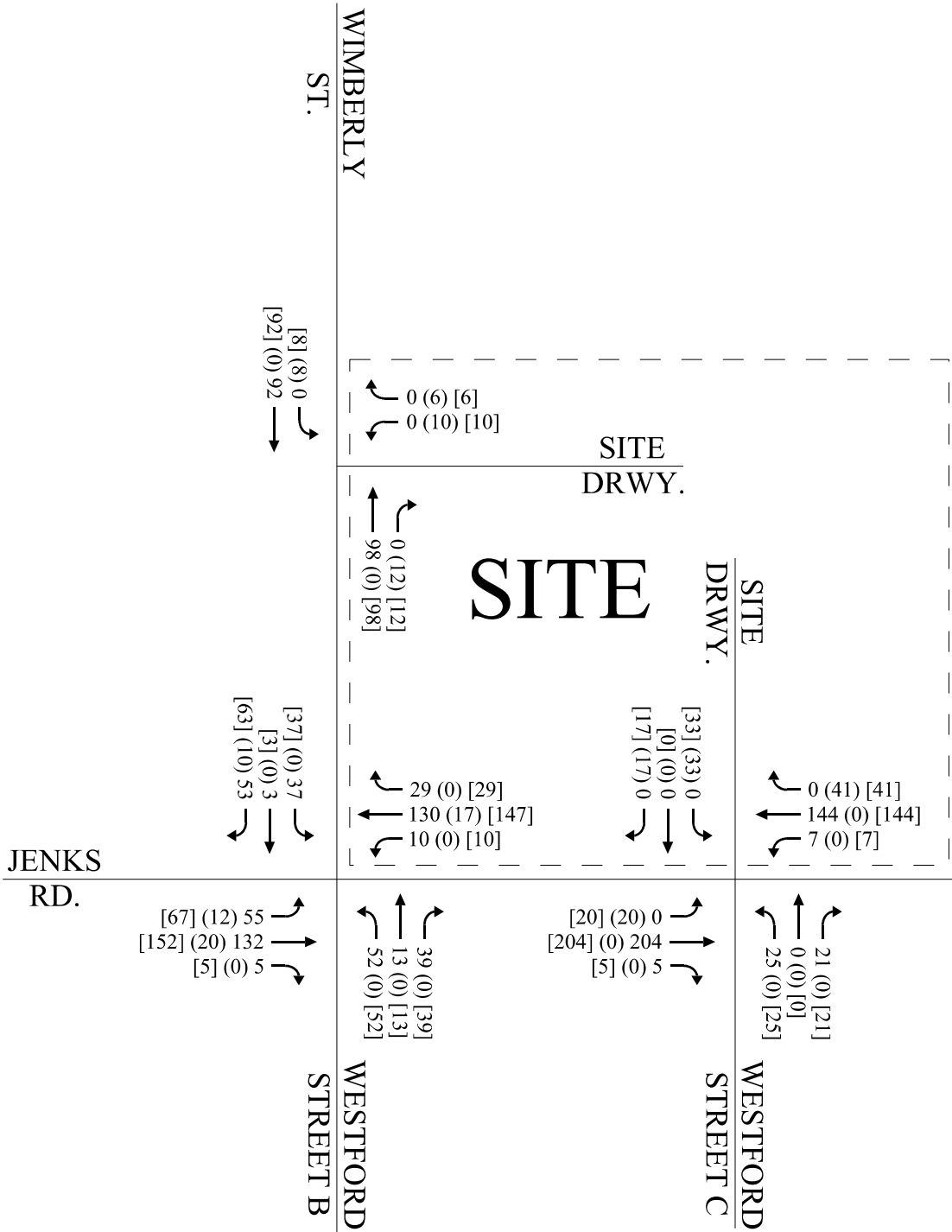
JENKS ROAD ASSEMBLAGE
APEX, NC
TRAFFIC CAPACITY ANALYSIS

EXISTING AND PROJECTED (2023)
BACKGROUND AM PEAK HOUR
TRAFFIC VOLUMES

FIGURE
4



NOT TO SCALE



LEGEND

- XX BACKGROUND TRAFFIC
- ((XX)) SITE TRAFFIC
- [XX] TOTAL BUILD-OUT TRAFFIC



JENKS ROAD ASSEMBLAGE
APEX, NC
TRAFFIC CAPACITY ANALYSIS

PROJECTED (2023) BUILD
AM PEAK HOUR
TRAFFIC VOLUMES

FIGURE
6

6.0 Capacity Analysis

Capacity analyses (see Appendix) were performed for the AM and PM peak hours for the existing (2019) traffic condition and the projected (2023) background and build-out traffic conditions using Synchro Version 10 software to determine the operating characteristics of the adjacent road network and 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 within a traffic stream. The *Highway Capacity Manual* 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 10 or computable using methodology published in the *Highway Capacity Manual*. 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-A](#) lists the LOS control delay thresholds published in the *Highway Capacity Manual* for signalized and unsignalized intersections.

Table 6.0-A		
Level-of-Service Control Delay Thresholds		
Level-of-Service	Signalized Intersections – Control Delay Per Vehicle [sec/veh]	Unsignalized Intersections – Average Control Delay [sec/veh]
A	≤ 10	≤ 10
B	> 10 – 20	> 10 – 15
C	> 20 – 35	> 15 – 25
D	> 35 – 55	> 25 – 35
E	> 55 – 80	> 35 – 50
F	> 80	> 50

Where count or projected volumes are between 1 and 4 trips, a minimum volume of 4 was used in the Synchro analysis to be conservative, though volume figures and volume development spreadsheets reflect actual volumes for all movements. Per Congestion Management guidelines, a peak hour factor (PHF) of 0.90 was used for each study condition.

Table 6.0-B summarizes the LOS and delay (seconds per vehicle) for all of the study intersections for the existing (2019) traffic condition and the projected (2023) background and build-out traffic conditions. All capacity analyses are included in the Appendix and are briefly summarized in the following sub-sections.

Table 6.0-B Level-of-Service Summary		
Condition	AM Peak-Hour LOS (Delay)	PM Peak-Hour LOS (Delay)
Jenks Road – Wimberly Road/Westford Street B (Unsignalized)*		
Existing (2019) Traffic	NB – A (9.9) SB – B (10.1) EBL – A (7.5) WBL – A (7.4)	NB – B (10.6) SB – B (11.0) EBL – A (7.5) WBL – A (7.4)
Projected (2023) Background Traffic	NB – B (12.6) SB – B (12.0) EBL – A (7.7) WBL – A (7.5)	NB – B (14.4) SB – C (16.3) EBL – A (7.8) WBL – A (7.7)
Projected (2023) Build-out Traffic	NB – B (13.7) SB – B (12.5) EBL – A (7.8) WBL – A (7.6)	NB – C (15.4) SB – C (17.4) EBL – A (7.9) WBL – A (7.7)
Jenks Road – Westford Street C/Site Driveway (Unsignalized)*		
Projected (2023) Background Traffic	NB – B (10.4) WBL – A (7.7)	NB – B (10.9) WBL – A (7.8)
Projected (2023) Build-out Traffic	NB – B (12.0) SB – B (12.4) EBL – A (7.7) WBL – A (7.7)	NB – B (13.1) SB – B (13.7) EBL – A (7.8) WBL – A (7.8)
Wimberly Road – Site Driveway (Unsignalized)*		
Projected (2023) Build-out Traffic	WB – A (9.6) SBL – A (7.5)	WB – A (9.9) SBL – A (7.5)

* Note: HCM methodology does not report an overall level of service for unsignalized intersections. The level of service and delay for the worst approach are reported above for unsignalized intersections.

6.1 Jenks Road at Wimberly Road/Westford Street B

Analyses indicate that the unsignalized Jenks Road – Wimberly Road/Westford Street B intersection currently operates with short delays on the minor street approaches (Wimberly Road and Westford Street B) in both the AM and PM peak hours. The intersection is expected to continue to operate with short delays and queues in the year 2023 with or without the proposed project in place. In fact, both Synchro and SimTraffic indicate that queues on the minor street approaches will be less than 100’ at project build-out. Therefore, no roadway improvements are recommended to be performed at this intersection as part of the Jenks Road Assemblage project.

Table 6.1 summarizes the operation of the intersection for the existing (2019) and projected (2023) background and build-out traffic conditions.

Table 6.1 Level-of-Service Jenks Road – Wimberly Road/Westford Street B (Unsignalized)*		
Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
Existing (2019) Traffic	NB – A (9.9) SB – B (10.1) EBL – A (7.5) WBL – A (7.4)	NB – B (10.6) SB – B (11.0) EBL – A (7.5) WBL – A (7.4)
Projected (2023) Background Traffic	NB – B (12.6) SB – B (12.0) EBL – A (7.7) WBL – A (7.5)	NB – B (14.4) SB – C (16.3) EBL – A (7.8) WBL – A (7.7)
Projected (2023) Build-out Traffic	NB – B (13.7) SB – B (12.5) EBL – A (7.8) WBL – A (7.6)	NB – C (15.4) SB – C (17.4) EBL – A (7.9) WBL – A (7.7)

* Note: HCM methodology does not report an overall level of service for unsignalized intersections. The level of service and delay for the worst approach are reported above for unsignalized intersections.

6.2 Jenks Road at Westford Street C/Site Driveway

The Westford residential project proposes the construction of “Street C” as a full-movement driveway on Jenks Road approximately 1,100’ east of Wimberly Road. The following roadway improvement is committed as part of that project at this intersection:

- Provide a westbound left-turn lane with a minimum of 100 feet of storage on Jenks Road

Analyses indicate that the intersection is expected to operate with short delays and queues in the background traffic condition with the committed improvement in place.

The Jenks Road Assemblage project proposes to construct a full-movement site driveway aligning with Street C with one ingress lane and one egress lane. The following roadway improvement is recommended as part of the Jenks Road Assemblage project:

- Restripe the eastbound approach of Jenks Road to provide a left-turn lane with 100 feet of storage

Analyses indicate that the intersection is expected to continue to operate with short delays and queues in both peak hours at project build-out. Therefore, no roadway improvements are recommended at this intersection as part of the Jenks Road Assemblage project.

Table 6.2 summarizes the operation of the intersection for the projected (2023) background and build-out traffic conditions.

Table 6.2 Level-of-Service Wimberly Road – Westford Street C/Site Driveway (Unsignalized)*		
Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
Projected (2023) Background Traffic	NB – B (10.4) WBL – A (7.7)	NB – B (10.9) WBL – A (7.8)
Projected (2023) Build-out Traffic	NB – B (12.0) SB – B (12.4) EBL – A (7.7) WBL – A (7.7)	NB – B (13.1) SB – B (13.7) EBL – A (7.8) WBL – A (7.8)

* Note: HCM methodology does not report an overall level of service for unsignalized intersections. The level of service and delay for the worst approach are reported above for unsignalized intersections.

6.3 Wimberly Road – Site Driveway

A full-movement site driveway is proposed to be constructed on Wimberly Road approximately 480 feet north of Jenks Road as part of this project. The site driveway is proposed to be constructed with one ingress lane and one egress lane, and analyses indicate that the intersection is expected to operate with short delays and queues at project build-out. Therefore, no roadway improvements are recommended at this intersection as part of the Jenks Road Assemblage project.

Table 6.3 summarizes the operation of the intersection for the projected (2023) build-out traffic condition.

Table 6.3 Level-of-Service Wimberly Road – Site Driveway (Unsignalized)*		
Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
Projected (2023) Build-out Traffic	WB – A (9.6) SBL – A (7.5)	WB – A (9.9) SBL – A (7.5)

* Note: HCM methodology does not report an overall level of service for unsignalized intersections. The level of service and delay for the worst approach are reported above for unsignalized intersections.

7.0 Recommendations

The following improvement is committed by the Westford residential project:

Jenks Road – Westford Street C/Site Driveway:

- Provide a westbound left-turn lane with a minimum of 100 feet of storage on Jenks Road

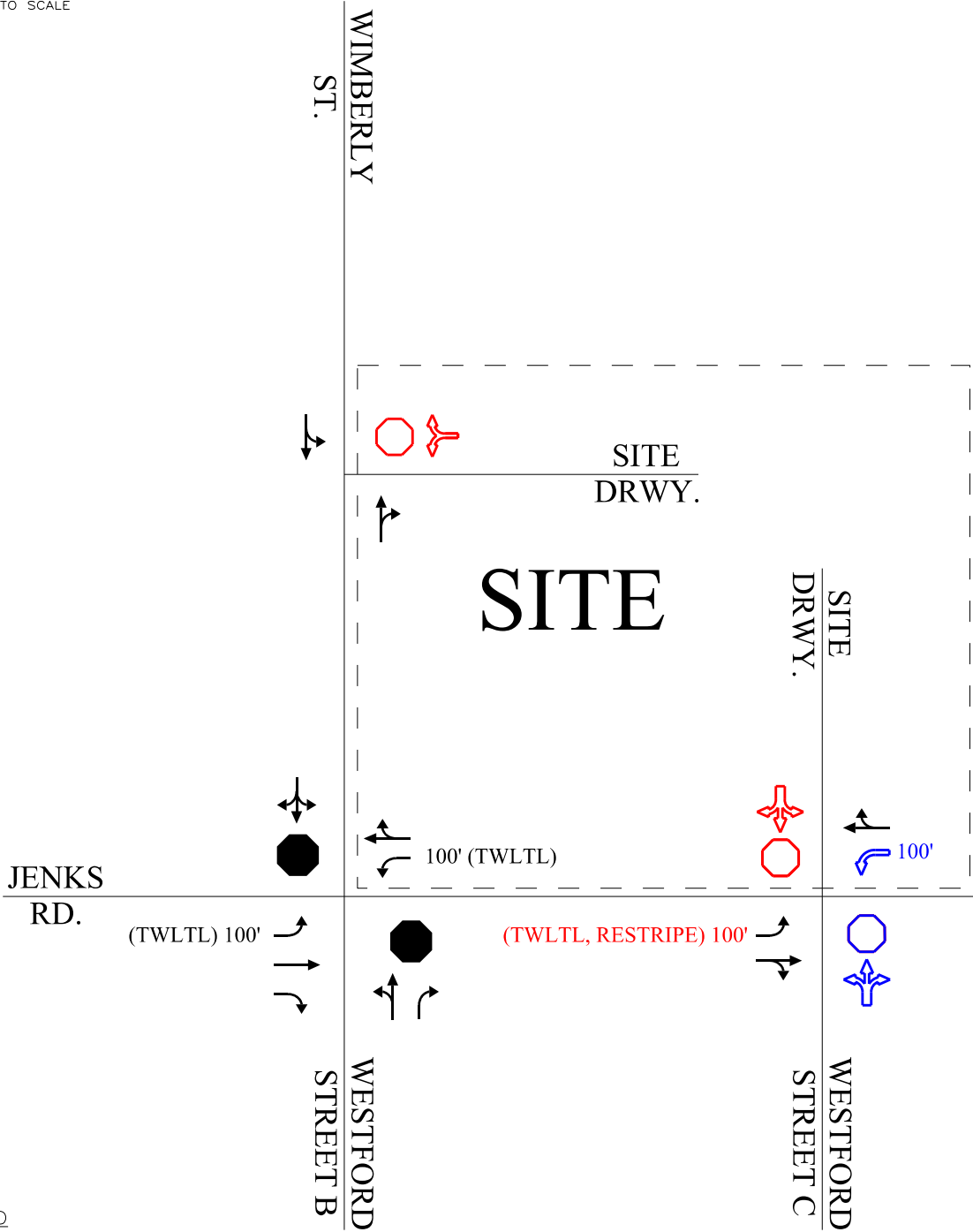
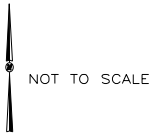
The following improvement is recommended as part of this project:

Jenks Road – Westford Street C/Site Driveway:








- Restripe the eastbound approach of Jenks Road to provide a left-turn lane with 100 feet of storage

Analyses indicate that with the committed and recommended improvements in place, all of the study intersections are expected to operate acceptably at project build-out. Additionally, both Synchro and SimTraffic indicate that queues are expected to be less than 100' on each stop-controlled approach in the study area at project build-out.

The build-out roadway laneage is shown on **Figure 8**.



LEGEND

-  EXISTING LANE
-  EXISTING STOP SIGN
-  EXISTING TRAFFIC SIGNAL
- XX' STORAGE LENGTH
-  COMMITTED LANE (BY OTHERS)
-  COMMITTED STOP SIGN (BY OTHERS)
-  RECOMMENDED LANE
-  RECOMMENDED STOP SIGN



JENKS ROAD ASSEMBLAGE
APEX, NC
TRAFFIC CAPACITY ANALYSIS

BUILD-OUT
ROADWAY LANEAGE

FIGURE
8

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.

Appendix

Appendix A:
Assumptions Memorandum

MEMORANDUM

To: Amy Neidringhaus, NCDOT District Office
Russell Dalton, P.E., Town of Apex

From: Earl Lewellyn, P.E.
Kimley-Horn and Associates, Inc.

Date: October 15, 2019 (*Revised 10/16/2019*)

Subject: Jenks Road Assemblage Traffic Impact Analysis – Memorandum of Understanding

The following assumptions will be incorporated into the traffic impact analysis for the proposed Jenks Road Assemblage mixed-use development based on a scoping meeting held September 30, 2019 with Town of Apex and NCDOT District Office staff. This project is located generally northeast of the Jenks Road – Wimberly Road intersection in Apex, North Carolina. The site is currently occupied by a few single-family homes and is proposed to include approximately 87 townhomes and 20,880 SF of commercial space. For the purposes of this analysis it is assumed that the commercial space will include 10,440 SF of medical office space and 10,440 SF of general retail space.

The project build-out is expected in 2023 and the site will be accessed via a full-movement site driveway on Jenks Road (across from the Westford East Site Driveway) and a full-movement site driveway on Wimberly Road.

STUDY AREA

Based on scoping discussions, the following intersections will be studied as part of this analysis:

- Jenks Road – Wimberly Road
- Jenks Road – Westford East Site Driveway/Proposed Site Driveway
- Wimberly Road – Proposed Site Driveway

Consistent with Congestion Management methodology, a consistent 0.90 peak hour factor (PHF) will be used at all study intersections, and no changes will be made to standard saturation flow rate inputs.

ANALYSIS SCENARIOS

We will analyze the weekday AM peak hour (7:00 to 9:00 AM) and PM peak hour (4:00 PM to 6:00 PM) for the following traffic conditions:

- Existing Traffic (2019)
- Projected (2023) No-Build Traffic
- Projected (2023) Build-Out Traffic

BACKGROUND GROWTH

Consistent with Town of Apex standards, a 3% annual growth rate will be applied to existing traffic volumes in the study area.

APPROVED DEVELOPMENT TRAFFIC

Based on discussions with the Town of Apex, site traffic from unoccupied portions (as indicated by the Town) of the following four approved developments will be included in this analysis as background traffic: Westford Residential (assume currently 50% occupied), Westford Commercial (assume currently 0% occupied), Lake Castleberry (assume currently 40% occupied), and the Preserve at White Oak Creek (assume currently 75% built-out).

TRIP GENERATION

Trip generation for the proposed uses at site build-out will generally be determined using the *ITE Trip Generation, 10th Edition* rates and equations as summarized in **Table 1**. It should be noted that, as the equation provide in ITE for general retail (LUC 820) has a very high y-intercept in the AM peak hour, trip generation for the AM peak hour will be calculated using an average of the rate and equation for that peak.

Table 1 ITE Traffic Generation (Vehicles)							
Land Use Code	Land Use	Intensity		AM Peak Hour		PM Peak Hour	
				In	Out	In	Out
220	Multifamily Housing (Low-Rise)	87	d.u.	10	32	33	19
720	Medical Office Building	10,440	d.u.	23	7	10	27
820	Shopping Center	10,440	s.f.	52	31	49	53
Subtotal				85	70	92	99
Internal Capture (Limit PM to 10%)				4	4	9	9
Pass-by Capture				0	0	16	16
Total Net New External Trips				81	66	50	57

While ITE methodology indicates that the proposed uses result in more than 27% internally-captured trips in the PM peak hour, that reduction was limited to 10% to be conservative.

TRIP DISTRIBUTION

Primary site traffic distribution is based on a review of origins and destinations within the area. General distribution percentages are as follows:

- 50% to/from the northeast on Jenks Road
- 40% to/from the southwest on Jenks Road
- 10% to/from the north on Wimberly Road

Jenks Road Assemblage

Table 1 - Trip Generation

Land Use	Intensity		Daily			AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out	Total	In	Out
220 Multifamily Housing (Low-Rise)	87	d.u.	618	309	309	42	10	32	52	33	19
720 Medical Office Building	10,440	s.f.	314	157	157	30	23	7	37	10	27
820 Shopping Center	10,440	s.f.	1,294	647	647	83	52	31	102	49	53
Subtotal			2,226	1,113	1,113	155	85	70	191	92	99
<i>Internal Capture</i>											
220 Multifamily Housing (Low-Rise)			151	76	75	1	0	1	21	15	6
720 Medical Office Building			76	36	40	4	2	2	7	2	5
820 Shopping Center			205	104	101	3	2	1	24	9	15
Internal Capture Total per ITE	AM	PM	432	216	216	8	4	4	52	26	26
Internal Capture Total for Analysis (Limit PM to 10%)	5.15%	10.00%	432	216	216	8	4	4	18	9	9
Total External Trips			1,794	897	897	147	81	66	173	83	90
<i>Pass-By Traffic (ITE)</i>											
820 Shopping Center	<u>AM</u>	<u>PM</u>	370	185	185	0	0	0	32	16	16
Pass-By Total:	0%	34%	370	185	185	0	0	0	32	16	16
Total Net New External Trips			1,424	712	712	147	81	66	107	50	57

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	157	157	23	7	10	27
Retail	647	647	52	31	49	53	
Restaurant	0	0	0	0	0	0	
Cinema/Entertainment	0	0	0	0	0	0	
Residential	309	309	10	32	33	19	
Hotel	0	0	0	0	0	0	
		1,113	1,113	85	70	92	99

INTERNAL TRIPS

OUTPUT	Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit	Enter	Exit
	Office	36	40	2	2	2	5
Retail	104	101	2	1	9	15	
Restaurant	0	0	0	0	0	0	
Cinema/Entertainment	0	0	0	0	0	0	
Residential	76	75	0	1	15	6	
Hotel	0	0	0	0	0	0	
		216	216	4	4	26	26
% Reduction			19.4%		5.1%		27.2%

EXTERNAL TRIPS

OUTPUT	Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit	Enter	Exit
	Office	121	117	21	5	8	22
Retail	543	546	50	30	40	38	
Restaurant	0	0	0	0	0	0	
Cinema/Entertainment	0	0	0	0	0	0	
Residential	233	234	10	31	18	13	
Hotel	0	0	0	0	0	0	
		897	897	81	66	66	73

Appendix B: Trip Generation

Jenks Road Assemblage

Table 1 - Trip Generation

Land Use	Intensity		Daily			AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out	Total	In	Out
220 Multifamily Housing (Low-Rise)	87	d.u.	618	309	309	42	10	32	52	33	19
720 Medical Office Building	10,440	s.f.	314	157	157	30	23	7	37	10	27
820 Shopping Center	10,440	s.f.	1,294	647	647	83	52	31	102	49	53
Subtotal			2,226	1,113	1,113	155	85	70	191	92	99
<i>Internal Capture</i>											
220 Multifamily Housing (Low-Rise)			151	76	75	1	0	1	21	15	6
720 Medical Office Building			76	36	40	4	2	2	7	2	5
820 Shopping Center			205	104	101	3	2	1	24	9	15
Internal Capture Total per ITE	AM	PM	432	216	216	8	4	4	52	26	26
Internal Capture Total for Analysis (Limit PM to 10%)	5.15%	10.00%	432	216	216	8	4	4	18	9	9
Total External Trips			1,794	897	897	147	81	66	173	83	90
<i>Pass-By Traffic (ITE)</i>											
820 Shopping Center	<u>AM</u>	<u>PM</u>	370	185	185	0	0	0	32	16	16
Pass-By Total:	0%	34%	370	185	185	0	0	0	32	16	16
Total Net New External Trips			1,424	712	712	147	81	66	107	50	57

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	157	157	23	7	10	27
Retail	647	647	52	31	49	53	
Restaurant	0	0	0	0	0	0	
Cinema/Entertainment	0	0	0	0	0	0	
Residential	309	309	10	32	33	19	
Hotel	0	0	0	0	0	0	
		1,113	1,113	85	70	92	99

INTERNAL TRIPS

OUTPUT	Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit	Enter	Exit
	Office	36	40	2	2	2	5
Retail	104	101	2	1	9	15	
Restaurant	0	0	0	0	0	0	
Cinema/Entertainment	0	0	0	0	0	0	
Residential	76	75	0	1	15	6	
Hotel	0	0	0	0	0	0	
		216	216	4	4	26	26
% Reduction		19.4%		5.1%		27.2%	

EXTERNAL TRIPS

OUTPUT	Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit	Enter	Exit
	Office	121	117	21	5	8	22
Retail	543	546	50	30	40	38	
Restaurant	0	0	0	0	0	0	
Cinema/Entertainment	0	0	0	0	0	0	
Residential	233	234	10	31	18	13	
Hotel	0	0	0	0	0	0	
		897	897	81	66	66	73

**Appendix C:
Traffic Count Data**

Your Company Name Here

Default Comments
 Change These in The Preferences Window
 Select File/Preference in the Main Scree
 Then Click the Comments Tab

File Name : Jenks - Wimberly combined
 Site Code : 00000000
 Start Date : 10/3/2019
 Page No : 1

Groups Printed- Unshifted

Start Time	Jenks Eastbound					Jenks Westbound					Wimberly Northbound					Wimberly Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	12	24	2	0	38	1	4	4	0	9	0	0	4	0	4	4	0	2	0	6	57
07:15 AM	9	23	0	0	32	1	15	4	0	20	1	1	4	0	6	6	0	4	0	10	68
07:30 AM	11	21	2	0	34	0	17	6	0	23	0	3	5	0	8	3	0	7	0	10	75
07:45 AM	12	31	1	0	44	1	12	7	0	20	3	1	3	0	7	7	1	8	0	16	87
Total	44	99	5	0	148	3	48	21	0	72	4	5	16	0	25	20	1	21	0	42	287
08:00 AM	7	18	1	0	26	1	19	6	0	26	0	1	2	0	3	8	1	6	0	15	70
08:15 AM	12	24	0	0	36	0	17	2	0	19	3	0	5	0	8	2	0	8	0	10	73
08:30 AM	10	20	2	0	32	0	10	8	0	18	1	2	7	0	10	4	0	7	0	11	71
08:45 AM	15	15	0	0	30	0	9	5	0	14	0	0	2	0	2	8	0	10	0	18	64
Total	44	77	3	0	124	1	55	21	0	77	4	3	16	0	23	22	1	31	0	54	278
*** BREAK ***																					
04:00 PM	7	9	0	0	16	1	19	1	0	21	1	0	0	0	1	3	0	10	0	13	51
04:15 PM	6	13	2	0	21	2	19	8	0	29	2	0	2	0	4	6	1	8	0	15	69
04:30 PM	9	19	2	0	30	3	22	2	0	27	1	0	2	0	3	7	1	2	0	10	70
04:45 PM	10	21	1	0	32	2	24	3	0	29	0	0	2	0	2	10	0	13	0	23	86
Total	32	62	5	0	99	8	84	14	0	106	4	0	6	0	10	26	2	33	0	61	276
05:00 PM	16	16	2	0	34	7	20	4	0	31	0	0	0	0	0	11	0	13	0	24	89
05:15 PM	7	9	2	0	18	3	25	3	0	31	2	1	1	0	4	17	2	16	0	35	88
05:30 PM	9	19	1	0	29	2	29	6	0	37	2	0	1	0	3	16	1	11	0	28	97
05:45 PM	14	12	0	0	26	2	17	4	0	23	1	0	0	0	1	12	0	11	0	23	73
Total	46	56	5	0	107	14	91	17	0	122	5	1	2	0	8	56	3	51	0	110	347
Grand Total	166	294	18	0	478	26	278	73	0	377	17	9	40	0	66	124	7	136	0	267	1188
Apprch %	34.7	61.5	3.8	0		6.9	73.7	19.4	0		25.8	13.6	60.6	0		46.4	2.6	50.9	0		
Total %	14	24.7	1.5	0	40.2	2.2	23.4	6.1	0	31.7	1.4	0.8	3.4	0	5.6	10.4	0.6	11.4	0	22.5	

Start Time	Jenks Eastbound					Jenks Westbound					Wimberly Northbound					Wimberly Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	11	21	2	0	34	0	17	6	0	23	0	3	5	0	8	3	0	7	0	10	75
07:45 AM	12	31	1	0	44	1	12	7	0	20	3	1	3	0	7	7	1	8	0	16	87
08:00 AM	7	18	1	0	26	1	19	6	0	26	0	1	2	0	3	8	1	6	0	15	70
08:15 AM	12	24	0	0	36	0	17	2	0	19	3	0	5	0	8	2	0	8	0	10	73
Total Volume	42	94	4	0	140	2	65	21	0	88	6	5	15	0	26	20	2	29	0	51	305
% App. Total	30	67.1	2.9	0		2.3	73.9	23.9	0		23.1	19.2	57.7	0		39.2	3.9	56.9	0		
PHF	.875	.758	.500	.000	.795	.500	.855	.750	.000	.846	.500	.417	.750	.000	.813	.625	.500	.906	.000	.797	.876

Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	10	21	1	0	32	2	24	3	0	29	0	0	2	0	2	10	0	13	0	23	86
05:00 PM	16	16	2	0	34	7	20	4	0	31	0	0	0	0	0	11	0	13	0	24	89
05:15 PM	7	9	2	0	18	3	25	3	0	31	2	1	1	0	4	17	2	16	0	35	88
05:30 PM	9	19	1	0	29	2	29	6	0	37	2	0	1	0	3	16	1	11	0	28	97
Total Volume	42	65	6	0	113	14	98	16	0	128	4	1	4	0	9	54	3	53	0	110	360
% App. Total	37.2	57.5	5.3	0		10.9	76.6	12.5	0		44.4	11.1	44.4	0		49.1	2.7	48.2	0		
PHF	.656	.774	.750	.000	.831	.500	.845	.667	.000	.865	.500	.250	.500	.000	.563	.794	.375	.828	.000	.786	.928

Appendix D:
Approved Development Data

Lake Castleberry Development

Apex, NC

Prepared for Withers & Ravenel
c/o Craig Duerr, PE, LEED AP
115 MacKenan Drive
Cary, NC 28511

Prepared by **VHB Engineering NC, P.C. (C-3705)**
4000 Westchase Boulevard, Suite 530
Raleigh, NC 27607
919.829.0328 • Fax 919.829.0329
www.vhb.com

January 10, 2014



Transportation | Land Development | Environmental

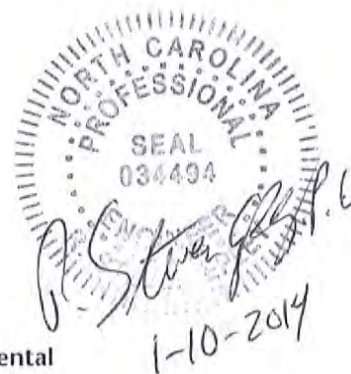




Table 5: Trip Generation Rates (Vehicle Trips)

AM Peak Hour Total Trips						
ITE Land Use Code	USE	Units	ITE MANUAL RATES*			
			ADT	AM Enter	AM Exit	AM Total
210	Single-Family Detached Housing	172 units	1,730	33	97	130
<i>Total Trips</i>			<i>1,730</i>	<i>33</i>	<i>97</i>	<i>130</i>

PM Peak Hour Total Trips						
ITE Land Use Code	USE	Units	ITE MANUAL RATES*			
			ADT	PM Enter	PM Exit	PM Total
220	Single-Family Detached Housing	172 units	1,730	108	63	171
<i>Total Trips</i>			<i>1,730</i>	<i>108</i>	<i>63</i>	<i>171</i>

* ITE Trip Generation, 9th Edition

Traffic Distribution and Assignment

The generated site trips were distributed in accordance with the existing traffic patterns and land uses in the vicinity of the study area as follows:

- Green Level West Road to the west - 30%
- Green Level West Road to the east - 40%
- Green Level Church Road to the north - 5%
- Green Level Church Road to the south - 5%
- Jenks Road to the west - 10%
- Jenks Road to the east - 10%

The site trip percentages are depicted in Figure 6, with the resulting site trips shown in Figure 7.

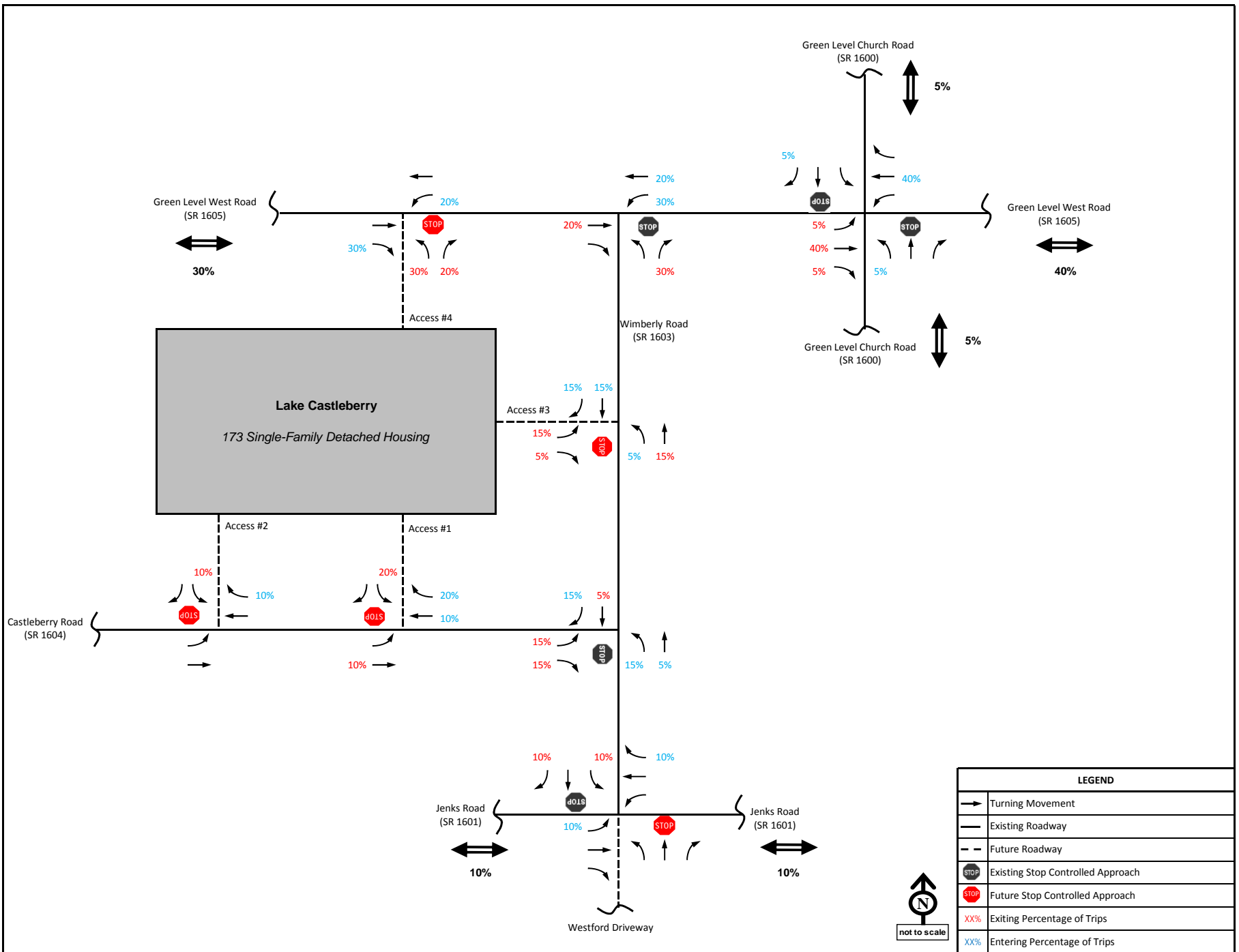


Figure 6
Peak Hour Directional Distribution Percentages

Lake Castleberry TIA
Town of Apex, NC

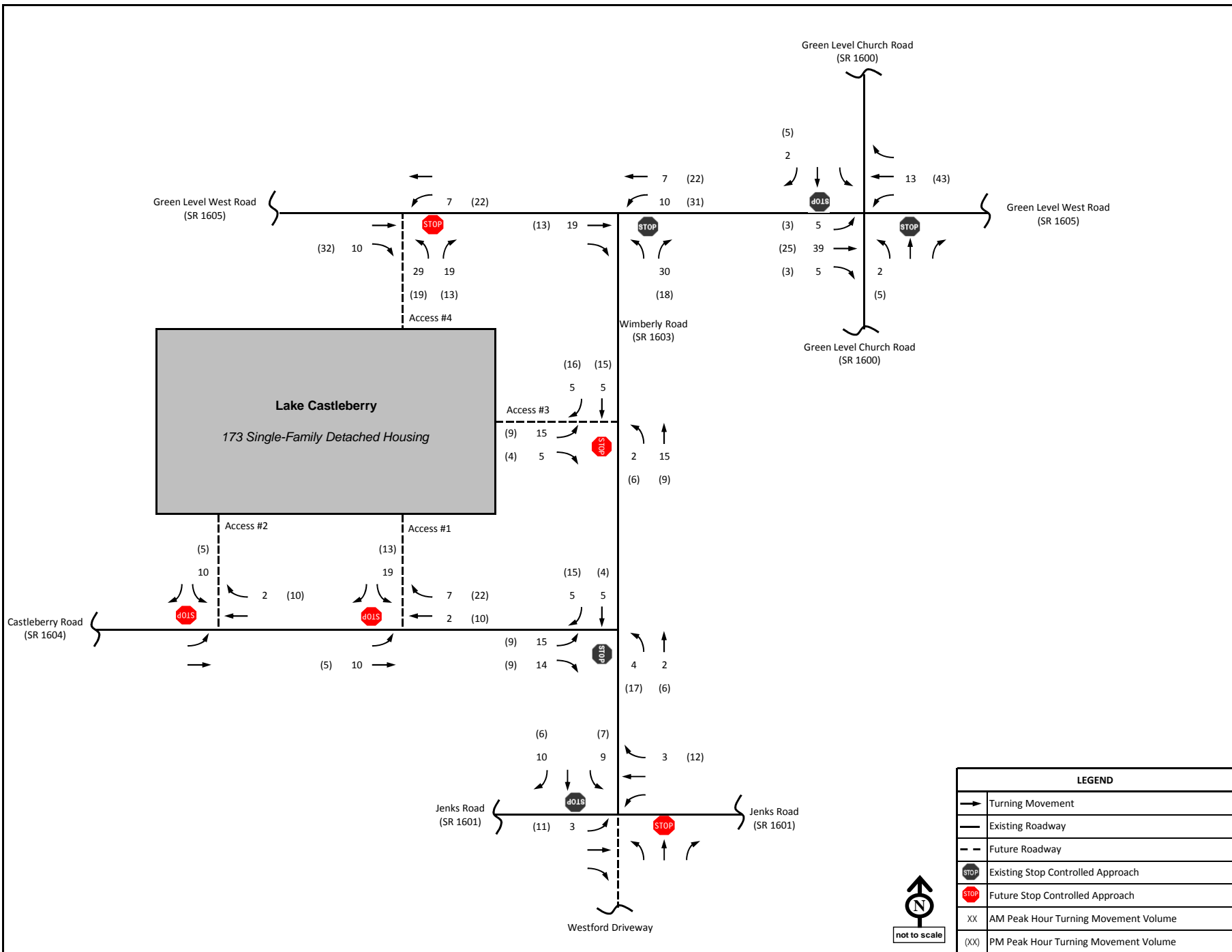


Figure 7
AM and PM Peak Hour Site Trips

Lake Castleberry TIA
Town of Apex, NC

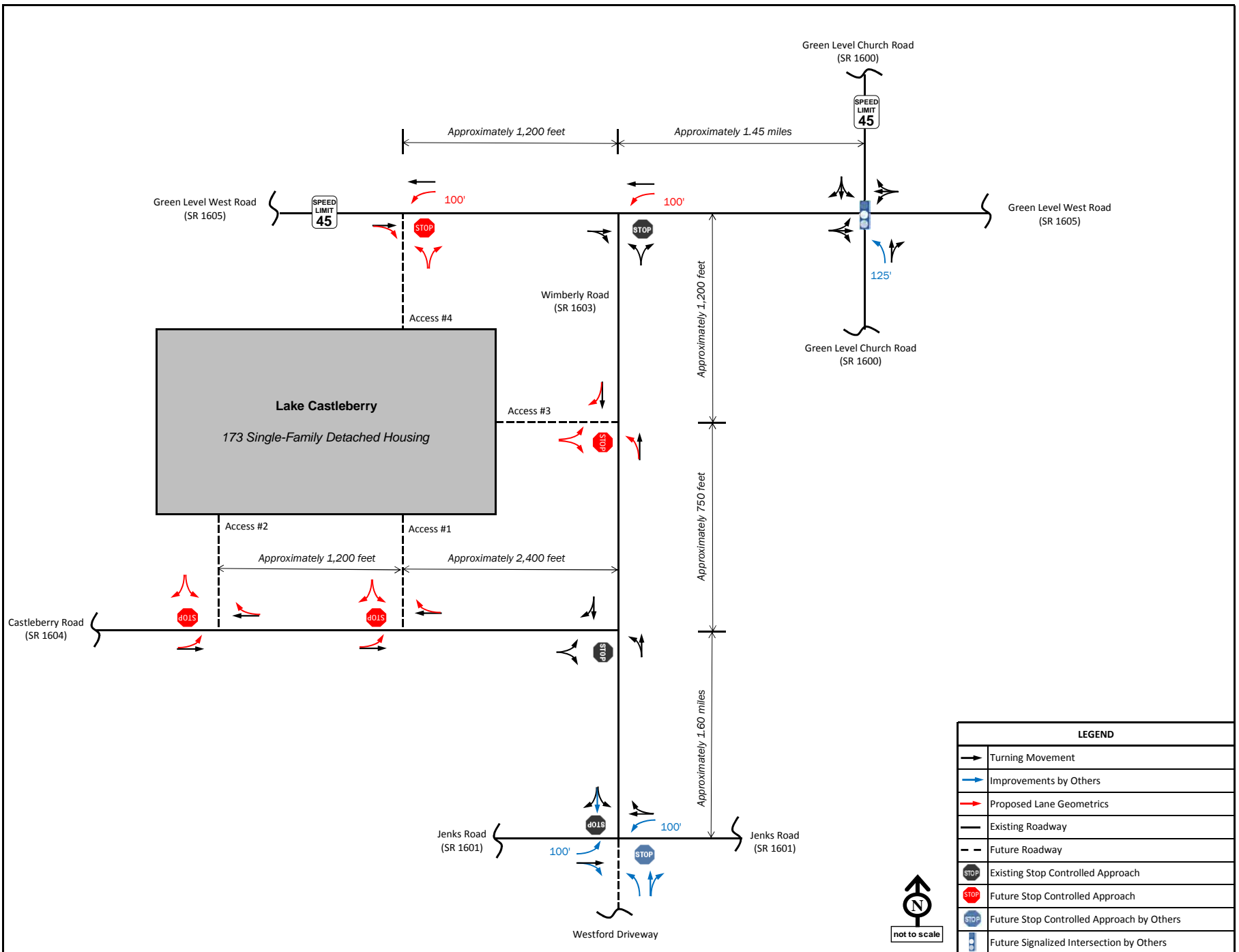


Figure 9
Recommended (2018) Lane Geometrics and Traffic Control

Lake Castleberry TIA
Town of Apex, NC

Traffic Impact Analysis
for
Tunstall Property
Apex, North Carolina

Prepared for:
Raleigh Land Fund I, LLC
Raleigh, NC

Prepared By:
Kimley-Horn and Associates, Inc.
NC License # F-0102
3001 Weston Parkway
Cary, North Carolina 27513
(919) 677-2000

011657000

June 2013

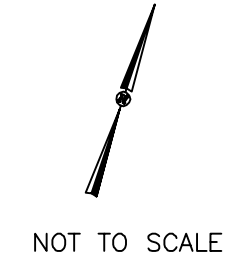


4.0 Traffic Generation

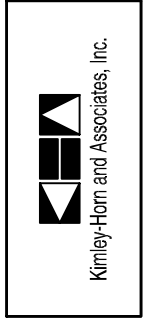
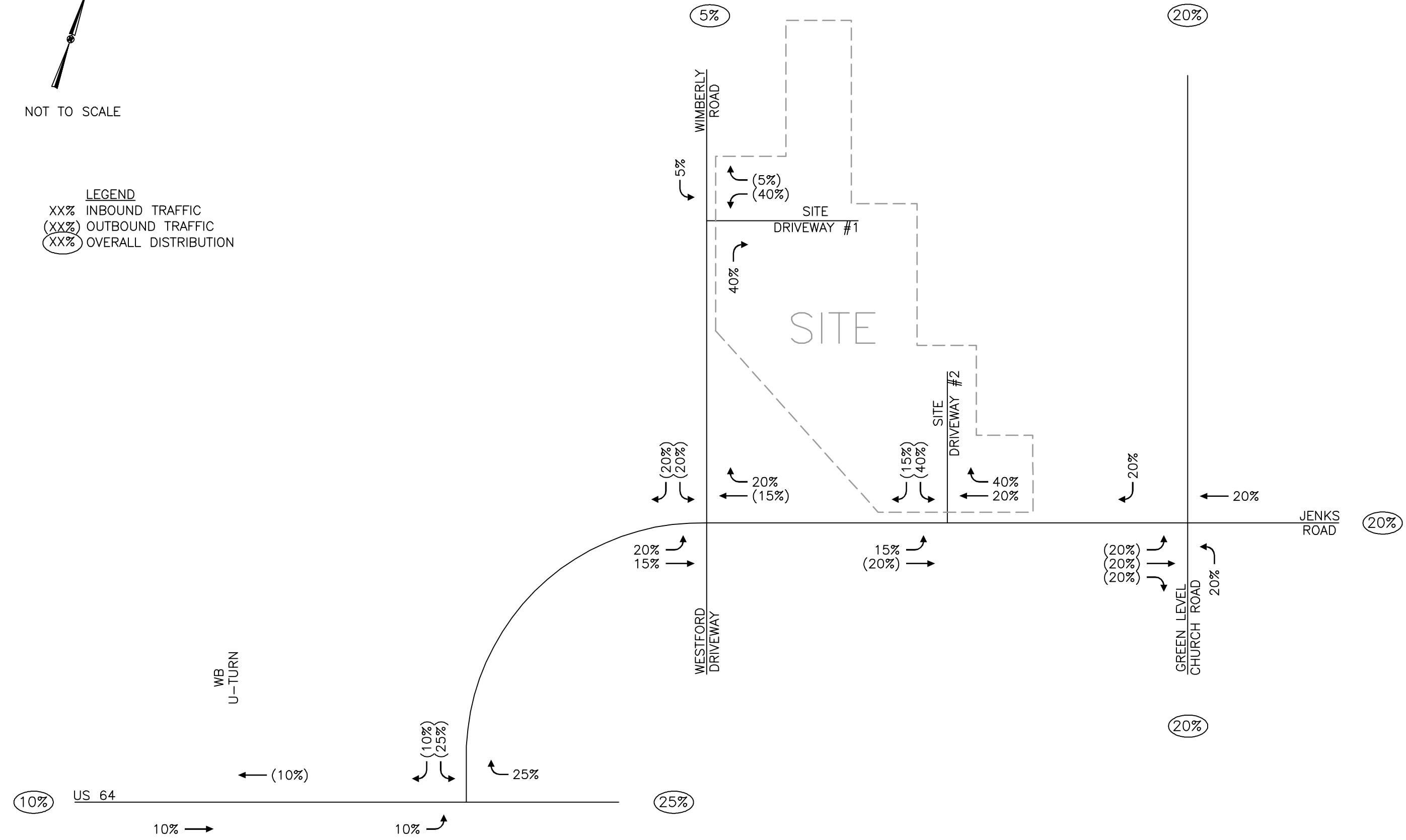
The traffic generation potential of the proposed development was determined using the traffic generation rates published in *Trip Generation* (Institute of Transportation Engineers, 9th Edition, 2012). Table 4.0 summarizes the estimated traffic generation potential of the site during a typical weekday.

Table 4.0 ITE Traffic Generation (Average Weekday Traffic)				
Land Use	AM Peak		PM Peak	
	Enter	Exit	Enter	Exit
250 Single Family Homes	46	139	151	89
100 Townhomes	9	43	40	20
Total Net New External Vehicle Trips	55	182	191	109

Table 4.1 indicates that the development is expected to generate 55 trips entering and 182 trips exiting in the AM peak hour and 191 trips entering and 109 trips exiting in the PM peak hour.



LEGEND
 XX% INBOUND TRAFFIC
 (XX%) OUTBOUND TRAFFIC
 (XX%) OVERALL DISTRIBUTION



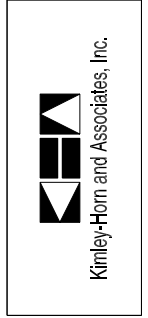
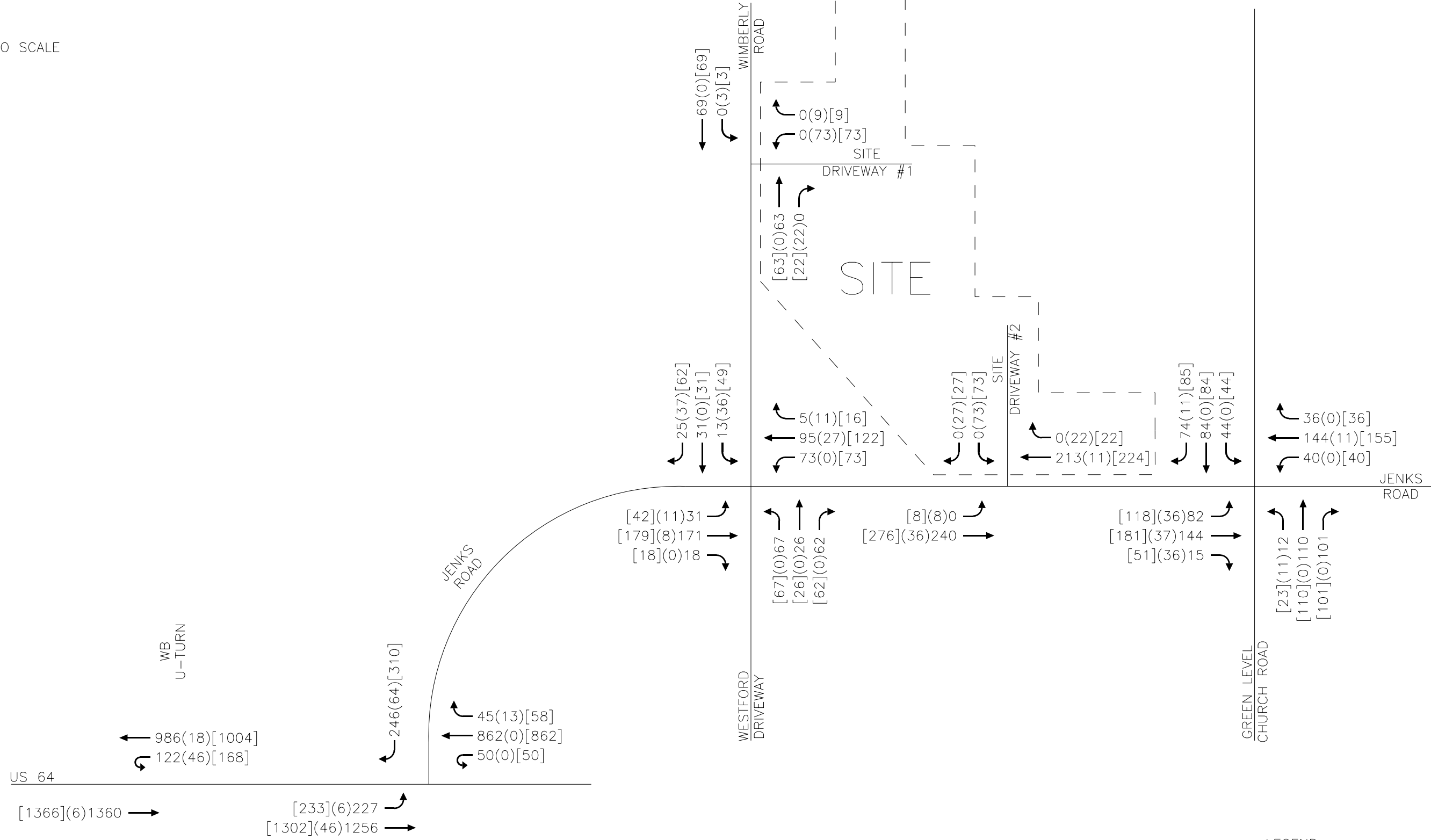
TUNSTALL PROPERTY
 TRAFFIC IMPACT ANALYSIS

PRIMARY SITE TRIP DISTRIBUTION
 AND PERCENT ASSIGNMENT WITHOUT
 SECLUDED ACRES ACCESS

FIGURE
 4B



NOT TO SCALE



TUNSTALL PROPERTY TRAFFIC IMPACT ANALYSIS

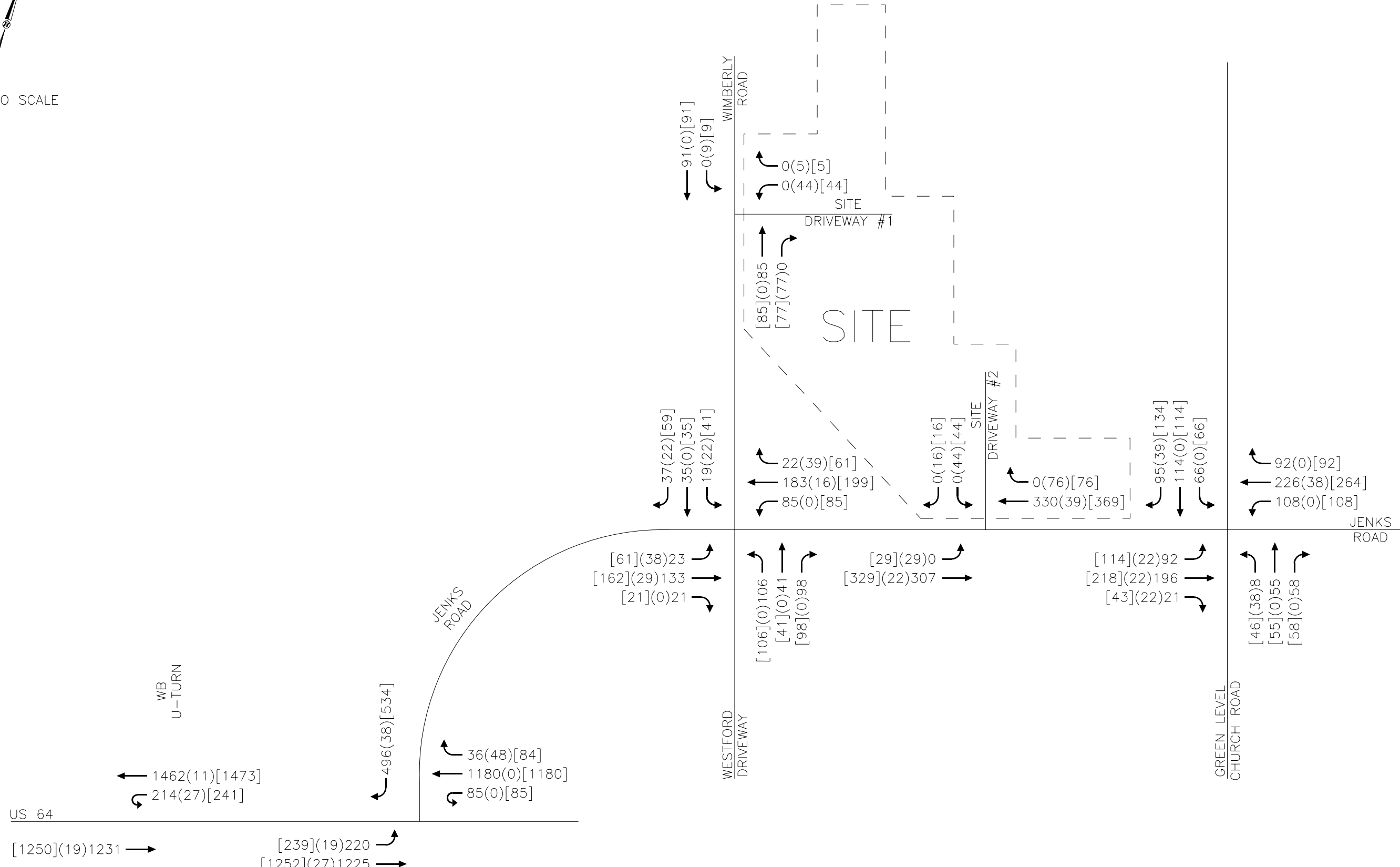
PROJECTED (2017)
AM PEAK HOUR
BUILD-OUT TRAFFIC VOLUMES
- WITHOUT SECLUDED ACRES

FIGURE
7C

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NOT TO SCALE

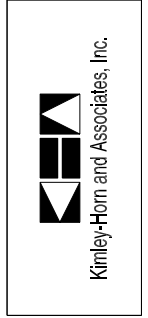


LEGEND

XX EXISTING TRAFFIC

(XX) SITE GENERATED TRAFFIC

[XX] TOTAL BUILD-OUT TRAFFIC



TUNSTALL PROPERTY
TRAFFIC IMPACT ANALYSIS

PROJECTED (2017)
PM PEAK HOUR
BUILD-OUT TRAFFIC VOLUMES
- WITHOUT SECLUDED ACRES

FIGURE
8C

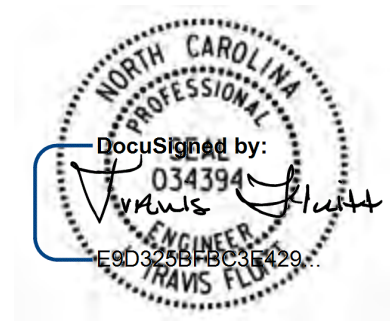
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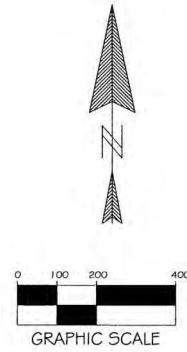
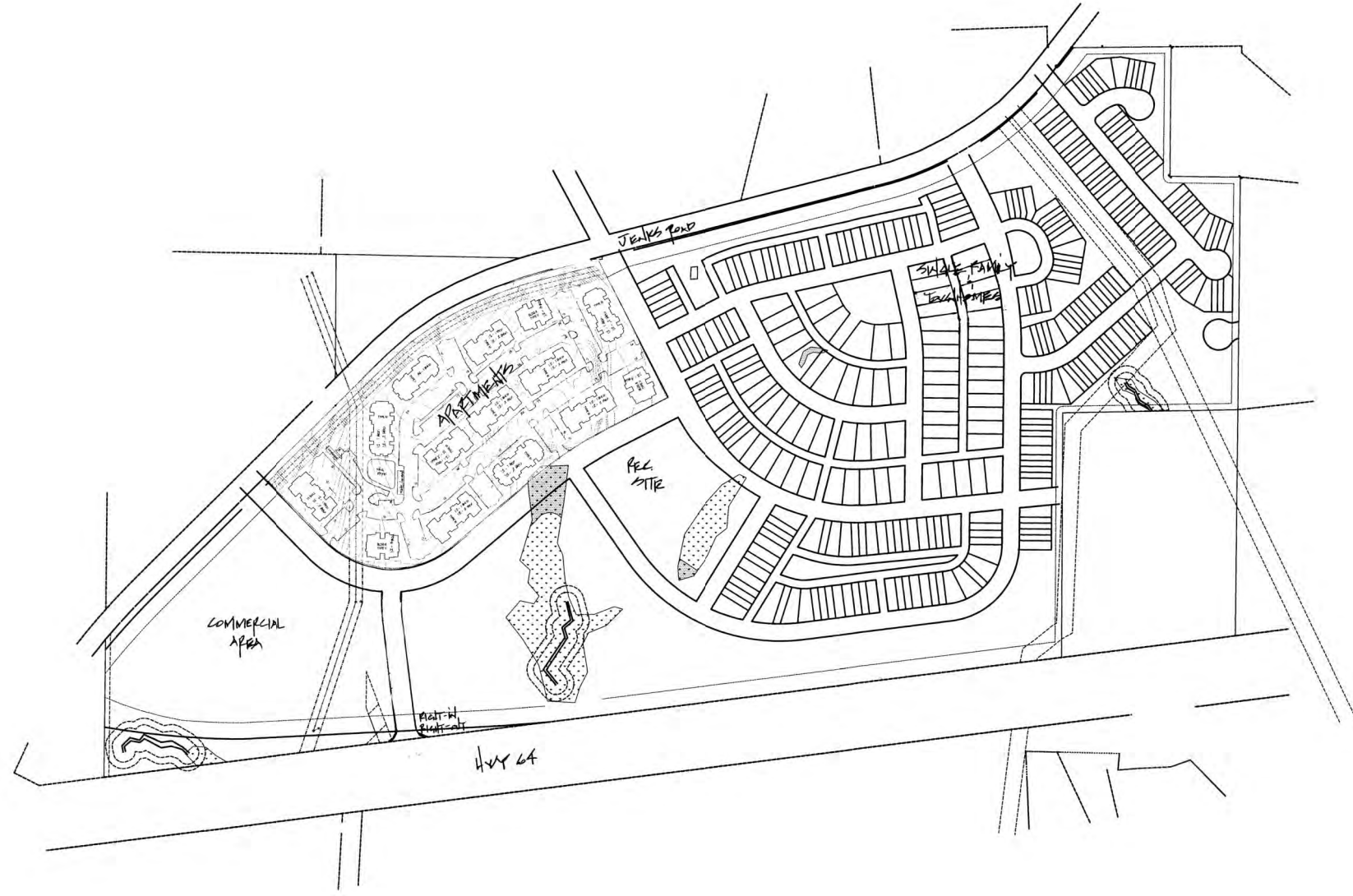
**Traffic Impact Analysis
for
Westford
Apex, North Carolina**

**Prepared for:
The Halle Companies
Apex, North Carolina**

**Prepared by:
Kimley-Horn and Associates, Inc.
NC License #F-0102
421 Fayetteville Street Suite 600
Raleigh, NC 27601
(919) 677-2000**

**December 2016
018995001**





SCALE:	1"=200'	DATE:	DECEMBER 2, 2016
DATE:		REVISION:	
REVISION:		DATE:	
DATE:		REVISION:	
REVISION:		DATE:	
DATE:		REVISION:	
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DATE:		REVISION:	
REVISION:		DATE:	

WESTFORD
MASTER SITE PLAN
PRELIMINARY SITE PLAN
TRAFFIC IMPACT ANALYSIS
TOWN OF APEX
WAKE COUNTY, NORTH CAROLINA

Preliminary Plan

221 N. SALEM ST.
SUITE 001
PO BOX 1062
APEX, NC 27502
Office: 919-382-1174
Registration: P-0151
www.jonescrossen.com

Jones & Crossen
ENGINEERING, PLLC
Civil Engineering | Construction Management | Land Planning

Kimley»Horn

WESTFORD
APEX, NC
TRAFFIC IMPACT ANALYSIS

CONCEPTUAL SITE PLAN

FIGURE
2

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, Ninth Edition, 2012). As currently envisioned, Westford will consist of approximately 300 apartment units, 225 townhomes, and 90 single family detached homes. The development is expected to be completed (built-out) in 2019. Table 3.0 summarizes the trip generation for the proposed Westford development.

Land Use Code	Land Use	Intensity		Daily		AM Peak Hour		PM Peak Hour	
				In	Out	In	Out	In	Out
210	Single Family Detached Housing	90	d.u.	472	472	18	55	60	36
220	Apartments	300	d.u.	971	971	30	121	119	64
230	Residential Townhouses	225	d.u.	651	651	17	82	78	39
Total Net New External Trips				2,094	2,094	65	258	257	139

The proposed residential development has the potential to generate 2,094 net new trips entering and 2,094 net new trips exiting during a typical weekday with 65 net new trips entering and 258 net new trips exiting during the AM peak hour and 257 net new trips entering and 139 net new trips exiting during the PM peak hour.

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

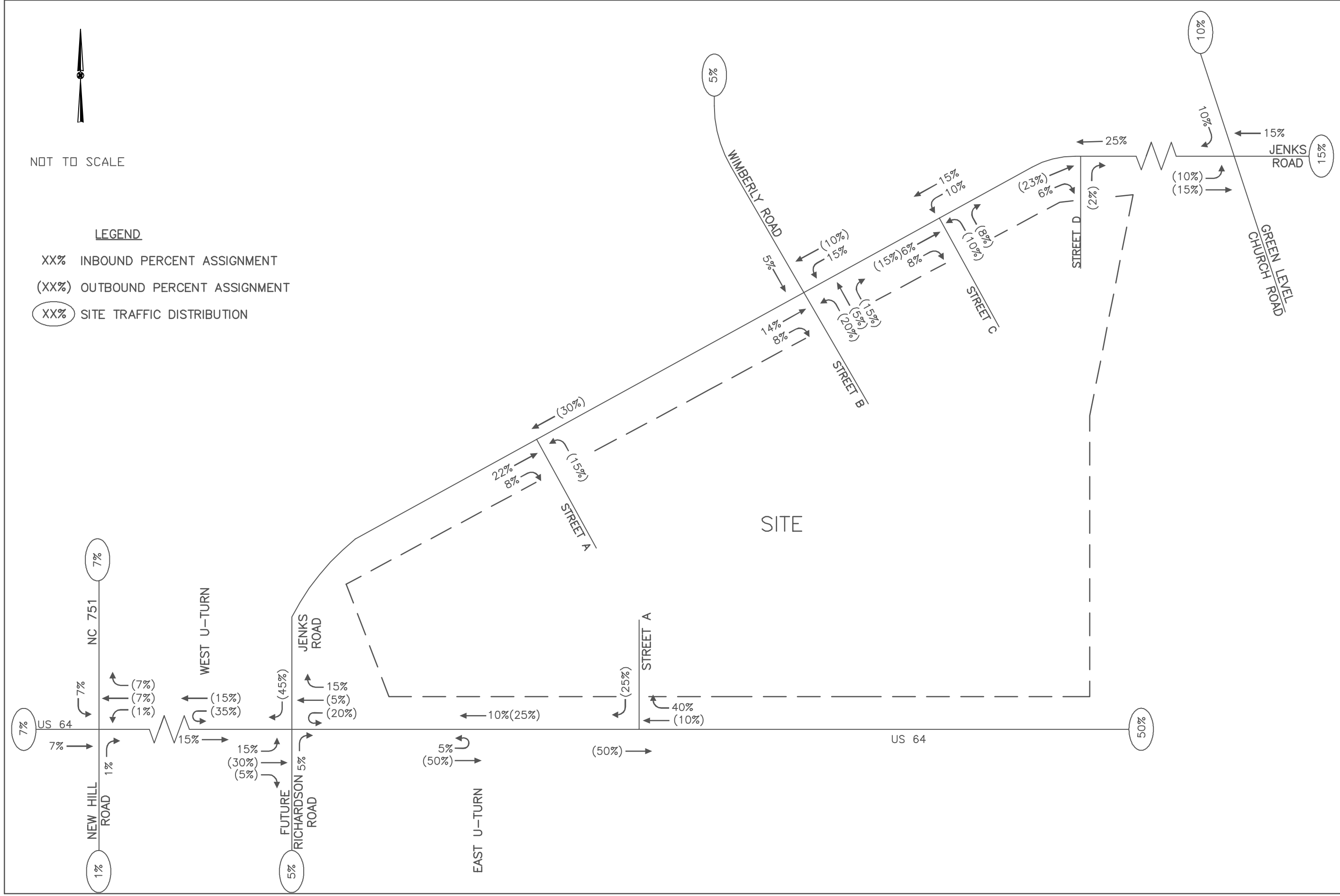


FIGURE 4

SITE TRAFFIC DISTRIBUTION AND PERCENT ASSIGNMENT

WESTFORD APEX, NC
TRAFFIC IMPACT ANALYSIS



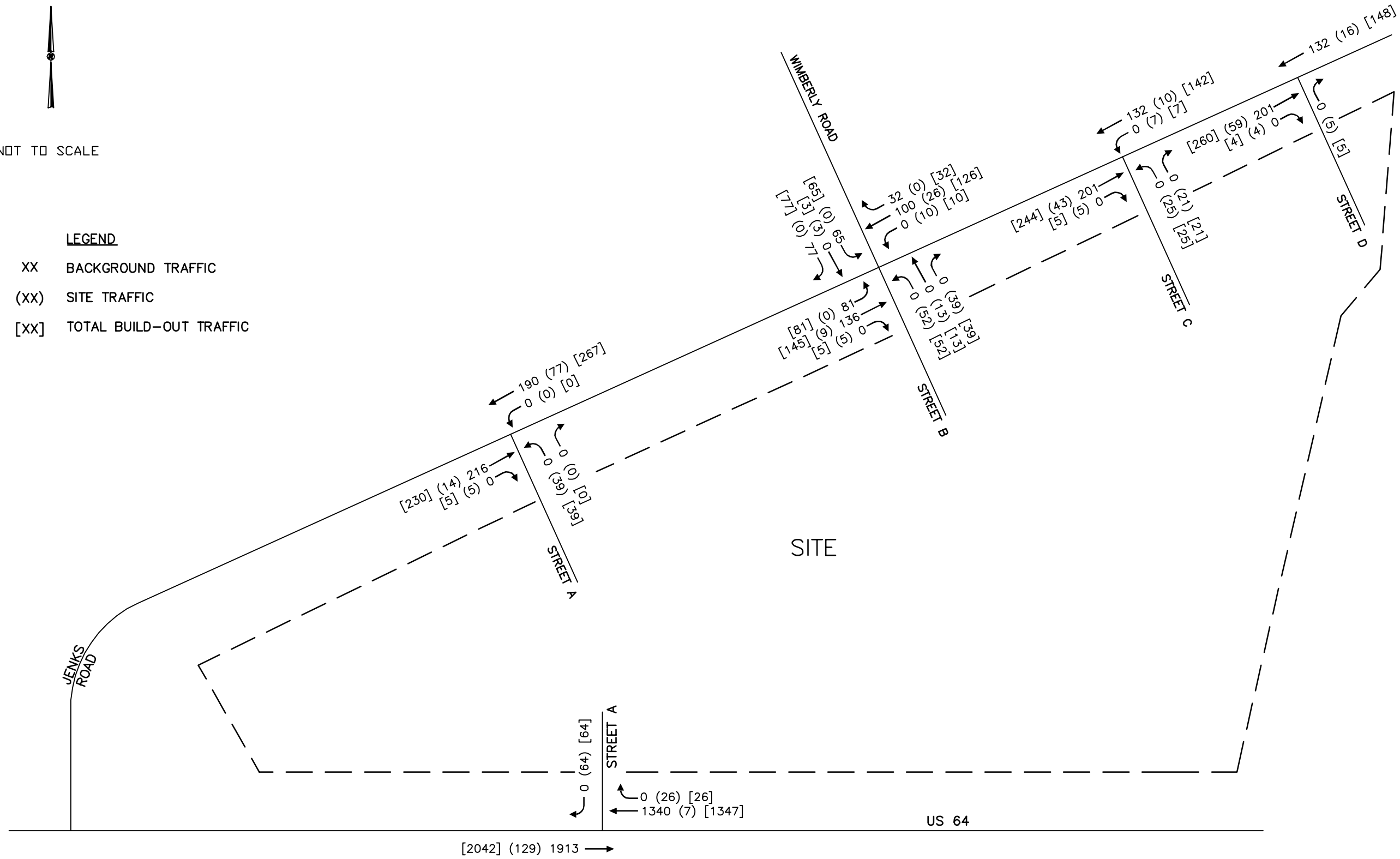
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NOT TO SCALE



LEGEND

- XX BACKGROUND TRAFFIC
- (XX) SITE TRAFFIC
- [XX] TOTAL BUILD-OUT TRAFFIC



WESTFORD
APEX, NC
TRAFFIC IMPACT ANALYSIS

PROJECTED (2019) BUILD-OUT
AM PEAK HOUR TRAFFIC VOLUMES
SITE DRIVEWAYS

FIGURE
7B

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.

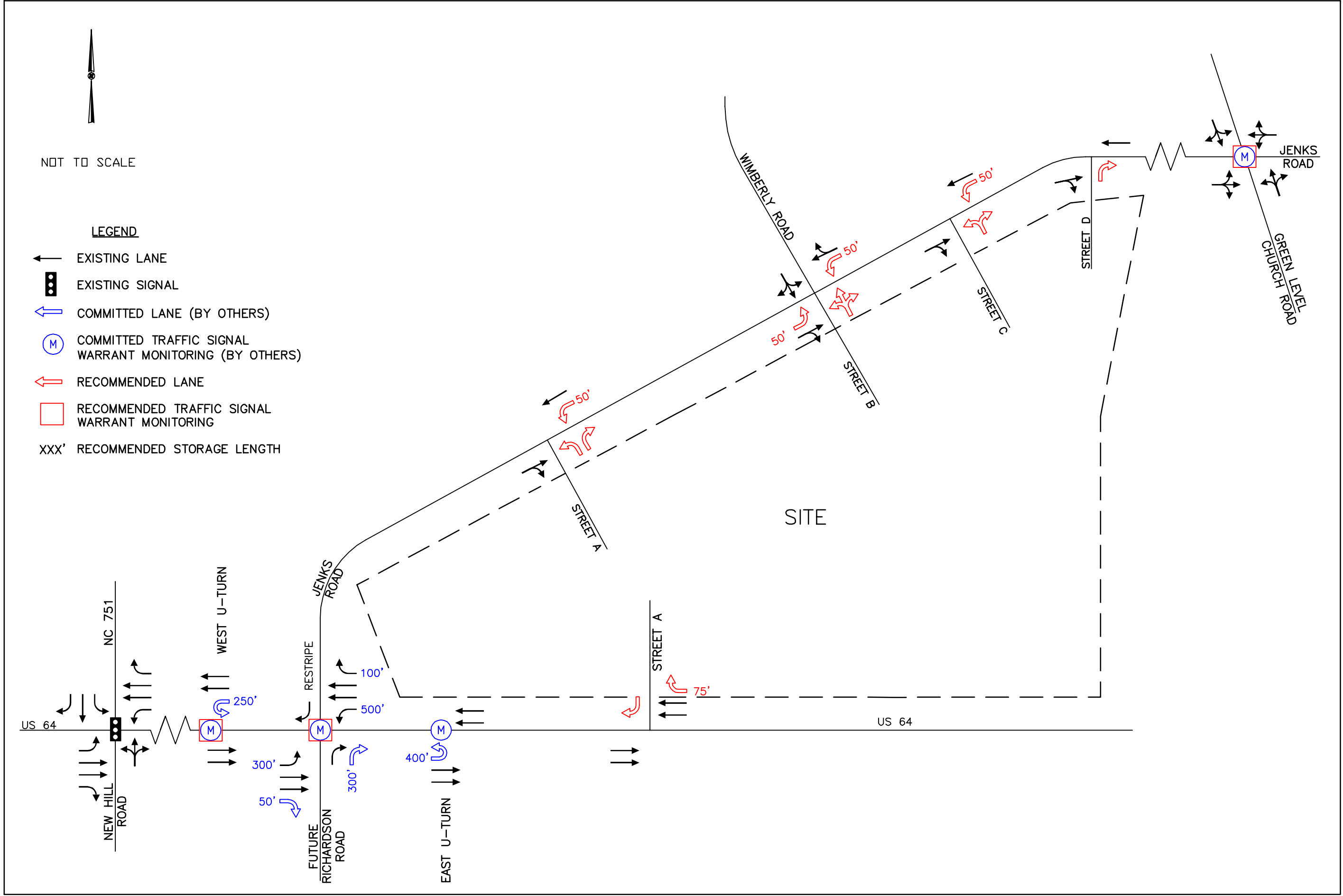


FIGURE 9

RECOMMENDED ROADWAY LANEAGE

WESTFORD APEX, NC
TRAFFIC IMPACT ANALYSIS



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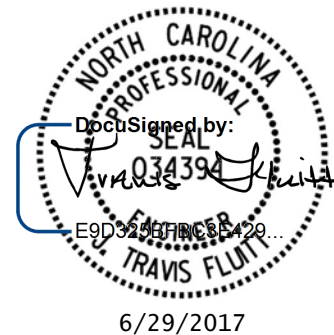
MEMORANDUM

To: Mr. Russell Dalton, P.E., Town of Apex
Mr. Scott Wheeler, NCDOT

From: Travis Fluitt, P.E.
Kimley-Horn and Associates, Inc.

Date: June 29, 2017

Subject: Westford – Traffic Impact Analysis Addendum – Commercial Parcel



Kimley-Horn has prepared this addendum to the *Westford TIA* (Kimley-Horn, December 2016) to determine the impacts of site traffic associated the proposed commercial portion of the development located south of Jenks Road between US 64 and Wimberly Road in Apex, North Carolina. While the original TIA was performed for the residential portion of the development, which as currently proposed would include approximately 300 apartments, 225 townhomes, and 90 single-family homes with a projected build-out year of 2019, this addendum studied the construction of approximately 100,000 square feet (SF) of general retail space to be located generally southwest of the residential uses along Jenks Road. The commercial portion of the site will be accessed primarily by the right-in/right-out site driveway on US 64 (Street A), a shared full-movement driveway on Jenks road with the residential uses (Street A), and an additional right-in/right-out driveway on Jenks Road west of Street A. The commercial portion of the development has a projected build-out year of 2021.

This report presents trip generation, distribution, traffic analyses, and recommendations for transportation improvements required to meet anticipated traffic demands in conjunction with the proposed development in the 2021 study year. Figure 1 shows the proposed site plan.

Background Traffic

Based on historic daily traffic volumes in the area and to be consistent with the *Westford TIA*, an annual growth factor of 2% was applied to the existing traffic volumes up to the year 2021 to calculate background traffic volumes.

Approved development volumes were obtained from the December 2016 *Westford TIA*. It should be noted that, with the inclusion of a 2% annual growth rate and approved development traffic, the effective annual growth rate analyzed as part of this development ranged from approximately 4% to nearly 22%. Peak hour background traffic volumes, which include historic growth traffic, are shown on Figures 2 and 3.

Trip Generation

The trip generation potential for the commercial portion of the development was determined by calculating the difference between the trip generation of the combined site (residential and commercial uses) and the trip generation of the residential land uses only (obtained from the *Westford TIA*). The

net new external trips for the commercial portion of the development were assigned to the network based on the overall distribution discussed below, while the site trips for the residential portion of the development were obtained from the *Westford TIA* and assigned directly to the network. In order to accurately depict the impacts of the entire Westford development, site traffic associated with the residential portion of the project was only analyzed in the build-out traffic condition (as opposed to analyzing it as approved development traffic).

Table 1 summarizes the estimated traffic generation potential for the site.

Table 1 ITE Traffic Generation (Vehicles)									
Land Use Code	Land Use	Intensity		Daily		AM Peak Hour		PM Peak Hour	
				In	Out	In	Out	In	Out
210	Single Family Detached Housing	90	d.u.	472	472	18	55	60	36
220	Apartments	300	d.u.	971	971	30	121	119	64
230	Townhomes	225	d.u.	651	651	17	82	78	39
820	Shopping Center	100,000	s.f.	3,396	3,396	97	59	288	311
<i>Subtotal</i>				<i>5,495</i>	<i>5,495</i>	<i>162</i>	<i>317</i>	<i>545</i>	<i>450</i>
<i>Internal Capture</i>				<i>955</i>	<i>955</i>	<i>0</i>	<i>0</i>	<i>110</i>	<i>110</i>
<i>Pass-by Capture</i>				<i>830</i>	<i>830</i>	<i>0</i>	<i>0</i>	<i>88</i>	<i>78</i>
<i>Net New Residential Trips from TIA</i>				<i>2,094</i>	<i>2,094</i>	<i>65</i>	<i>258</i>	<i>257</i>	<i>139</i>
Difference in Total Net New External Trips				1,616	1,616	97	59	90	123

Table 1 shows that, separate from the site trips generated by the residential portion of the development, the commercial portion of the site has the potential to generate 1,616 new entering trips and 1,616 new exiting trips on a typical weekday, with 97 new trips entering and 59 new trips exiting in the AM peak hour and 90 new trips entering and 123 new trips exiting in the PM peak hour.

Trip Distribution and Assignment

The new generated commercial trips were assigned to the surrounding roadway network. The directional distribution and assignment, which are somewhat different than those for the residential uses, were based on land uses and existing travel patterns in the area.

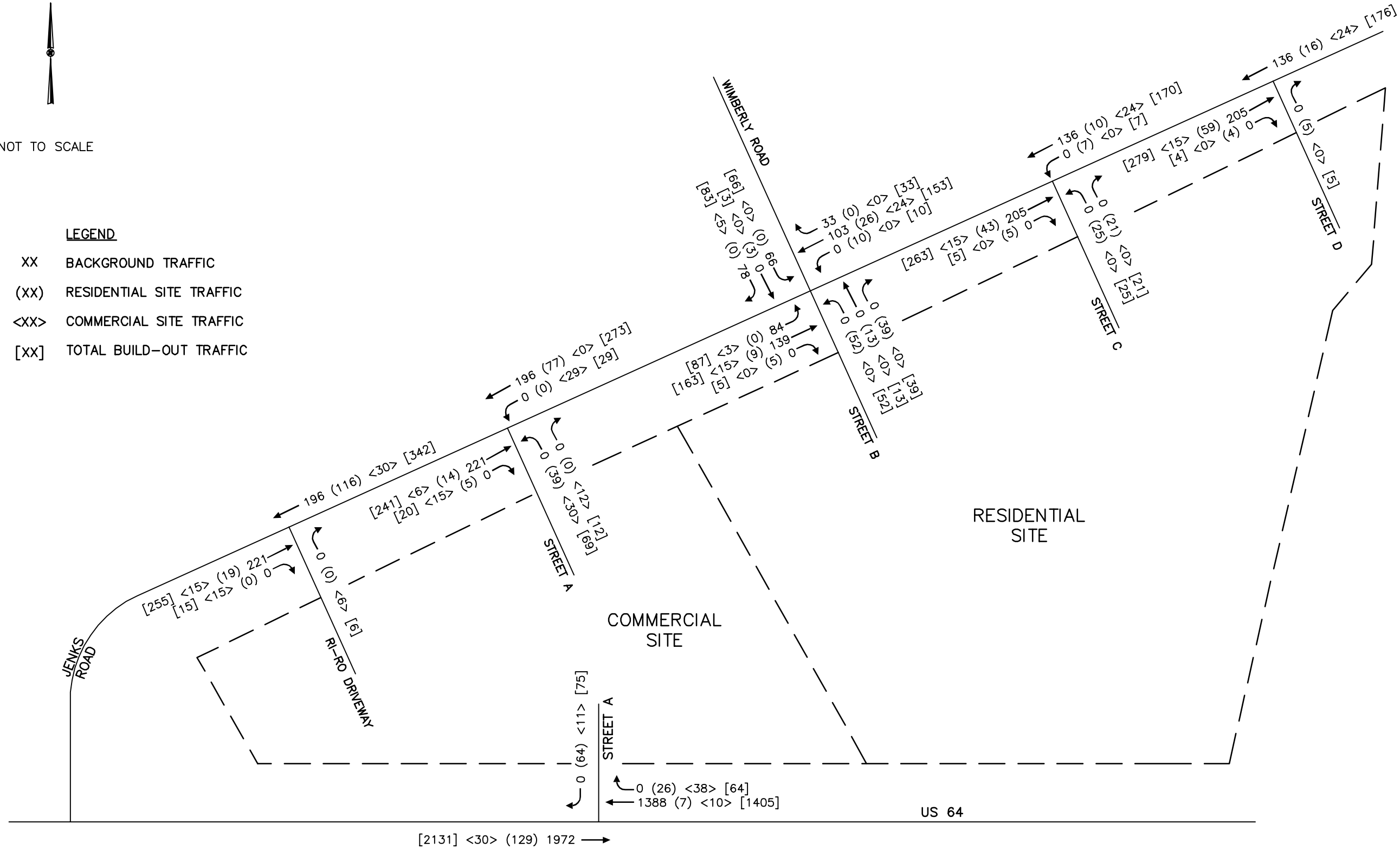
- 50% to/from the east on US 64
- 15% to/from the east on Jenks Road
- 13% to/from the west on US 64
- 10% to/from the north on Green Level Church Road
- 5% to/from the north on NC 751
- 5% to/from the north on Wimberly Road
- 2% to/from the south on New Hill Road



NOT TO SCALE

LEGEND

- XX BACKGROUND TRAFFIC
- (XX) RESIDENTIAL SITE TRAFFIC
- <XX> COMMERCIAL SITE TRAFFIC
- [XX] TOTAL BUILD-OUT TRAFFIC



WESTFORD-COMMERCIAL
APEX, NC
TRAFFIC IMPACT ANALYSIS

PROJECTED (2021) BUILD-OUT
AM PEAK HOUR TRAFFIC VOLUMES
SITE DRIVEWAYS

FIGURE
5B

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NOT TO SCALE

LEGEND

- XX BACKGROUND TRAFFIC
- (XX) RESIDENTIAL SITE TRAFFIC
- <XX> COMMERCIAL SITE TRAFFIC
- {XX} PASS-BY TRAFFIC
- [XX] TOTAL BUILD-OUT TRAFFIC

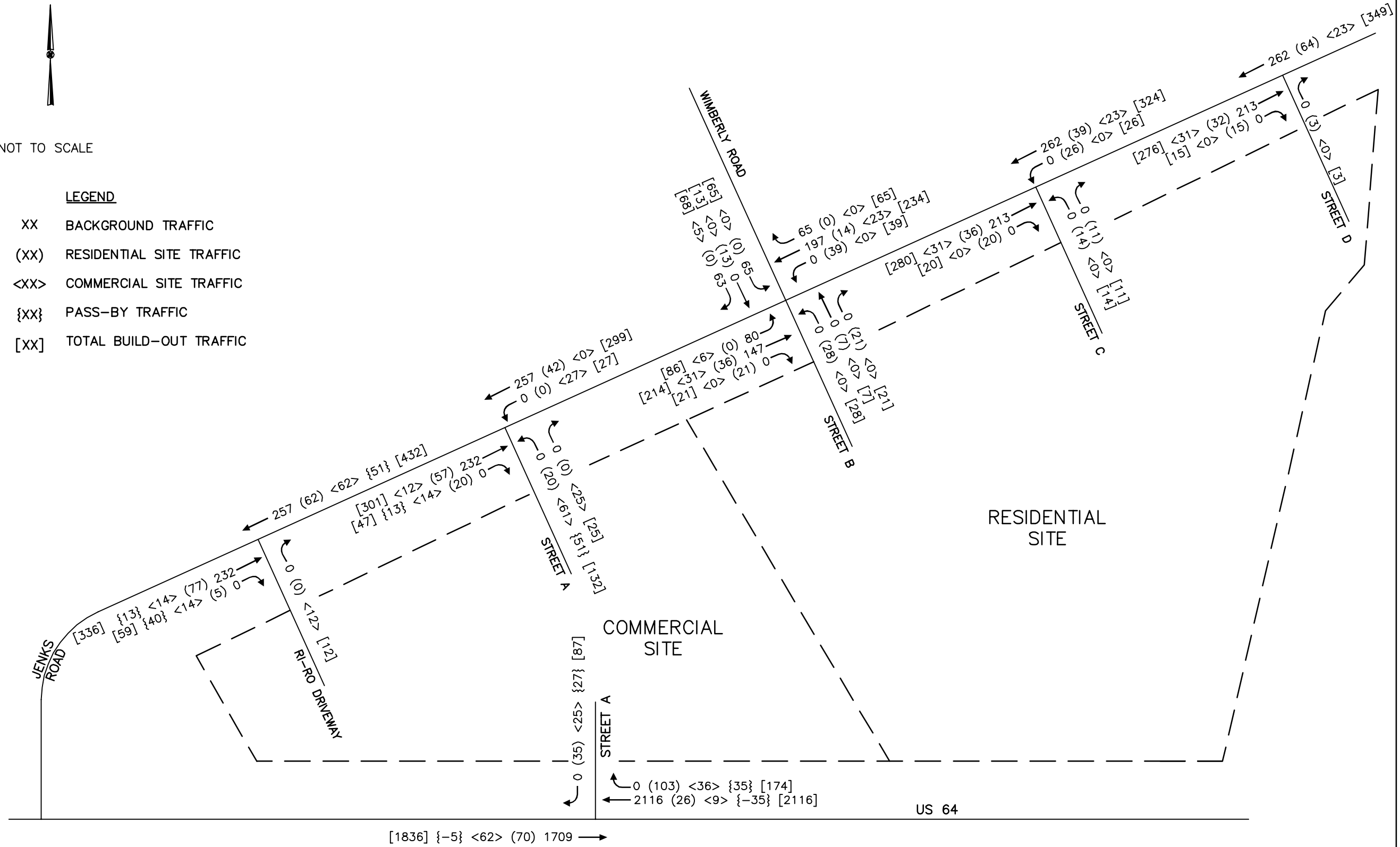


FIGURE 6B

PROJECTED (2021) BUILD-OUT
PM PEAK HOUR TRAFFIC VOLUMES
SITE DRIVEWAYS

WESTFORD-COMMERCIAL
APEX, NC
TRAFFIC IMPACT ANALYSIS



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Appendix E:
Intersection Spreadsheets

INTERSECTION ANALYSIS SHEET

Project:	Jenks Road Assemblage
Location:	Apex, NC
Ct. Date:	10/3/2019
N/S Street:	Wimberly Road/Westford Street B
E/W Street:	Jenks Road

	AM In	AM Out	PM In	PM Out
Net New Trips:	81	66	50	57
Pass-By Trips:	0	0	16	16

Annual Growth Rate:	3.0%	Existing Year:	2019
Growth Factor:	0.125509	Buildout Year:	2023

AM PEAK HOUR AM PHF = 0.90

Description	Jenks Road Eastbound			Jenks Road Westbound			Westford Street B Northbound			Wimberly Road Southbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2019 Traffic Count	42	94	4	2	65	21	6	5	15	20	2	29
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2019 Existing Traffic	42	94	4	2	65	21	6	5	15	20	2	29
Growth Factor (0.03 per year)	0.126	0.126	0.000	0.000	0.126	0.126	0.000	0.000	0.000	0.126	0.000	0.126
2023 Background Growth	5	12	0	0	8	3	0	0	0	3	0	4
Committed Projects												
Lake Castleberry (40% occupied)	2	0	0	0	0	2	0	0	0	5	0	6
Preserve at White Oak Creek (75% occ.)	3	2	0	0	7	3	0	0	0	9	0	9
Westford Commercial (0% occupied)	3	15	0	0	24	0	0	0	0	0	0	5
Westford Residential (50% occupied)	0	9	1	8	26	0	46	8	24	0	1	0
Total Committed Traffic	8	26	1	8	57	5	46	8	24	14	1	20
2023 Background Traffic	55	132	5	10	130	29	52	13	39	37	3	53
Project Traffic												
Percent Assignment Inbound	15%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	12	20	0	0	0	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%	0%	15%
Outbound Project Traffic	0	0	0	0	17	0	0	0	0	0	0	10
Total Project Traffic	12	20	0	0	17	0	0	0	0	0	0	10
2023 Buildout Total	67	152	5	10	147	29	52	13	39	37	3	63
Percent Impact (Approach)		14.3%			9.1%			0.0%				9.7%

Overall Percent Impact 9.6%

PM PEAK HOUR PM PHF = 0.90

Description	Jenks Road Eastbound			Jenks Road Westbound			Westford Street B Northbound			Wimberly Road Southbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2019 Traffic Count	42	65	6	14	98	16	4	1	4	54	3	53
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2019 Existing Traffic	42	65	6	14	98	16	4	1	4	54	3	53
Growth Factor (0.03 per year)	0.126	0.126	0.000	0.000	0.126	0.126	0.000	0.000	0.000	0.126	0.000	0.126
2023 Background Growth	5	8	0	0	12	2	0	0	0	7	0	7
Committed Projects												
Lake Castleberry (40% occupied)	7	0	0	0	0	7	0	0	0	4	0	4
Preserve at White Oak Creek (75% occ.)	10	7	0	0	4	10	0	0	0	6	0	6
Westford Commercial (0% occupied)	6	31	0	0	23	0	0	0	0	0	0	5
Westford Residential (50% occupied)	0	36	15	25	14	0	24	6	17	0	10	0
Total Committed Traffic	23	74	15	25	41	17	24	6	17	10	10	15
2023 Background Traffic	70	147	21	39	151	35	28	7	21	71	13	75
Project Traffic												
Percent Assignment Inbound	15%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	8	13	0	0	0	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%	0%	15%
Outbound Project Traffic	0	0	0	0	14	0	0	0	0	0	0	9
Total External Site Traffic	8	13	0	0	14	0	0	0	0	0	0	9
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
Total Project Traffic	8	13	0	0	14	0	0	0	0	0	0	9
2023 Buildout Total	78	160	21	39	165	35	28	7	21	71	13	84
Percent Impact (Approach)		8.1%			5.9%			0.0%				5.4%

Overall Percent Impact 6.1%

INTERSECTION ANALYSIS SHEET

Project:	Jenks Road Assemblage
Location:	Apex, NC
Ct. Date:	Balanced with Jenks - Wimberly
N/S Street:	Westford Street C/Site Driveway
E/W Street:	Jenks Road

	AM In	AM Out	PM In	PM Out
Net New Trips:	81	66	50	57
Pass-By Trips:	0	0	16	16

Annual Growth Rate:	3.0%	Existing Year:	2019
Growth Factor:	0.125509	Buildout Year:	2023

AM PEAK HOUR AM PHF = 0.90

Description	Jenks Road Eastbound			Jenks Road Westbound			Westford Street C Driveway Northbound			Site Driveway Southbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2019 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing	0	129	0	0	88	0	0	0	0	0	0	0
2019 Existing Traffic	0	129	0	0	88	0	0	0	0	0	0	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
2023 Background Growth	0	16	0	0	11	0	0	0	0	0	0	0
Committed Projects												
Lake Castleberry (40% occupied)	0	5	0	0	2	0	0	0	0	0	0	0
Preserve at White Oak Creek (75% occ.)	0	11	0	0	10	0	0	0	0	0	0	0
Westford Commercial (0% occupied)	0	15	0	0	24	0	0	0	0	0	0	0
Westford Residential (50% occupied)	0	28	5	7	9	0	25	0	21	0	0	0
Total Committed Traffic	0	59	5	7	45	0	25	0	21	0	0	0
2023 Background Traffic	0	204	5	7	144	0	25	0	21	0	0	0
Project Traffic												
Percent Assignment Inbound	25%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	20	0	0	0	0	41	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	25%
Outbound Project Traffic	0	0	0	0	0	0	0	0	0	33	0	17
Total Project Traffic	20	0	0	0	0	41	0	0	0	33	0	17
2023 Buildout Total	20	204	5	7	144	41	25	0	21	33	0	17
Percent Impact (Approach)		8.7%			21.4%			0.0%			100.0%	

Overall Percent Impact 21.5%

PM PEAK HOUR PM PHF = 0.90

Description	Jenks Road Eastbound			Jenks Road Westbound			Westford Street C Driveway Northbound			Site Driveway Southbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2019 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing	0	123	0	0	128	0	0	0	0	0	0	0
2019 Existing Traffic	0	123	0	0	128	0	0	0	0	0	0	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
2023 Background Growth	0	15	0	0	16	0	0	0	0	0	0	0
Committed Projects												
Lake Castleberry (40% occupied)	0	4	0	0	7	0	0	0	0	0	0	0
Preserve at White Oak Creek (75% occ.)	0	13	0	0	14	0	0	0	0	0	0	0
Westford Commercial (0% occupied)	0	31	0	0	23	0	0	0	0	0	0	0
Westford Residential (50% occupied)	0	33	20	26	25	0	14	0	11	0	0	0
Total Committed Traffic	0	81	20	26	69	0	14	0	11	0	0	0
2023 Background Traffic	0	219	20	26	213	0	14	0	11	0	0	0
Project Traffic												
Percent Assignment Inbound	25%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	13	0	0	0	0	25	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	25%
Outbound Project Traffic	0	0	0	0	0	0	0	0	0	29	0	14
Total External Site Traffic	13	0	0	0	0	25	0	0	0	29	0	14
Pass-By Capture Reduction	0	-6	0	0	-10	0	0	0	0	0	0	0
Pass-By Capture Assignment	6	0	0	0	0	10	0	0	0	6	0	10
Total Pass-By Traffic	6	-6	0	0	-10	10	0	0	0	6	0	10
Total Project Traffic	19	-6	0	0	-10	35	0	0	0	35	0	24
2023 Buildout Total	19	213	20	26	203	35	14	0	11	35	0	24
Percent Impact (Approach)		5.2%			9.5%			0.0%			100.0%	

Overall Percent Impact 16.2%

INTERSECTION ANALYSIS SHEET

Project:	Jenks Road Assemblage
Location:	Apex, NC
Ct. Date:	Balanced with Jenks - Wimberly
N/S Street:	Wimberly Road
E/W Street:	Site Driveway

	AM In	AM Out	PM In	PM Out
Net New Trips:	81	66	50	57
Pass-By Trips:	0	0	16	16

Annual Growth Rate:	3.0%	Existing Year:	2019
Growth Factor:	0.125509	Buildout Year:	2023

AM PEAK HOUR AM PHF = 0.90

Description	Site Driveway Eastbound			Site Driveway Westbound			Wimberly Road Northbound			Wimberly Road Southbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2019 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing	0	0	0	0	0	0	0	68	0	0	51	0
2019 Existing Traffic	0	0	0	0	0	0	0	68	0	0	51	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
2023 Background Growth	0	0	0	0	0	0	0	9	0	0	6	0
Committed Projects												
Lake Castleberry (40% occupied)	0	0	0	0	0	0	0	4	0	0	11	0
Preserve at White Oak Creek (75% occ.)	0	0	0	0	0	0	0	6	0	0	18	0
Westford Commercial (0% occupied)	0	0	0	0	0	0	0	3	0	0	5	0
Westford Residential (50% occupied)	0	0	0	0	0	0	0	8	0	0	1	0
Total Committed Traffic	0	0	0	0	0	0	0	21	0	0	35	0
2023 Background Traffic	0	0	0	0	0	0	0	98	0	0	92	0
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	15%	10%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	0	12	8	0	0
Percent Assignment Outbound	0%	0%	0%	15%	0%	10%	0%	0%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	10	0	6	0	0	0	0	0	0
Total Project Traffic	0	0	0	10	0	6	0	0	12	8	0	0
2023 Buildout Total	0	0	0	10	0	6	0	98	12	8	92	0
Percent Impact (Approach)		-			100.0%			10.9%			8.0%	
Overall Percent Impact	15.9%											

PM PEAK HOUR PM PHF = 0.90

Description	Site Driveway Eastbound			Site Driveway Westbound			Wimberly Road Northbound			Wimberly Road Southbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2019 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing	0	0	0	0	0	0	0	59	0	0	110	0
2019 Existing Traffic	0	0	0	0	0	0	0	59	0	0	110	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
2023 Background Growth	0	0	0	0	0	0	0	7	0	0	14	0
Committed Projects												
Lake Castleberry (40% occupied)	0	0	0	0	0	0	0	14	0	0	8	0
Preserve at White Oak Creek (75% occ.)	0	0	0	0	0	0	0	20	0	0	12	0
Westford Commercial (0% occupied)	0	0	0	0	0	0	0	6	0	0	5	0
Westford Residential (50% occupied)	0	0	0	0	0	0	0	6	0	0	10	0
Total Committed Traffic	0	0	0	0	0	0	0	46	0	0	35	0
2023 Background Traffic	0	0	0	0	0	0	0	112	0	0	159	0
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	15%	10%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	0	8	4	0	0
Percent Assignment Outbound	0%	0%	0%	15%	0%	10%	0%	0%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	9	0	5	0	0	0	0	0	0
Total External Site Traffic	0	0	0	9	0	5	0	0	8	4	0	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
Total Project Traffic	0	0	0	9	0	5	0	0	8	4	0	0
2023 Buildout Total	0	0	0	9	0	5	0	112	8	4	159	0
Percent Impact (Approach)		-			100.0%			6.7%			2.5%	
Overall Percent Impact	8.8%											

**Appendix F:
Synchro Output:
Existing (2019)**

Jenks Road Assemblage
 1: Westford Street B/Wimberly Road & Jenks Road

Existing AM
 10/16/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	94	4	4	65	21	6	5	15	20	4	29
Future Volume (vph)	42	94	4	4	65	21	6	5	15	20	4	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	100			100			100			100		
Satd. Flow (prot)	1770	1863	1583	1770	1796	0	0	1814	1583	0	1692	0
Flt Permitted	0.950			0.950				0.974			0.981	
Satd. Flow (perm)	1770	1863	1583	1770	1796	0	0	1814	1583	0	1692	0
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		1361			1374			374			1809	
Travel Time (s)		20.6			20.8			10.2			27.4	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	47	104	4	4	95	0	0	13	17	0	58	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	25.4%
ICU Level of Service	A
Analysis Period (min)	15

Jenks Road Assemblage
 1: Westford Street B/Wimberly Road & Jenks Road

Existing AM
 10/16/2019

Intersection												
Int Delay, s/veh	3.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑	↗	↙	↑	↗		↙	↗		↕	
Traffic Vol, veh/h	42	94	4	4	65	21	6	5	15	20	4	29
Future Vol, veh/h	42	94	4	4	65	21	6	5	15	20	4	29
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	100	-	0	100	-	-	-	-	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	47	104	4	4	72	23	7	6	17	22	4	32

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	95	0	0	108	0	0	308	301	104	304	294	84
Stage 1	-	-	-	-	-	-	198	198	-	92	92	-
Stage 2	-	-	-	-	-	-	110	103	-	212	202	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1499	-	-	1483	-	-	644	612	951	648	617	975
Stage 1	-	-	-	-	-	-	804	737	-	915	819	-
Stage 2	-	-	-	-	-	-	895	810	-	790	734	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1499	-	-	1483	-	-	603	591	951	616	596	975
Mov Cap-2 Maneuver	-	-	-	-	-	-	603	591	-	616	596	-
Stage 1	-	-	-	-	-	-	779	714	-	887	817	-
Stage 2	-	-	-	-	-	-	858	808	-	746	711	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.2			0.3			9.9			10.1		
HCM LOS							A			B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	597	951	1499	-	-	1483	-	-	769
HCM Lane V/C Ratio	0.02	0.018	0.031	-	-	0.003	-	-	0.077
HCM Control Delay (s)	11.2	8.9	7.5	-	-	7.4	-	-	10.1
HCM Lane LOS	B	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0.1	0.1	-	-	0	-	-	0.2

Jenks Road Assemblage
 1: Westford Street B/Wimberly Road & Jenks Road

Existing PM
 10/16/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	65	6	14	98	16	4	4	4	54	4	53
Future Volume (vph)	42	65	6	14	98	16	4	4	4	54	4	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	100			100			100			100		
Satd. Flow (prot)	1770	1863	1583	1770	1824	0	0	1818	1583	0	1700	0
Flt Permitted	0.950			0.950				0.976			0.976	
Satd. Flow (perm)	1770	1863	1583	1770	1824	0	0	1818	1583	0	1700	0
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		1361			1374			329			1809	
Travel Time (s)		20.6			20.8			9.0			27.4	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	47	72	7	16	127	0	0	8	4	0	123	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	28.8%
ICU Level of Service	A
Analysis Period (min)	15

Jenks Road Assemblage
 1: Westford Street B/Wimberly Road & Jenks Road

Existing PM
 10/16/2019

Intersection												
Int Delay, s/veh	4.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↑	↗		↖	↗		↕	
Traffic Vol, veh/h	42	65	6	14	98	16	4	4	4	54	4	53
Future Vol, veh/h	42	65	6	14	98	16	4	4	4	54	4	53
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	100	-	0	100	-	-	-	-	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	47	72	7	16	109	18	4	4	4	60	4	59

Major/Minor	Major1		Major2		Minor1			Minor2				
Conflicting Flow All	127	0	0	79	0	0	348	325	72	324	323	118
Stage 1	-	-	-	-	-	-	166	166	-	150	150	-
Stage 2	-	-	-	-	-	-	182	159	-	174	173	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1459	-	-	1519	-	-	607	593	990	629	595	934
Stage 1	-	-	-	-	-	-	836	761	-	853	773	-
Stage 2	-	-	-	-	-	-	820	766	-	828	756	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1459	-	-	1519	-	-	547	568	990	603	569	934
Mov Cap-2 Maneuver	-	-	-	-	-	-	547	568	-	603	569	-
Stage 1	-	-	-	-	-	-	809	737	-	826	764	-
Stage 2	-	-	-	-	-	-	756	758	-	793	732	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	2.8		0.8		10.6		11	
HCM LOS					B		B	

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	557	990	1459	-	-	1519	-	-	724
HCM Lane V/C Ratio	0.016	0.004	0.032	-	-	0.01	-	-	0.17
HCM Control Delay (s)	11.6	8.7	7.5	-	-	7.4	-	-	11
HCM Lane LOS	B	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	0.1	-	-	0	-	-	0.6

**Appendix G:
Synchro Output:
Background (2023)**

Jenks Road Assemblage
1: Westford Street B/Wimberly Road & Jenks Road

Background AM
10/16/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	132	5	10	130	29	52	13	39	37	4	53
Future Volume (vph)	55	132	5	10	130	29	52	13	39	37	4	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	100			100			100			100		
Satd. Flow (prot)	1770	1863	1583	1770	1812	0	0	1790	1583	0	1687	0
Flt Permitted	0.950			0.950				0.961			0.981	
Satd. Flow (perm)	1770	1863	1583	1770	1812	0	0	1790	1583	0	1687	0
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		1360			1114			425			481	
Travel Time (s)		20.6			16.9			11.6			7.3	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	61	147	6	11	176	0	0	72	43	0	104	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	34.1%
Analysis Period (min)	15
	ICU Level of Service A

Jenks Road Assemblage
1: Westford Street B/Wimberly Road & Jenks Road

Background AM
10/16/2019

Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑	↗	↙	↑	↗		↖	↗		↕	
Traffic Vol, veh/h	55	132	5	10	130	29	52	13	39	37	4	53
Future Vol, veh/h	55	132	5	10	130	29	52	13	39	37	4	53
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	100	-	0	100	-	-	-	-	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	61	147	6	11	144	32	58	14	43	41	4	59

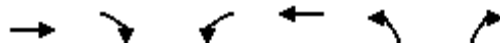
Major/Minor	Major1		Major2		Minor1			Minor2				
Conflicting Flow All	176	0	0	153	0	0	483	467	147	483	457	160
Stage 1	-	-	-	-	-	-	269	269	-	182	182	-
Stage 2	-	-	-	-	-	-	214	198	-	301	275	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1400	-	-	1428	-	-	494	493	900	494	500	885
Stage 1	-	-	-	-	-	-	737	687	-	820	749	-
Stage 2	-	-	-	-	-	-	788	737	-	708	683	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1400	-	-	1428	-	-	440	467	900	441	474	885
Mov Cap-2 Maneuver	-	-	-	-	-	-	440	467	-	441	474	-
Stage 1	-	-	-	-	-	-	705	657	-	784	743	-
Stage 2	-	-	-	-	-	-	726	731	-	630	653	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	2.2		0.4		12.6		12	
HCM LOS					B		B	

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	445	900	1400	-	-	1428	-	-	618
HCM Lane V/C Ratio	0.162	0.048	0.044	-	-	0.008	-	-	0.169
HCM Control Delay (s)	14.7	9.2	7.7	-	-	7.5	-	-	12
HCM Lane LOS	B	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.6	0.2	0.1	-	-	0	-	-	0.6

Jenks Road Assemblage
2: Westford Street C & Jenks Road

Background AM
10/16/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑		↙	↑	↘	
Traffic Volume (vph)	204	5	7	144	25	21
Future Volume (vph)	204	5	7	144	25	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			100		100	
Satd. Flow (prot)	1857	0	1770	1863	1702	0
Flt Permitted			0.950		0.973	
Satd. Flow (perm)	1857	0	1770	1863	1702	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	1114			692	484	
Travel Time (s)	16.9			10.5	13.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)						
Lane Group Flow (vph)	233	0	8	160	51	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	21.0% ICU Level of Service A
Analysis Period (min)	15

Jenks Road Assemblage
2: Westford Street C & Jenks Road

Background AM
10/16/2019

Intersection						
Int Delay, s/veh	1.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	204	5	7	144	25	21
Future Vol, veh/h	204	5	7	144	25	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	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	227	6	8	160	28	23

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	233	0	406 230
Stage 1	-	-	-	-	230 -
Stage 2	-	-	-	-	176 -
Critical Hdwy	-	-	4.12	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	2.218	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	1335	-	601 809
Stage 1	-	-	-	-	808 -
Stage 2	-	-	-	-	855 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1335	-	597 809
Mov Cap-2 Maneuver	-	-	-	-	648 -
Stage 1	-	-	-	-	803 -
Stage 2	-	-	-	-	855 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	10.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	713	-	-	1335	-
HCM Lane V/C Ratio	0.072	-	-	0.006	-
HCM Control Delay (s)	10.4	-	-	7.7	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Jenks Road Assemblage
 1: Westford Street B/Wimberly Road & Jenks Road

Background PM
 10/16/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	147	21	39	151	35	28	7	21	71	13	75
Future Volume (vph)	70	147	21	39	151	35	28	7	21	71	13	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	100			100			100			100		
Satd. Flow (prot)	1770	1863	1583	1770	1811	0	0	1792	1583	0	1705	0
Flt Permitted	0.950			0.950				0.962			0.978	
Satd. Flow (perm)	1770	1863	1583	1770	1811	0	0	1792	1583	0	1705	0
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		1360			1114			425			481	
Travel Time (s)		20.6			16.9			11.6			7.3	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	78	163	23	43	207	0	0	39	23	0	176	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	39.8%
Analysis Period (min)	15
	ICU Level of Service A

Jenks Road Assemblage
1: Westford Street B/Wimberly Road & Jenks Road

Background PM
10/16/2019

Intersection												
Int Delay, s/veh	6.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	70	147	21	39	151	35	28	7	21	71	13	75
Future Vol, veh/h	70	147	21	39	151	35	28	7	21	71	13	75
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	100	-	0	100	-	-	-	-	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	78	163	23	43	168	39	31	8	23	79	14	83

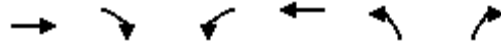
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	207	0	0	186	0	0	641	612	163	620	616	188
Stage 1	-	-	-	-	-	-	319	319	-	274	274	-
Stage 2	-	-	-	-	-	-	322	293	-	346	342	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1364	-	-	1388	-	-	388	408	882	400	406	854
Stage 1	-	-	-	-	-	-	693	653	-	732	683	-
Stage 2	-	-	-	-	-	-	690	670	-	670	638	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1364	-	-	1388	-	-	317	373	882	358	371	854
Mov Cap-2 Maneuver	-	-	-	-	-	-	317	373	-	358	371	-
Stage 1	-	-	-	-	-	-	653	616	-	690	662	-
Stage 2	-	-	-	-	-	-	590	649	-	607	602	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.3			1.3			14.4			16.3		
HCM LOS							B			C		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	327	882	1364	-	-	1388	-	-	495
HCM Lane V/C Ratio	0.119	0.026	0.057	-	-	0.031	-	-	0.357
HCM Control Delay (s)	17.5	9.2	7.8	-	-	7.7	-	-	16.3
HCM Lane LOS	C	A	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.4	0.1	0.2	-	-	0.1	-	-	1.6

Jenks Road Assemblage
2: Westford Street C & Jenks Road

Background PM
10/16/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗		↖	↗	↖	
Traffic Volume (vph)	219	20	26	213	14	11
Future Volume (vph)	219	20	26	213	14	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			100		100	
Satd. Flow (prot)	1842	0	1770	1863	1706	0
Flt Permitted			0.950		0.972	
Satd. Flow (perm)	1842	0	1770	1863	1706	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	1114			692	484	
Travel Time (s)	16.9			10.5	13.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)						
Lane Group Flow (vph)	265	0	29	237	28	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	29.4%
ICU Level of Service	A
Analysis Period (min)	15

Jenks Road Assemblage
2: Westford Street C & Jenks Road

Background PM
10/16/2019

Intersection						
Int Delay, s/veh	1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	219	20	26	213	14	11
Future Vol, veh/h	219	20	26	213	14	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	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	243	22	29	237	16	12

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	265	0	549 254
Stage 1	-	-	-	-	254 -
Stage 2	-	-	-	-	295 -
Critical Hdwy	-	-	4.12	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	2.218	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	1299	-	497 785
Stage 1	-	-	-	-	788 -
Stage 2	-	-	-	-	755 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1299	-	486 785
Mov Cap-2 Maneuver	-	-	-	-	563 -
Stage 1	-	-	-	-	771 -
Stage 2	-	-	-	-	755 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	10.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	643	-	-	1299	-
HCM Lane V/C Ratio	0.043	-	-	0.022	-
HCM Control Delay (s)	10.9	-	-	7.8	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Appendix H:
Synchro & SimTraffic Output:
Build-out (2023)

Jenks Road Assemblage
 1: Westford Street B/Wimberly Road & Jenks Road

Build AM
 10/16/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	67	152	5	10	147	29	52	13	39	36	4	63
Future Volume (vph)	67	152	5	10	147	29	52	13	39	36	4	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	100			100			100			100		
Satd. Flow (prot)	1770	1863	1583	1770	1816	0	0	1790	1583	0	1679	0
Flt Permitted	0.950			0.950				0.961			0.983	
Satd. Flow (perm)	1770	1863	1583	1770	1816	0	0	1790	1583	0	1679	0
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		1360			1114			425			481	
Travel Time (s)		20.6			16.9			11.6			7.3	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	74	169	6	11	195	0	0	72	43	0	114	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	36.0%
ICU Level of Service	A
Analysis Period (min)	15

Jenks Road Assemblage
1: Westford Street B/Wimberly Road & Jenks Road

Build AM
10/16/2019

Intersection												
Int Delay, s/veh	5.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	67	152	5	10	147	29	52	13	39	36	4	63
Future Vol, veh/h	67	152	5	10	147	29	52	13	39	36	4	63
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	100	-	0	100	-	-	-	-	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	74	169	6	11	163	32	58	14	43	40	4	70

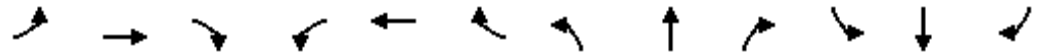
Major/Minor	Major1		Major2		Minor1			Minor2				
Conflicting Flow All	195	0	0	175	0	0	555	534	169	550	524	179
Stage 1	-	-	-	-	-	-	317	317	-	201	201	-
Stage 2	-	-	-	-	-	-	238	217	-	349	323	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1378	-	-	1401	-	-	442	452	875	446	458	864
Stage 1	-	-	-	-	-	-	694	654	-	801	735	-
Stage 2	-	-	-	-	-	-	765	723	-	667	650	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1378	-	-	1401	-	-	384	424	875	394	430	864
Mov Cap-2 Maneuver	-	-	-	-	-	-	384	424	-	394	430	-
Stage 1	-	-	-	-	-	-	657	619	-	758	729	-
Stage 2	-	-	-	-	-	-	693	717	-	586	615	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.3	0.4	13.7	12.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	391	875	1378	-	-	1401	-	-	593
HCM Lane V/C Ratio	0.185	0.05	0.054	-	-	0.008	-	-	0.193
HCM Control Delay (s)	16.3	9.3	7.8	-	-	7.6	-	-	12.5
HCM Lane LOS	C	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.7	0.2	0.2	-	-	0	-	-	0.7

Jenks Road Assemblage
 2: Westford Street C/Site Driveway & Jenks Road

Build AM
 10/16/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	204	5	7	144	41	25	4	21	33	4	17
Future Volume (vph)	20	204	5	7	144	41	25	4	21	33	4	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	100			100			100			100		
Satd. Flow (prot)	1770	1855	0	1770	1801	0	0	1714	0	0	1729	0
Flt Permitted	0.950			0.950				0.975			0.970	
Satd. Flow (perm)	1770	1855	0	1770	1801	0	0	1714	0	0	1729	0
Link Speed (mph)		45			45			25			25	
Link Distance (ft)		1114			692			484			339	
Travel Time (s)		16.9			10.5			13.2			9.2	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	22	233	0	8	206	0	0	55	0	0	60	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	27.5%
Analysis Period (min)	15
	ICU Level of Service A

Jenks Road Assemblage
2: Westford Street C/Site Driveway & Jenks Road

Build AM
10/16/2019

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	20	204	5	7	144	41	25	4	21	33	4	17
Future Vol, veh/h	20	204	5	7	144	41	25	4	21	33	4	17
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	100	-	-	100	-	-	-	-	-	-	-	-
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	22	227	6	8	160	46	28	4	23	37	4	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	206	0	0	233	0	0	485	496	230	487	476	183
Stage 1	-	-	-	-	-	-	274	274	-	199	199	-
Stage 2	-	-	-	-	-	-	211	222	-	288	277	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1365	-	-	1335	-	-	492	475	809	491	488	859
Stage 1	-	-	-	-	-	-	732	683	-	803	736	-
Stage 2	-	-	-	-	-	-	791	720	-	720	681	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1365	-	-	1335	-	-	470	465	809	465	477	859
Mov Cap-2 Maneuver	-	-	-	-	-	-	470	465	-	465	477	-
Stage 1	-	-	-	-	-	-	720	672	-	790	732	-
Stage 2	-	-	-	-	-	-	764	716	-	683	670	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.7			0.3			12			12.4		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	570	1365	-	-	1335	-	-	545
HCM Lane V/C Ratio	0.097	0.016	-	-	0.006	-	-	0.11
HCM Control Delay (s)	12	7.7	-	-	7.7	-	-	12.4
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0	-	-	0.4

Jenks Road Assemblage
3: Wimberly Road & Site Driveway

Build AM
10/16/2019



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	10	6	98	12	8	92
Future Volume (vph)	10	6	98	12	8	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	100	
Storage Lanes	1	0		0	0	
Taper Length (ft)	100				100	
Satd. Flow (prot)	1711	0	1837	0	0	1855
Flt Permitted	0.970					0.996
Satd. Flow (perm)	1711	0	1837	0	0	1855
Link Speed (mph)	25		45			45
Link Distance (ft)	358		481			1036
Travel Time (s)	9.8		7.3			15.7
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)						
Lane Group Flow (vph)	18	0	122	0	0	111
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	21.5%
Analysis Period (min)	15
	ICU Level of Service A

Jenks Road Assemblage
3: Wimberly Road & Site Driveway

Build AM
10/16/2019

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	10	6	98	12	8	92
Future Vol, veh/h	10	6	98	12	8	92
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	7	109	13	9	102

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	236	116	0	0	122	0
Stage 1	116	-	-	-	-	-
Stage 2	120	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	752	936	-	-	1465	-
Stage 1	909	-	-	-	-	-
Stage 2	905	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	747	936	-	-	1465	-
Mov Cap-2 Maneuver	747	-	-	-	-	-
Stage 1	903	-	-	-	-	-
Stage 2	905	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.6	0	0.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	808	1465
HCM Lane V/C Ratio	-	-	0.022	0.006
HCM Control Delay (s)	-	-	9.6	7.5
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Jenks Road Assemblage
 1: Westford Street B/Wimberly Road & Jenks Road

Build PM
 10/16/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	160	21	39	165	35	28	7	21	71	13	84
Future Volume (vph)	78	160	21	39	165	35	28	7	21	71	13	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	100		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	100			100			100			100		
Satd. Flow (prot)	1770	1863	1583	1770	1814	0	0	1792	1583	0	1700	0
Flt Permitted	0.950			0.950				0.962			0.979	
Satd. Flow (perm)	1770	1863	1583	1770	1814	0	0	1792	1583	0	1700	0
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		1360			1114			425			481	
Travel Time (s)		20.6			16.9			11.6			7.3	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	87	178	23	43	222	0	0	39	23	0	186	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	41.6%
ICU Level of Service	A
Analysis Period (min)	15

Jenks Road Assemblage
1: Westford Street B/Wimberly Road & Jenks Road

Build PM
10/16/2019

Intersection												
Int Delay, s/veh	6.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↑	↗		↖	↗		↕	
Traffic Vol, veh/h	78	160	21	39	165	35	28	7	21	71	13	84
Future Vol, veh/h	78	160	21	39	165	35	28	7	21	71	13	84
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	100	-	0	100	-	-	-	-	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	87	178	23	43	183	39	31	8	23	79	14	93

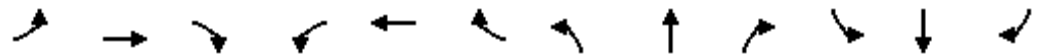
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	222	0	0	201	0	0	694	660	178	668	664	203
Stage 1	-	-	-	-	-	-	352	352	-	289	289	-
Stage 2	-	-	-	-	-	-	342	308	-	379	375	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1347	-	-	1371	-	-	357	383	865	372	381	838
Stage 1	-	-	-	-	-	-	665	632	-	719	673	-
Stage 2	-	-	-	-	-	-	673	660	-	643	617	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1347	-	-	1371	-	-	285	347	865	330	345	838
Mov Cap-2 Maneuver	-	-	-	-	-	-	285	347	-	330	345	-
Stage 1	-	-	-	-	-	-	622	591	-	672	652	-
Stage 2	-	-	-	-	-	-	566	640	-	578	577	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.4			1.3			15.4			17.4		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	296	865	1347	-	-	1371	-	-	476
HCM Lane V/C Ratio	0.131	0.027	0.064	-	-	0.032	-	-	0.392
HCM Control Delay (s)	19	9.3	7.9	-	-	7.7	-	-	17.4
HCM Lane LOS	C	A	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.4	0.1	0.2	-	-	0.1	-	-	1.8

Jenks Road Assemblage
2: Westford Street C/Site Driveway & Jenks Road

Build PM
10/16/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	213	20	26	203	35	14	4	11	35	4	24
Future Volume (vph)	19	213	20	26	203	35	14	4	11	35	4	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	100			100			100			100		
Satd. Flow (prot)	1770	1839	0	1770	1822	0	0	1725	0	0	1718	0
Flt Permitted	0.950			0.950				0.976			0.973	
Satd. Flow (perm)	1770	1839	0	1770	1822	0	0	1725	0	0	1718	0
Link Speed (mph)		45			45			25			25	
Link Distance (ft)		1114			692			484			339	
Travel Time (s)		16.9			10.5			13.2			9.2	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	259	0	29	265	0	0	32	0	0	70	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	31.0%
ICU Level of Service	A
Analysis Period (min)	15

Jenks Road Assemblage
2: Westford Street C/Site Driveway & Jenks Road

Build PM
10/16/2019

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	19	213	20	26	203	35	14	4	11	35	4	24
Future Vol, veh/h	19	213	20	26	203	35	14	4	11	35	4	24
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	100	-	-	100	-	-	-	-	-	-	-	-
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	21	237	22	29	226	39	16	4	12	39	4	27

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	265	0	0	259	0	0	609	613	248	602	605	246
Stage 1	-	-	-	-	-	-	290	290	-	304	304	-
Stage 2	-	-	-	-	-	-	319	323	-	298	301	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1299	-	-	1306	-	-	407	408	791	412	412	793
Stage 1	-	-	-	-	-	-	718	672	-	705	663	-
Stage 2	-	-	-	-	-	-	693	650	-	711	665	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1299	-	-	1306	-	-	379	392	791	391	396	793
Mov Cap-2 Maneuver	-	-	-	-	-	-	379	392	-	391	396	-
Stage 1	-	-	-	-	-	-	707	661	-	694	648	-
Stage 2	-	-	-	-	-	-	650	636	-	684	654	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.8			13.1			13.7		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	475	1299	-	-	1306	-	-	485
HCM Lane V/C Ratio	0.068	0.016	-	-	0.022	-	-	0.144
HCM Control Delay (s)	13.1	7.8	-	-	7.8	-	-	13.7
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.1	-	-	0.5

Jenks Road Assemblage
3: Wimberly Road & Site Driveway

Build PM
10/16/2019



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	9	5	112	8	4	159
Future Volume (vph)	9	5	112	8	4	159
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1715	0	1846	0	0	1861
Flt Permitted	0.970					0.999
Satd. Flow (perm)	1715	0	1846	0	0	1861
Link Speed (mph)	25		45			45
Link Distance (ft)	358		481			1036
Travel Time (s)	9.8		7.3			15.7
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	0	133	0	0	181
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	21.6%
Analysis Period (min)	15
	ICU Level of Service A

Jenks Road Assemblage
3: Wimberly Road & Site Driveway

Build PM
10/16/2019

Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	5	112	8	4	159
Future Vol, veh/h	9	5	112	8	4	159
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	6	124	9	4	177

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	314	129	0	0	133	0
Stage 1	129	-	-	-	-	-
Stage 2	185	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	679	921	-	-	1452	-
Stage 1	897	-	-	-	-	-
Stage 2	847	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	677	921	-	-	1452	-
Mov Cap-2 Maneuver	677	-	-	-	-	-
Stage 1	894	-	-	-	-	-
Stage 2	847	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	748	1452
HCM Lane V/C Ratio	-	-	0.021	0.003
HCM Control Delay (s)	-	-	9.9	7.5
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0

1: Westford Street B/Wimberly Road & Jenks Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.1	0.0	0.1	0.0	0.4
Total Del/Veh (s)	1.0	1.2	5.5	4.0	2.3

2: Westford Street C/Site Driveway & Jenks Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.3	0.1	0.1	0.1
Total Del/Veh (s)	0.8	0.8	5.2	5.3	1.6

3: Wimberly Road & Site Driveway Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.1	0.1
Total Del/Veh (s)	3.9	0.6	0.3	0.7

Total Network Performance

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	3.7

Intersection: 1: Westford Street B/Wimberly Road & Jenks Road

Movement	EB	WB	NB	NB	SB
Directions Served	L	L	LT	R	LTR
Maximum Queue (ft)	34	18	56	53	66
Average Queue (ft)	8	1	27	19	32
95th Queue (ft)	28	9	49	41	52
Link Distance (ft)			379	379	406
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100	100			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: Westford Street C/Site Driveway & Jenks Road

Movement	EB	WB	WB	NB	SB
Directions Served	L	L	TR	LTR	LTR
Maximum Queue (ft)	28	24	2	62	57
Average Queue (ft)	3	2	0	29	26
95th Queue (ft)	16	12	2	55	52
Link Distance (ft)			663	450	304
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100	100			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 3: Wimberly Road & Site Driveway

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	35	14
Average Queue (ft)	12	1
95th Queue (ft)	37	7
Link Distance (ft)	329	1014
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

1: Westford Street B/Wimberly Road & Jenks Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.2	0.0	0.1	0.0	0.4
Total Del/Veh (s)	1.1	1.3	6.0	6.5	2.8

2: Westford Street C/Site Driveway & Jenks Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.6	0.1	0.1	0.3
Total Del/Veh (s)	1.0	0.8	5.3	5.8	1.6

3: Wimberly Road & Site Driveway Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.2	0.1
Total Del/Veh (s)	4.2	0.5	0.4	0.6

Total Network Performance

Denied Del/Veh (s)	0.6
Total Del/Veh (s)	4.1

Intersection: 1: Westford Street B/Wimberly Road & Jenks Road

Movement	EB	EB	WB	WB	NB	NB	SB
Directions Served	L	R	L	TR	LT	R	LTR
Maximum Queue (ft)	41	3	30	1	53	28	88
Average Queue (ft)	10	0	4	0	20	12	42
95th Queue (ft)	33	2	19	1	44	31	72
Link Distance (ft)		1326		1042	379	379	406
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	100		100				
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 2: Westford Street C/Site Driveway & Jenks Road

Movement	EB	WB	NB	SB
Directions Served	L	L	LTR	LTR
Maximum Queue (ft)	27	31	50	60
Average Queue (ft)	3	4	20	30
95th Queue (ft)	17	20	46	54
Link Distance (ft)			450	304
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	100	100		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Wimberly Road & Site Driveway

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	30	8
Average Queue (ft)	10	0
95th Queue (ft)	33	5
Link Distance (ft)	329	1014
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

PLANNING BOARD REPORT TO TOWN COUNCIL
Rezoning #19CZ25 Jenks and Wimberly Mixed Use PUD

February 10, 2020 Planning Board Meeting



Report Requirements:

Per NCGS 160A-387, all proposed amendments to the zoning ordinance or zoning map shall have a written report provided from the Planning Board to the Town Council within 30 days of referral of the amendment to the Planning Board, or the Town Council may proceed in its consideration of the amendment without the Planning Board report. Furthermore, in no case is the Town Council bound by the recommendations, if any, of the Planning Board.

Per NCGS 160A-383, the Planning Board shall advise and comment on whether the proposed zoning amendment is consistent with all applicable officially adopted plans, and provide a written recommendation to the Town Council that addresses plan consistency and other matters as deemed appropriate by the Planning Board, but a comment by the Planning Board that a proposed amendment is inconsistent with the officially adopted plans shall not preclude consideration or approval of the proposed amendment by the Town Council.

PROJECT DESCRIPTION:

- Acreage:** +/- 14.86 acres
PINs: 0722788252, 0722784193, 0722780191, 0722687241
Current Zoning: Rural Residential (RR)
Proposed Zoning: Planned Unit Development-Conditional Zoning (PUD-CZ)
2045 Land Use Map: Mixed Use: High Density Residential, Office Employment & Commercial Services
Town Limits: ETJ

Applicable Officially Adopted Plans:

The Board must state whether the project is consistent or inconsistent with the following officially adopted plans, if applicable. Applicable plans have a check mark next to them.

2045 Land Use Map
 Consistent Inconsistent Reason: _____

Apex Transportation Plan
 Consistent Inconsistent Reason: _____

Parks, Recreation, Open Space, and Greenways Plan
 Consistent Inconsistent Reason: _____

PLANNING BOARD REPORT TO TOWN COUNCIL
Rezoning #19CZ25 Jenks and Wimberly Mixed Use PUD

February 10, 2020 Planning Board Meeting



Legislative Considerations:

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.

Consistent Inconsistent Reason: _____

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

Consistent Inconsistent Reason: _____

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

Consistent Inconsistent Reason: _____

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.

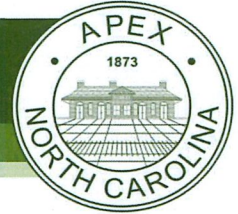
Consistent Inconsistent Reason: _____

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.

Consistent Inconsistent Reason: _____

PLANNING BOARD REPORT TO TOWN COUNCIL
Rezoning #19CZ25 Jenks and Wimberly Mixed Use PUD

February 10, 2020 Planning Board Meeting



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.

Consistent Inconsistent Reason: _____

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.

Consistent Inconsistent Reason: _____

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

Consistent Inconsistent Reason: _____

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.

Consistent Inconsistent Reason: _____

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.

Consistent Inconsistent Reason: _____

PLANNING BOARD REPORT TO TOWN COUNCIL
Rezoning #19CZ25 Jenks and Wimberly Mixed Use PUD

February 10, 2020 Planning Board Meeting



Planning Board Recommendation:

Motion: To recommend approval as submitted.

Introduced by Planning Board member: Beth Godfrey

Seconded by Planning Board member: Reginald Skinner

Approval: the project is consistent with all applicable officially adopted plans and the applicable legislative considerations listed above.

Approval with conditions: the project is not consistent with all applicable officially adopted plans and/or the applicable legislative considerations as noted above, so the following conditions are recommended to be included in the project in order to make it fully consistent:

As submitted by applicant.

Denial: the project is not consistent with all applicable officially adopted plans and/or the applicable legislative considerations as noted above.

With 6 Planning Board Member(s) voting "aye"

With 2 Planning Board Member(s) voting "no"

Reasons for dissenting votes:

Ms Sherman - concern regarding unknown nature of potential commercial.
Mr. Royal - concern about location of commercial (flip to other side makes more sense).

This report reflects the recommendation of the Planning Board, this the 10th day of February, 2020.

Attest:

Michael Marks

Michael Marks, Planning Board Chair

Dianne F. Khin

Dianne Khin, Planning Director



TOWN OF APEX

POST OFFICE BOX 250
APEX, NORTH CAROLINA 27502
PHONE 919-249-3426

PUBLIC NOTIFICATION OF PUBLIC HEARINGS

CONDITIONAL ZONING #19CZ25 Jenks and Wimberly Mixed Use PUD

Pursuant to the provisions of North Carolina Statutes Section 160A-364 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: Jeremy Medlin, Taylor Morrison of Carolinas, Inc.

Authorized Agent: Jason Barron, Morningstar Law Group

Property Addresses: 7912, 8000, & 8016 Jenks Road & 1533 Wimberly Road

Acreage: ±14.86 acres

Property Identification Numbers (PINs): 0722788252, 0722784193, 0722780191, 0722687241

2045 Land Use Map Designation: Mixed Use: High Density Residential, Office Employment & Commercial Services

Existing Zoning of Properties: Rural Residential (RR)

Proposed Zoning of Properties: Planned Unit Development-Conditional Zoning (PUD-CZ)

Public Hearing Location: Apex Town Hall
73 Hunter Street, Apex, North Carolina
Council Chambers, 2nd Floor

Planning Board Public Hearing Date and Time: February 10, 2020 4:30 P.M.

Town Council Public Hearing Date and Time: February 18, 2020 6:00 P.M.

Vicinity Map:



Property owners within 300 feet of the proposed conditional zoning have been sent this notice via first class mail. All interested parties may appear at the public hearing and be heard with respect to the application. Maps showing the location for the above site(s) to be considered in addition to a copy of the [2045 Land Use Map](#) can be inspected at the Apex Town Hall or call 919-249-3426, Department of Planning and Community Development, for further information. To view the petition and related documents on-line: <https://www.apexnc.org/DocumentCenter/View/26287>.

Dianne F. Khin, AICP
Planning Director

Published Dates: January 28 - February 18, 2020



3:49 PM
1/28/2020





TOWN OF APEX

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Dianne F. Khin, AICP
Planning Director



Rezoning #19CZ25

The Preserve at White Oak Creek

Sunnybrook Farms

Caitlin Pond

Townes at Westford

November, 2019
May 2019 Aerial Photography
Prepared by: Town of Apex Planning Department

Public Hearing Sign Posted By

[Signature]
Signature

11/8/19
Date



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 Number and/or Name: Conditional Rezoning #19CZ25 (Jenks & Wimberly Mixed Use PUD)
 Project Location: 7912, 8000, & 8016 Jenks Road & 1533 Wimberly Road
 Applicant or Authorized Agents: Jason Barron
 Firm: Morningstar Law Group

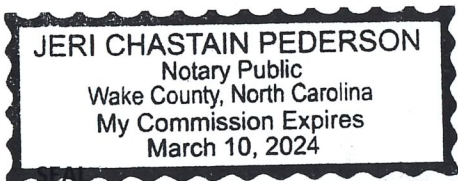
This is to certify that I as Planning Director, mailed or caused to have mailed by first class postage for the above mentioned project on January 28, 2020, a notice containing the time and place, location, nature and scope of the application, where additional information may be obtained, and the opportunity for interested parties to be heard, to the property owners within 300' of the land subject to notification. I further certify that I relied on information provided to me by the above-mentioned person as to accuracy and mailing addresses of property owners within 300' of the land subject to notification.

1/28/2020
 Date

Jeanne F. Klein
 Planning Director

STATE OF NORTH CAROLINA
 COUNTY OF WAKE

Sworn and subscribed before me, Jeri Chastain Pederson, a Notary Public for the above State and County, this the 28 day of January, 20 20.



Jeri Chastain Pederson
 Notary Public

My Commission Expires: 03 / 10 / 2024