

## STAFF REPORT

### Rezoning #24CZ11 Altera Heights PUD

May 27, 2025 Town Council Meeting



All property owners, tenants, and neighborhood associations within 300 feet of this rezoning have been notified per UDO Sec. 2.2.11 *Public Notification*.

#### BACKGROUND INFORMATION:

**Location:** 8108 Jenks Rd, 1508 Wimberly Rd, & 1440 Wimberly Rd  
**Applicant:** Wood Partners  
**Authorized Agent:** Matthew Carpenter, Parker Poe  
**Owners:** Terry Cichocki, DJ 1300 HOLDINGS LLC, & Terry D Poole

#### PROJECT DESCRIPTION:

**Acreage:** +/- 13.55 acres  
**PINs:** 0722673959, 0722682430, & 0722681610  
**Current Zoning:** Rural Residential (RR)  
**Proposed Zoning:** Planned Unit Development-Conditional Zoning (PUD-CZ)  
**Current 2045 Land Use Map:** Office Employment/Commercial Services  
**If rezoned as proposed, the 2045 Land Use Map Designation will change to:** High Density Residential  
**Town Limits:** In ETJ

#### ADJACENT ZONING & LAND USES:

	Zoning	Land Use
<b>North:</b>	Planned Unit Development-Conditional Zoning (PUD-CZ #21CZ01 & 16CZ30)	Wimberly Rd; Single-family residential (The Park at Wimberly); HOA open space and Single-family residential (The Preserve at White Oak Creek Subdivision)
<b>South:</b>	Planned Unit Development-Conditional Zoning (PUD-CZ # 22CZ01 & 12CZ10)	Jenks Rd; Vacant; Apartments (Westford Apartments)
<b>East:</b>	Planned Unit Development-Conditional Zoning (PUD-CZ #21CZ09 & 16CZ30)	Wimberly Rd; Single-family residential (The Preserve at White Oak Creek Subdivision); Future Commercial (Alderwood PUD)
<b>West:</b>	Rural Residential (RR)	Water treatment facility

#### EXISTING CONDITIONS:

The site consists of three (3) parcels totaling +/- 13.55 acres located north of Jenks Road, and west of Wimberly Road. The northern and southernmost properties contain single-family dwellings and accessory buildings while the central property is primarily cleared. The southern lot is primarily wooded while the other properties have little vegetation.

#### NEIGHBORHOOD MEETING:

The applicant conducted two neighborhood meetings on May 22, 2024 and April 15, 2025. The neighborhood meeting reports are attached.

#### 2045 LAND USE MAP:

The 2045 Land Use Map designates the site as Office Employment/Commercial Services. This designation does not support the residential uses proposed with Altera Heights PUD. If the properties are rezoned as proposed, the 2045 Land Use Map will automatically be amended to High Density Residential per NCGS 160D-605(a).

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#### WCPSS COORDINATION:

A Letter of Impact from Wake County Public School System (WCPSS) was received for this rezoning and is included in the staff report packet. WCPSS indicates that high schools within the current assignment area for this rezoning/development are anticipated to have insufficient capacity for future students; transportation to schools outside of the current assignment area should be anticipated. School expansion or construction within the next five years may address concerns at the high school level. Possible long-term solutions may include capping students out to schools with available seats (not very proximate), reassignments, or calendar changes.

#### PLANNED UNIT DEVELOPMENT PLAN:

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

##### 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

- Multi-family or apartment
- Condominium

##### Utilities

- Utility, minor

##### Recreational

- Greenway
- Park, Active
- Park, Passive
- Recreation Facility, private

#### 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 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 Site Plan submittal. The following conditions shall apply:

##### Multi-Family/Apartments/Condominiums:

1. Vinyl siding is not permitted; however, vinyl windows, decorative elements, and trim are permitted.
2. Rear and side elevations of units that have right-of-way frontage shall have trim around the windows.
3. A minimum of three of the following features shall be used on each building:
  - a. Decorative shake
  - b. Board and batten
  - c. Decorative porch railing/posts
  - d. Shutters
  - e. Decorative/functional air vents on roof or foundation
  - f. Recessed windows
  - g. Decorative windows
  - h. Decorative brick/stone
  - i. Gables
  - j. Decorative cornices
  - k. Tin/metal roof
4. Garage doors must have windows, decorative details, or carriage-style adornments on them.
5. Windows that are not recessed must be trimmed.



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#### Proposed Design Controls:

Maximum Residential Units:	300
Maximum Building Height:	60 ft & 4 stories *
Maximum Built-Up Area:	65%

Building Setbacks:	Multi-family
Front:	10 ft
Side:	10 ft
Rear:	10 ft
Corner:	10 ft
Building side to side:	N/A
From Buffers/RCA:	10 ft
Minimum building separation:	30 ft

\* As shown on Sheet C1.1 of the associated plan set for this 24CZ11 Altera Heights PUD, buildings located in the north of the site and adjacent to Wimberly Road and directly across from the existing single-family homes in The Preserve at White Oak Creek shall be limited to a maximum height of three (3) stories.

#### Parking:

This development proposes a minimum of 1.3 spaces per 1- and 2-bedroom unit and a maximum of 1.8 spaces per 3-bedroom unit. The applicant has indicated that no more than 8% of the units will be three-bedroom units; however, a zoning condition to that effect has not been provided. As such, there is no assurance that this limit will be maintained.

Estimated # of Units	Per UDO Min Required	Per PUD Min Required
1 & 2 bedrooms: 276	1.5 per unit = 414	1.3 per unit = 359 (358.8 rounded up)
3 bedrooms: 24	1.8 per unit = 43 (43.2 rounded down)	1.8 per unit = 43 (43.2 rounded down)
Total: 300	457	402
<b>PUD difference from UDO</b>	<b>--</b>	<b>-55</b>
Max Permitted	(457*1.15) = 526 (525.55 rounded up)	(402*1.15) = 462 (462.3 rounded down)

#### Affordable Housing:

- A minimum of 10% of the total residential apartment units (as shown on the first site plan submittal) shall be designated as restricted low-income affordable housing rental units (the "Affordable Units") for a minimum A minimum of 10% of the total residential apartment units (as shown on the first site plan submittal) shall be designated as restricted low-income affordable housing rental units (the "Affordable Units") for a minimum affordability period of 15 years starting from the date of issuance of the first residential Certificate of Occupancy (the "Affordable Restriction Period").
- 1/2 of the Affordable Units shall be occupied by low-income households earning no more than 80% of the Raleigh, NC Metropolitan Statistical Area (MSA) Area Median Income, adjusted for family size, as

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most recently published by the U.S. Department of Housing and Urban Development (HUD)(the “AMI”) and rented at maximum rent limits per bedroom count, no greater than the 80% AMI limits as stipulated by the most recently published NC Housing Finance Agency Low-Income Housing Tax Credit Multifamily Tax Subsidy Program income and rent limits for the Wake County Metropolitan Area (the “MTSP Rent Limits”).

- 1/2 of the Affordable Units shall be occupied by low-income households earning no more than 100% AMI and rented at maximum rent limits as stipulated by the 100% AMI MTSP Rent Limits.
- If the Affordable Units calculation results in a fraction between 0.00 and 0.49, the number of Affordable Units shall be rounded down to the nearest whole number. If the Affordable Units calculation results in a fraction between 0.50 and 0.99, the number of Affordable Units shall be rounded up to the nearest whole number.
- Prior to issuance of the first residential Certificate of Occupancy, a restrictive covenant between the Town and property owner shall be executed and recorded in the Wake County Registry to memorialize the affordable housing terms and conditions.
- During the Affordable Restriction Period, the property owner shall be responsible for performing, or contracting for, all property management and administration duties to ensure compliance with this affordable housing condition and shall submit annual compliance reports to the Town verifying compliance.
- Following expiration of the Affordable Restriction Period, this affordable housing condition shall expire, and the property owner shall be relieved of all obligations set forth in this affordable housing condition, and the Affordable Units may be freely marketed and leased at market-rate rents.

Summary Table:			
% affordable	Max # units	Affordability %	Term (years)
10%	30	5% at 80% AMI 5% at 100% AMI	15

#### Housing Staff Statement

Based on the 2023 Affordable Housing Incentive Zoning Policy, the Housing Program recommends at least five percent (5%) of the residential units or lots to be designated as affordable or workforce housing. The Policy recommendation applies to residential and mixed-use rezoning applications that propose 20 or more residential units. The proposed PUD designated 10% of the residential apartment units towards affordability with 1/2 of the affordable apartment units targeted to incomes that are 100% of the area median income and the remaining 1/2 of the affordable apartment units targeted to income that are 80% of the area median income.

Housing Staff has indicated that the 15 year affordability term is sufficient based upon the number of units offered and the AMI limits proposed.

#### Proposed RCA & Buffers:

The PUD will provide a minimum of 25% of the gross project area as Resource Conservation Area (“RCA”). Designated RCA areas will be consistent with the items listed in UDO Section 8.1.2(B). Preserved streams, wetlands, and associated riparian buffers provide the primary RCAs throughout the site. Additional RCA areas may include perimeter and street front buffers, stormwater management areas, and greenways.

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Buffers:	UDO Requirement:	Proposed:
Wimberly Road (Thoroughfare):	30-foot Type B	20-foot Type B**
North boundary:	20-foot Type B	20-foot Type B
South boundary:		
Adjacent to vacant property:	20-foot Type B	30-foot Type B
Adjacent to Jenks Road:	30-foot Type B	15- foot Type B*
East boundary		
Adjacent to Use Class 1:	20-foot Type B	20-foot Type B
West boundary:	50-foot Type A	25-foot Type A

\* There is an existing Duke Energy Electric Easement (Deed Book 5389, Page 112) (the “Jenks Duke Easement”) along the property’s Jenks Road frontage. The Jenks Road right of way dedication and road widening set forth in the Transportation Improvements section of this PUD may require relocation of the Jenks Duke Easement north onto the property as shown on the Preliminary Layout Plan (the “Relocation”). If the Relocation occurs, the portion of the buffer adjacent to the easement shall be reduced to a 15-foot Type B buffer and located outside of the relocated Jenks Duke Easement.

\*\* This buffer may overlap with the existing Town of Apex Electric Easement (Deed Book 16203, Page 1465) and Duke Energy Electric Easement along Wimberly Road provided there is a 10-foot wide planting area as measured from the edge of the easement.

#### Public Facilities:

The Altera Heights PUD will be served by Town of Apex water, sanitary sewer, and electrical systems. The utility design will be finalized at Site Plan review. A conceptual Utility Plan is included in the PUD Plan for reference.

There is a 30-foot Duke Electric easement running north-south on the eastern portion of the property. Two (2) water connections have been identified on the PUD Layout Plan Sheet: from the east on White Oak Pond Road and from the east of Wimberly Road. Sewer connections are provided to the southwest of the site. The ultimate design for the utilities shall meet the current Town of Apex Master Water and Sewer Plans for approval.

#### Apex Transportation Plan/Access and Circulation:

Per the Apex Thoroughfare and Collector Street Plan map, Wimberly Road is designated as an existing 2-lane thoroughfare. The developer will dedicate right-of-way along their property frontage on Wimberly Road to meet the requirements shown in Advance Apex.

The Apex Bicycle and Pedestrian System Plan Map shows a future side path along the property's Wimberly Road and Jenks Road frontages, which the developer proposes to construct. The PUD will provide sidewalks along both sides of all internal streets.

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

1. **Wimberly Road Widening.** Developer shall widen Wimberly Road to accommodate turn lanes as required based on a minimum 35-foot back to back curb and gutter 2-lane section with a 10-foot Side

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Path in a 60-foot right-of-way. Developer shall dedicate up to 5 feet of additional right of way along the property's frontage where needed to accommodate required turn lanes.

2. **Wimberly Road/White Oak Pond Road/North Site Driveway Intersection.** Developer shall construct a full-movement stop-controlled two-lane driveway across from White Oak Pond Road.
3. **Wimberly Road/Retreat at Preserve at White Oak Driveway/South Site Driveway Intersection.** Developer shall construct:
  - a. a full-movement stop-controlled two-lane driveway across from the planned Alderwood commercial site driveway approximately 550 feet north of Jenks Road;
  - b. a northbound left turn lane on Wimberly Road with a minimum 50 feet of storage and appropriate deceleration length and taper; and
  - c. a southbound left turn lane on Wimberly Road with a minimum 25 feet of storage and appropriate deceleration length and taper.
4. **Jenks Road/Wimberly Road Intersection.**
  - a. Developer shall dedicate right-of-way in the northwestern quadrant of the intersection sufficient for the future construction of a metal pole traffic signal with signal cabinet and associated equipment.
  - b. Prior to recordation of the Final Plat for the last phase of the development, Developer shall pay a fee in lieu for 50% of the estimated costs to design, acquire easements for, and construct a metal pole span wire traffic signal with pedestrian accommodations. Prior to Final Plat approval for the last phase of the development, Developer shall provide a preliminary signal geometric plan and engineer's estimate to the Town for review and approval.
5. **Jenks Road Widening.** Developer shall dedicate right of way and widen the northern half of Jenks Road for the length of the property's Jenks Road frontage based on a minimum 84-foot back to back curb and gutter 4-lane divided section with a 10-foot Side Path in a 110-foot right-of-way (the "Jenks Road Widening").
6. **Right of Way/Easement Acquisition.** The Road Improvements are intended to be located in existing Jenks Road and Wimberly Road rights of way and in additional right of way to be dedicated along the subject property's road frontage. If any Road Improvements require offsite rights of way, easements, or other property interests, the developer shall be responsible for acquiring all offsite easements and right of way necessary to construct committed transportation improvements. In the event that developer is unable to acquire the aforementioned easements and right of way through good faith efforts, Developer shall request assistance from the Town of Apex. In the event that the Town is unwilling or unable to assist with the acquisitions, Developer shall update engineering plans accordingly and pay a fee in lieu based on the fair market value of the offsite easements and right of way and estimated construction cost of the improvements, based on an engineer's estimate, subject to Town review and approval. Payment of the fee in lieu shall satisfy the requirement to construct the committed transportation improvements.

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#### ENVIRONMENTAL ADVISORY BOARD:

The Apex Environmental Advisory Board (EAB) reviewed this rezoning on February 27, 2025. The zoning conditions suggested by the EAB are listed below along with the applicant's response to each condition.

EAB Suggested Conditions	Applicant's Response
The project shall use full cutoff LED fixtures that have a maximum color temperature of 3000K for all exterior lighting, including, but not limited to, parking lot and building mounted fixtures.	Yes
The project shall install signage adjacent to wooded or natural condition Resource Conservation Area. The signage shall indicate that the area is RCA and is to be preserved in perpetuity and not disturbed.	Yes
To reduce irrigation requirements, the project shall select and plant only warm season grasses.	No
No invasive species shall be permitted. No single species of tree or shrub shall constitute more than 20% of the plant material of its type within a single development site.	Yes
The project shall increase biodiversity within perimeter buffers, common owned open space, and other landscape areas by providing a variety of native and adaptive species for the canopy, understory and shrub levels. A minimum of 75% of the species selected shall be native or a native of North Carolina.	No
The project shall ensure that 75% of the landscaping shall be native species. Landscaping shall be coordinated with and approved by the Planning Department at site or subdivision review.	Yes, reduced from 75% to 70%
No clearing or land disturbance shall be permitted within the riparian buffer, except the minimum necessary to install required sewer infrastructure and SCM outlets. The SCM water storage and treatment area shall not be permitted within the riparian buffer. The sewer shall be designed to minimize impacts to the riparian buffer.	No

The following environmental conditions have been proposed by the applicant:

- The project shall install at least one (1) sign per SCM discouraging the use of fertilizer and to reduce pet waste near SCM drainage areas. The sign shall be installed in locations that are publicly accessible, such as adjacent to, but outside of public property and/or public easement(s), amenity centers, sidewalks, greenways, or side paths.
- At least 70% of plants shall be native species. Landscaping will be coordinated with and approved by the Planning Director at site plan or subdivision review.
- The project shall install a sign adjacent to wooded or natural condition Resource Conservation Area that indicates the area is RCA and to be preserved in perpetuity and not disturbed.
- The project shall install at least two (2) pet waste stations in the project in locations that are publicly accessible, such as adjacent to amenity centers, SCMs, sidewalks, greenways, or side paths.
- No invasive species shall be permitted. No single species of tree or shrub shall constitute more than 20% of the plant material of its type within a single development site.
- The project shall use full cutoff LED fixtures that have a maximum color temperature of 3,000K for all exterior lighting, including, but not limited to, parking lot and building mounted fixtures.

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#### **PARKS, RECREATION, AND CULTURAL RESOURCES ADVISORY COMMISSION:**

Altera Heights PUD #24CZ11 was reviewed at the February 25, 2025, PRCR Advisory Commission meeting. The Commission unanimously recommended a fee in lieu of dedication for a maximum of 300 Multi-Family units. The fee in lieu rate will be set at the time of Town Council action on the Rezoning and run for the life of the project. The total fee-in-lieu (based on the final unit count) will be calculated at Site Plan and Construction Document review and deposited prior to issuance of the first building permit for each building.

#### **PLANNING STAFF RECOMMENDATION:**

Planning staff recommends denial of Rezoning #24CZ11 Altera Heights PUD as proposed.

#### **PLANNING BOARD RECOMMENDATION:**

The Planning Board held a public hearing on May 12, 2025 and unanimously recommended denial of the rezoning.

#### **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 proposed rezoning to Planned Unit Development-Conditional Zoning (PUD-CZ) is not consistent with the Town of Apex 2045 Land Use Map, which designates the subject properties as Office Employment/Commercial Services. The requested high density multi-family use does not conform to the intended land use designation, which is focused on supporting employment-generating uses and sustaining the Town's economic development objectives. Furthermore, the proposed density of 22.14 dwelling units per acre (dua) is much higher than that of the apartments to the south (13.15 dua) and the townhomes in the Alderwood PUD to the east (6.9 dua). The 2045 Land Use Map shows a trend toward lower residential densities as one moves north from the intersection of Wimberly Rd and Jenks Rd.

Although the applicant has proposed 10% income-restricted affordable housing units, this level of commitment does not constitute sufficient public benefit to warrant a change from the adopted land use designation. The Town's Affordable Housing Incentive Zoning Policy does not provide for land use changes of this nature without a substantially higher degree of affordability or other compelling public interest.

In addition, the applicant has declined to commit to constructing an off-site 10-foot side path connection requested by staff. This path would close a critical pedestrian infrastructure gap and is necessary to meet transportation and connectivity goals outlined in the Town's Transportation Plan. The lack of commitment to this improvement further limits the project's ability to align with adopted policies.

The proposed building elevations also do not fully comply with Section 9.3.4 of the Unified Development Ordinance, which requires clearly defined and visible customer entrances. Design revisions have not adequately addressed this requirement.

Based on these factors, the proposed rezoning is not consistent with adopted land use and transportation plans, does not provide sufficient public benefit to justify the requested land use change, and is therefore not reasonable nor in the public interest.

#### **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



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quality architecture; and provide greater efficiency in the layout and provision of roads, utilities, and other infrastructure. The Planned Development (PD) Districts shall not be used as a means of circumventing the Town's adopted land development regulations for routine developments.

#### 1. *Planned Unit Development (PUD-CZ) District*

In approving a Planned Development (PD) Zoning District designation for a PUD-CZ, the Town Council shall find the PUD-CZ district designation and PD Plan for PUD-CZ demonstrates compliance with the following standards:

##### a) *Development parameters*

- (i) The uses proposed to be developed in the PD Plan for PUD-CZ are those uses permitted in Sec. 4.2.2 *Use Table*.
- (ii) The uses proposed in the PD Plan for PUD-CZ can be entirely residential, entirely non-residential, or a mix of residential and non-residential uses, provided a minimum percentage of non-residential land area is included in certain mixed use areas as specified on the 2045 Land Use Map. The location of uses proposed by the PUD-CZ must be shown in the PD Plan with a maximum density for each type of residential use and a maximum square footage for each type of non-residential use.
- (iii) The dimensional standards in Sec. 5.1.3 *Table of Intensity and Dimensional Standards, Planned Development Districts* may be varied in the PD Plan for PUD-CZ. The PUD-CZ shall demonstrate compliance with all other dimensional standards of the UDO, North Carolina Building Code, and North Carolina Fire Code.
- (iv) The development proposed in the PD Plan for PUD-CZ encourages cluster and compact development to the greatest extent possible that is interrelated and linked by pedestrian ways, bikeways and other transportation systems. At a minimum, the PD Plan must show sidewalk improvements as required by the Apex Transportation Plan and the *Town of Apex Standard Specifications and Standard Details*, and greenway improvements as required by the Town of Apex Parks, Recreation, Greenways, and Open Space Plan and the Apex Transportation Plan. In addition, sidewalks shall be provided on both sides of all streets for single-family detached homes.
- (v) The design of development in the PD Plan for PUD-CZ results in land use patterns that promote and expand opportunities for walkability, connectivity, public transportation, and an efficient compact network of streets. Cul-de-sacs shall be avoided unless the design of the subdivision and the existing or proposed street system in the surrounding area indicate that a through street is not essential in the location of the proposed cul-de-sac, or where sensitive environmental areas such as streams, floodplains, and wetlands would be substantially disturbed by making road connections.
- (vi) The development proposed in the PD Plan for PUD-CZ is compatible with the character of surrounding land uses and maintains and enhances the value of surrounding properties.
- (vii) The development proposed in the PD Plan for PUD-CZ has architectural and design standards that are exceptional and provide higher quality than routine developments. All residential uses proposed in a PD Plan for PUD-CZ shall provide architectural elevations representative of the residential structures to be built to ensure the Standards of this Section are met.

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





- intent and purpose of the off-street parking and loading standards.
- c) *RCA*. The PD Plan for PUD-CZ shall demonstrate compliance with Sec. 8.1.2 Resource Conservation Area, except that the percentage of RCA required under Sec. 8.1.2 may be reduced by the Town Council by no more than 10% provided that the PD Plan for PUD-CZ includes one or more of the following:
    - (i) A non-residential component; (ii) An overall density of 7 residential units per acre or more; or (iii) Environmental measures including but not limited to the following:
      - a. The installation of a solar photovoltaic (PV) system on a certain number or percentage of single-family or townhouse lots or on a certain number or percentage of multifamily, mixed-use, or nonresidential buildings. All required solar installation shall be completed or under construction prior to 90% of the building permits being issued for the approved number of lots or buildings. For single-family or townhouse installations, the lots on which these homes are located shall be identified on the Master Subdivision Plat, which may be amended;
      - b. The installation of a geothermal system for a certain number or percentage of units within the development; or
      - c. Energy efficiency standards that exceed minimum Building Code requirements (i.e. SEER rating for HVAC).
  - d) *Landscaping*. The PD Plan for PUD-CZ shall demonstrate compliance with the standards of Sec. 8.2 *Landscaping, Buffering and Screening*, except that variations from these standards may be permitted where it is demonstrated that the proposed landscaping sufficiently buffers uses from each other, ensures compatibility with land uses on surrounding properties, creates attractive streetscapes and parking areas and is consistent with the character of the area. In no case shall a buffer be less than one half of the width required by Sec. 8.2 or 10 feet in width, whichever is greater.
  - e) *Signs*. Signage in the PD Plan for PUD-CZ shall demonstrate compliance with Sec. 8.7 *Signs*, except that the standards can be varied if a master signage plan is submitted for review and approval concurrent with the PD plan and is determined by the Town Council to be suitable for the PUD-CZ and generally consistent with the intent and purpose of the sign standards of the UDO. The master signage plan shall have design standards that are exceptional and provide for higher quality signs than those in routine developments and shall comply with Sec. 8.7.2 *Prohibited Signs*.
  - f) *Public facilities*. The improvements standards and guarantees applicable to the public facilities that will serve the site shall comply with Article 7: *Subdivision* and Article 14: *Parks, Recreation, Greenways, and Open Space*.
    - (i) The PD Plan for PUD-CZ demonstrates a safe and adequate on-site transportation circulation system. The on-site transportation circulation system shall be integrated with the off-site transportation circulation system of the Town. The PD Plan for PUD-CZ shall be consistent with the Apex Transportation Plan and the *Town of Apex Standard Specifications and Standard Details* and show required right-of-way widths and road sections. A Traffic Impact Analysis (TIA) shall be required per Sec. 13.19.
    - (ii) The PD Plan for PUD-CZ demonstrates a safe and adequate on-site system of potable water and wastewater lines that can accommodate the proposed development, and are efficiently integrated into off-site potable water and wastewater public improvement plans. The PD Plan shall include a proposed water and wastewater plan.
    - (iii) Adequate off-site facilities for potable water supply, sewage disposal, solid waste disposal, electrical supply, fire protection and roads shall be planned and programmed for the development proposed in the PD Plan for PUD-CZ, and the development is conveniently

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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.

## STAFF REPORT

### Rezoning #24CZ11 Altera Heights PUD

May 27, 2025 Town Council Meeting



- 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.



*The Park at  
Wimberly*

*The Preserve at  
White Oak Creek*

**Rezoning #24CZ11**

*Sidewinder Ct*

*White Oak Pond Rd*

*Meadowside Ct*

*Wimberly Rd*

*Rambling Creek Rd*

*Sunnybranch Ln*

*Canarywood Ln*

*Bocote St*

*Alderwood*

*Macassar Ln*

*Hutch Ln*

*Jenks Rd*

*Townes at  
Westford*

*Arden at  
Summit  
Pines*

*Fletcherstone Way*

*Brookside Hill Aly*

*Haybeck Ln*

*Riverneck Aly*

*Forge Village Way*





## 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>24CZ11</u>	Submittal Date:	<u></u>
Fee Paid	<u>\$</u>	Check #	<u></u>

## PETITION TO AMEND THE OFFICIAL ZONING DISTRICT MAP

Project Name: Altera Heights  
Address(es): 8108 Jenks Road; 1508 Wimberly Road; 1440 Wimberly Road  
PIN(s) 0722673959; 0722682430; 0722681610

Acreage: 13.55  
Current Zoning: Rural Residential (RR) Proposed Zoning: Planned Unit Development Conditional (PUD-CZ)  
Current 2045 LUM Designation: Office Employment/Commercial Services

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

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

Area classified as mixed use:	Acreage:	<u>N/A</u>
Area proposed as non-residential development:	Acreage:	<u>N/A</u>
Percent of mixed use area proposed as non-residential:	Percent:	<u>N/A</u>

## Applicant Information

Name: Wood Partners c/o Matthew Carpenter  
Address: 301 Fayetteville Street, Suite 1400  
City: Raleigh State: NC Zip: 27601  
Phone: 919-835-4032 E-mail: MatthewCarpenter@parkerpoe.com

## Owner Information

Name: See attached  
Address:   
City:  State:  Zip:   
Phone:  E-mail:

## Agent Information

Name: Matthew Carpenter  
Address: 301 Fayetteville Street, Suite 1400  
City: Raleigh State: NC Zip: 27601  
Phone: 919-835-4032 E-mail: MatthewCarpenter@parkerpoe.com  
Other contacts: Bob Zumwalt; BGE, Inc.; bzumwalt@bgeinc.com  
Ryan Fisher; BGE, Inc.; rfisher@bgeinc.com  
Kevin Dean; Kimley-Horn; kevin.dean@kimley-horn.com

## PLANNED UNIT DEVELOPMENT APPLICATION

Application #: 24CZ11

Submittal Date: \_\_\_\_\_

### PLANNED UNIT DEVELOPMENT DISTRICT STANDARDS:

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

### LEGISLATIVE CONSIDERATIONS - CONDITIONAL ZONING

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

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

Although the proposed use is inconsistent with the office/commercial services LUM designation, it will provide attainable housing units, and AMI restricted affordable housing units, in furtherance of Goal 1.2(d) of the Affordable Housing Incentive Zoning Policy and Procedures Manual to create "mixed-income communities, with affordable housing units integrated within residential and mixed-use market rate developments." Additionally, as discussed in the PUD Text, the office market has not recovered since COVID-19, and the property is not suitable for commercial uses because of the lack of access and frontage on Jenks Road.

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

The proposed development will add attainable housing in an area characterized by a variety of housing types and in close proximity to existing and planned commercial uses on US-64. There are no existing residential uses adjacent to the property. Adjacent to the west is the Cary-Apex water treatment plant and to the south an undeveloped tract owned by the Town of Apex and planned for utilities. Accordingly, the proposed density will not have a negative effect on adjacent properties.

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

The proposed PUD will comply with any applicable standards in UDO Section 4.4.

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.

Adjacent to the west is the Cary-Apex water treatment plant and to the south an undeveloped tract owned by the Town of Apex and planned for utilities. Accordingly, the proposed density will not have a negative effect on adjacent properties. Buffers have been located along Jenks Road and Wimberly Road to help buffer the project from the street. Trash, parking and loading, and odors will be screened from adjacent uses as required by the UDO and as set forth in the PUD.

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

The property is not within a designated current or future 100 year floodplain but is located in the Primary Watershed Protection Overlay District. This PUD will comply with all built upon area, vegetated conveyances, structural SCMS and riparian stream buffer requirements of UDO Section 6.1.7. The PUD will include a minimum 25% RCA.

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.

The proposed development will not have adverse impacts on public facilities and services. It will include road improvements as recommended by the TIA. At the time of this application, the property is districted to Salem Year-Round Elementary, Salem Year-Round Middle, and Green Level High School, none of which are capped. The project will pay the required parks and rec fee in lieu of dedication, subject to review and recommendation by the Parks and Rec Board.

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.

The proposed use will not have adverse effects on the health, safety, or welfare of residents of the Town or its ETJ. Rather, the project will offer attainable housing and AMI restricted affordable units in a location convenient to goods and services.

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

Adjacent to the west is the Cary-Apex water treatment plant and to the south an undeveloped tract owned by the Town of Apex and planned for utilities. Accordingly, the proposed density will not have a negative effect on adjacent properties. Buffers have been located along Jenks Road and Wimberly Road to help buffer the project from the street. Trash, parking and loading, and odors will be screened from adjacent uses as required by the UDO and as set forth in the PUD.



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.

Traffic impacts will be mitigated by transportation infrastructure improvements recommended by the TIA. Additionally, the project will include perimeter buffer as shown on the Concept Plan.

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

The PUD will be governed by the regulations contained in the attached PUD Text and Concept Plan. The PUD will comply with all other regulations of the UDO to the extent they do not conflict with the PUD regulations.

## DEVELOPMENT NAME APPROVAL APPLICATION

Application #: 24CZ11

Submittal Date: \_\_\_\_\_

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 #: 24CZ11

Submittal Date: \_\_\_\_\_

**Proposed Subdivision/Development Information**

Description of location: Northwest corner of the intersection of Jenks Road and Wimberly Road

Nearest intersecting roads: Jenks Rd/Wimberly Rd

Wake County PIN(s): 0722673959; 0722682430; 0722681610

Township: White Oak

**Contact Information (as appropriate)**

Contact person: Matthew Carpenter

Phone number: 919-835-4032

Fax number: N/A

Address: 301 Fayetteville Street, Suite 1400, Raleigh, NC 27601

E-mail address: matthewcarpenter@parkerpoe.com

Owner: See attached

Phone number: \_\_\_\_\_ Fax number: \_\_\_\_\_

Address: \_\_\_\_\_

E-mail address: \_\_\_\_\_

**Proposed Subdivision/Development Name**1<sup>st</sup> Choice: Altera Heights2<sup>nd</sup> Choice (Optional): \_\_\_\_\_**Town of Apex Staff Approval:**\_\_\_\_\_  
Town of Apex Planning Department Staff\_\_\_\_\_  
Date

## TOWN OF APEX UTILITIES OFFER AND AGREEMENT

Application #: 24CZ11

Submittal Date: \_\_\_\_\_

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

WAKE COUNTY, NORTH CAROLINA CUSTOMER SELECTION AGREEMENT

\_\_\_\_\_  
0722673959; 0722682430; 0722681610

\_\_\_\_\_  
(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.

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

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

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

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

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

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

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

ACCEPTED:

CUSTOMER: WP East Acquisitions, LLC \_\_\_\_\_

TOWN OF APEX

BY: \_\_\_\_\_  
Authorized Agent

BY: \_\_\_\_\_  
Authorized Agent

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

## AGENT AUTHORIZATION FORM

Application #: 24CZ11

Submittal Date: \_\_\_\_\_

Terry D. Poole is the owner\* of the property for which the attached application is being submitted:

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

The property address is: 1440 Wimberly Road; PIN 0722681610

The agent for this project is: Matthew Carpenter and Caitlin Shelby

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

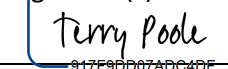
Agent Name: Matthew Carpenter and Caitlin Shelby

Address: 301 Fayetteville Street, Suite 1400, Raleigh, NC 27601

Telephone Number: 919-835-4032

E-Mail Address: MatthewCarpenter@parkerpoe.com

Signature(s) of Owner(s)\*

  
917F9DD07ADC4DF...

Terry D. Poole

\_\_\_\_\_  
Type or print name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Type or print name

\_\_\_\_\_  
Date

Attach additional sheets if there are additional owners.

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

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

**AGENT AUTHORIZATION FORM**Application #: 24CZ11

Submittal Date: \_\_\_\_\_

Danny L. Ottaway and Joan M. Ottaway is the owner\* of the property for which the attached application is being submitted:

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

The property address is: 1508 Wimberly Road; PIN 0722682430

The agent for this project is: Matthew Carpenter and Caitlin Shelby

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

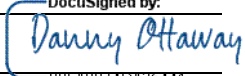
Agent Name: Matthew Carpenter and Caitlin Shelby

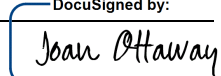
Address: 301 Fayetteville Street, Suite 1400, Raleigh, NC 27601

Telephone Number: 919-835-4032

E-Mail Address: MatthewCarpenter@parkerpoe.com

Signature(s) of Owner(s)\*

Danny L. Ottaway	<small>DocuSigned by:</small>  <small>00FA8074DAA25441...</small>	5/30/2024
	Type or print name	Date

Joan M. Ottaway	<small>DocuSigned by:</small>  <small>2C65C48879144E4...</small>	5/30/2024
	Type or print name	Date

Attach additional sheets if there are additional owners.

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

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

## AGENT AUTHORIZATION FORM

Application #: 24CZ11

Submittal Date: \_\_\_\_\_

Terry Cichocki is the owner\* of the property for which the attached application is being submitted:

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

The property address is: 8108 Jenks Road; PIN 0722673959

The agent for this project is: Matthew Carpenter and Caitlin Shelby

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

Agent Name: Matthew Carpenter and Caitlin Shelby

Address: 301 Fayetteville Street, Suite 1400, Raleigh, NC 27601

Telephone Number: 919-835-4032

E-Mail Address: MatthewCarpenter@parkerpoe.com

Signature(s) of Owner(s)\*

Terry Cichocki

0D84195D9588411...

Terry Cichocki

\_\_\_\_\_  
Type or print name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Type or print name

\_\_\_\_\_  
Date

Attach additional sheets if there are additional owners.

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

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



# AFFIDAVIT OF OWNERSHIP

Application #: 24CZ11

Submittal Date: \_\_\_\_\_

The undersigned, Matthew J. Carpenter (the "Affiant") first being duly sworn, hereby swears or affirms as follows:

1. Affiant is over eighteen (18) years of age and authorized to make this Affidavit. The Affiant is the sole owner, or is the authorized agent of all owners, of the property located at 8108 Junco Rd. and legally described in Exhibit "A" attached hereto and incorporated herein (the "Property").
2. This Affidavit of Ownership is made for the purpose of filing an application for development approval with the Town of Apex.
3. If Affiant is the owner of the Property, Affiant acquired ownership by deed, dated N/A, and recorded in the Wake County Register of Deeds Office on N/A, in Book N/A Page N/A.
4. If Affiant is the authorized agent of the owner(s) of the Property, Affiant possesses documentation indicating the agency relationship granting the Affiant the authority to apply for development approval on behalf of the owner(s).
5. If Affiant is the owner of the Property, from the time Affiant was deeded the Property on N/A, 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 N/A, 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 23 day of May, 2024.

Matthew J. Carpenter (seal)  
Matthew J. Carpenter  
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 Matthew J. Carpenter, 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.



Amy W. Stephenson  
Notary Public  
State of North Carolina  
My Commission Expires: October 2, 2028

**Exhibit A**  
**To**  
**Affidavit of Ownership**  
**Altera Rezoning**

**PIN 0722673959**

Address: 8108 Jenks Road  
Acreage: 9.66 acres  
Owner: Terry Cichocki  
Deed Book/Page: 16193/229  
Owner Address: 8108 Jenks Road, Apex, NC 27523

**PIN 0722682430**

Address: 1508 Wimberly Road  
Acreage: 2.07 acres  
Owner: Danny Ottaway and Joan Ottaway  
Deed Book/Page: 13368/821  
Owner Address: 10401 Chapel Hill Road, Morrisville, NC 27560

**PIN 0722681610**

Address: 1440 Wimberly Road  
Acreage: 1.83 acres  
Owner: Terry Poole  
Deed Book/Page: 12394/1101  
Owner Address: 1440 Wimberly Road, Apex, NC 27523

## Wake County Residential Development Notification

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

Town of Apex staff will enter this information into the online WCPSS form.

Please send any questions about this form to:

[studentassignment-gis-group@wcpss.net](mailto:studentassignment-gis-group@wcpss.net)

Developer Company Information	
Company Name	Wood Partners
Company Phone Number	c/o Matthew Carpenter; 919-835-4032
Developer Representative Name	Matthew Carpenter
Developer Representative Phone Number	919-835-4032
Developer Representative Email	MatthewCarpenter@parkerpoe.com

New Residential Subdivision Information	
Date of Application for Subdivision	Tentative January 1, 2025
City, Town or Wake County Jurisdiction	Town of Apex
Name of Subdivision	Altera Heights
Address of Subdivision (if unknown enter nearest cross streets)	8108 Jenks Road
REID(s)	
PIN(s)	0722673959; 0722682430; 0722681610

Projected Dates Information	
Subdivision Completion Date	2027
Subdivision Projected First Occupancy Date	2027

Lot by Lot Development Information																	
Unit Type	Total # of Units	Senior Living	Studio	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom	Square Foot Range		Price Range		Anticipated Completion Units & Dates					
								Min	Max	Low	High	Year	# Units	Year	# Units	Year	# Units
Single Family																	
Townhomes																	
Condos																	
Apartments				150	125	25		700	1600	unknown	unknown	2027					
Other																	



To: Neighboring Property Owners and Tenants  
From: Matthew J. Carpenter  
Date: May 8, 2024  
  
Re: Notice of Virtual Neighborhood Meeting

You are invited to attend a virtual neighborhood meeting on May 22, 2024 at 6:00 PM to discuss an upcoming application to rezone three parcels of land located 8108 Jenks Road (PIN 07226739), 1440 Wimberly Road (PIN 0722681610), and 1508 Wimberly Road (PIN 0722682430) (collectively, the "Property"). The Property is currently zoned Rural Residential (RR) and is proposed to be rezoned to Planned Unit Development-Conditional Zoning (PUD-CZ) or a similar district that permits multi-family housing.

During the meeting, the applicant will describe the nature of the rezoning request and field any questions from the public. Enclosed are: (1) a vicinity map outlining the location of the parcels; (2) a zoning map of the subject area; (3) a preliminary concept plan; (4) a project contact information sheet; and (5) a common construction issues & who to call information sheet.

The meeting will be held virtually. You can participate online via Zoom or by telephone. To participate in the Zoom online meeting:

Visit:	<a href="https://zoom.us/join">https://zoom.us/join</a>
Enter the following meeting ID:	865 0577 7501
Enter the following password:	987048

To participate by telephone:

Dial:	1 929 205 6099
Enter the following meeting ID:	865 0577 7501
Enter the Participant ID:	#
Enter the Meeting password:	987048

If you have any questions about this rezoning, please contact me at (919) 835-4032 or via email at [matthewcarpenter@parkerpoe.com](mailto:matthewcarpenter@parkerpoe.com).

Sincerely,

A handwritten signature in blue ink, appearing to read 'Matthew Carpenter', written over a horizontal line.

Matthew Carpenter

# 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.

May 8, 2024

Date

Dear Neighbor:

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

See attached Exhibit A

See attached Exhibit A

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. If you are unable to attend, please refer to the Project Contact Information page for ways to contact the applicant. Notified neighbors may request that the applicant provide updates and send plans via email or mail. Once an application has been submitted to the Town, it may be tracked using the [Interactive Development Map](#) or the [Apex Development Report](#) located on the Town of Apex website at <http://www.apexnc.org/180>. Applications for Rezoning must hold a second Neighborhood Meeting in the month prior to the anticipated public hearing date.

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

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

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

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

The applicant is proposing to rezone the property to Planned Unit Development-Conditional Zoning (PUD-CZ)

to facilitate a multi-family development.

Estimated submittal date: June 3, 2024

## MEETING INFORMATION:

Property Owner(s) name(s):

See attached

Applicant(s):

Wood Partners c/o Matthew Carpenter

Contact information (email/phone):

matthewcarpenter@parkerpoe.com; (919) 835-4032

Meeting Address:

Virtual (Zoom) - See attached notice letter

Date/Time of meeting\*\*:

May 22, 2024

Welcome: 6:00 PM

Project Presentation:

between 6:00 PM - 7:00PM

Question & Answer:

between 6:00 PM - 7:00PM

\*\*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>.





8108 Jenks Road; &  
1440/1508 Wimberly Road



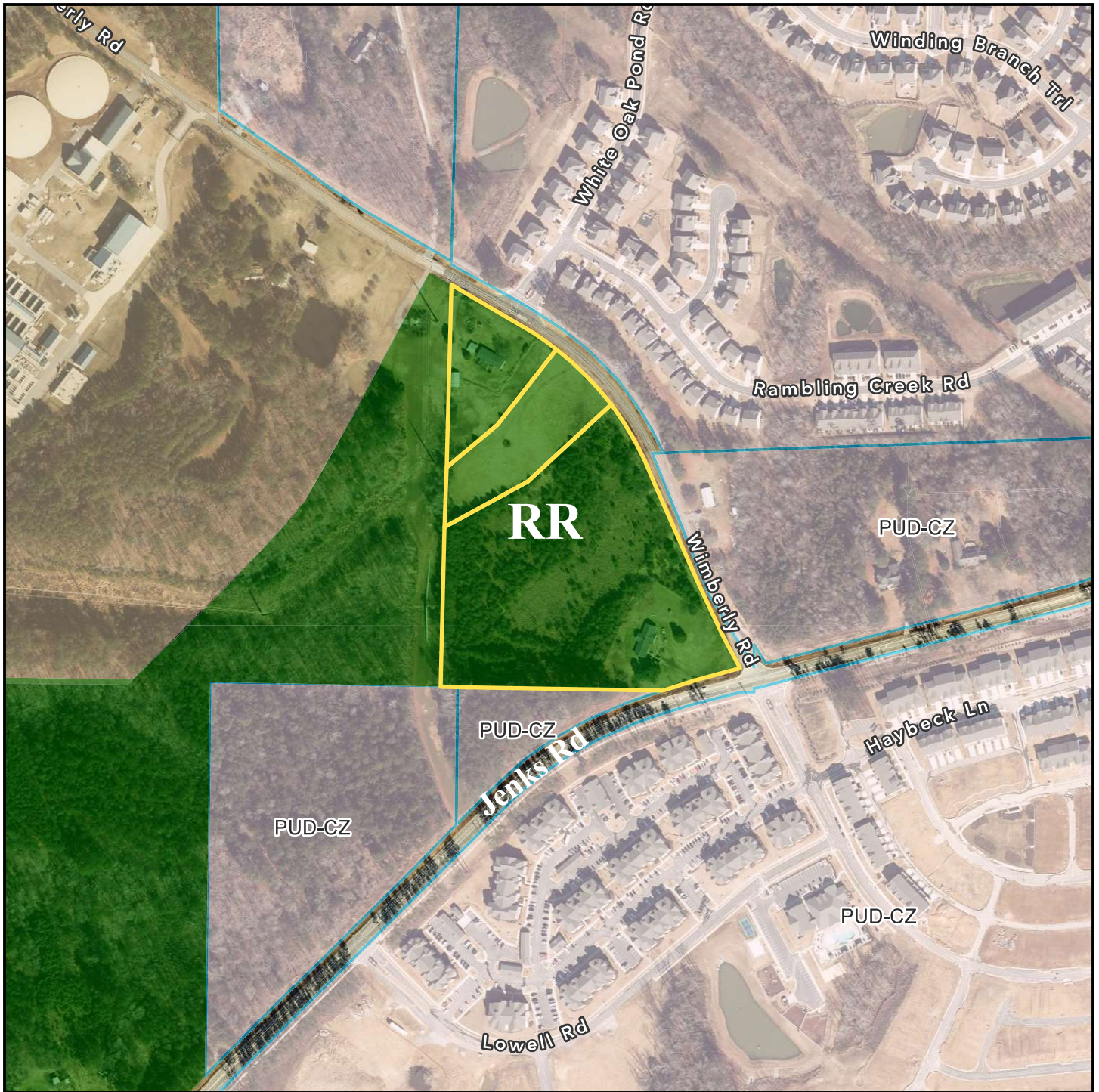
0 50 400 800  
1 inch equals 400 feet

Vicinity Map

**Disclaimer**

*iMaps makes every effort to produce and publish the most current and accurate information possible. However, the maps are produced for information purposes, and are **NOT** surveys. No warranties, expressed or implied, are provided for the data therein, its use, or its interpretation.*

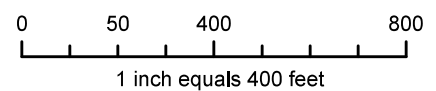




8108 Jenks Road; &  
1440/1508 Wimberly Road

Zoning Map

Current Zoning: RR



**Disclaimer**

iMaps makes every effort to produce and publish the most current and accurate information possible. However, the maps are produced for information purposes, and are **NOT** surveys. No warranties, expressed or implied, are provided for the data therein, its use, or its interpretation.





# 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: Altera Jenks Road Zoning: Rural Residential (RR)

Location: See attached Exhibit A

Property PIN(s): See attached Exhibit A Acreage/Square Feet: 13.56 acres

Property Owner: See attached Exhibit A

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Developer: Wood Partners c/o Matthew Carpenter

Address: 301 Fayetteville Street, Suite1400

City: Raleigh State: NC Zip: 27601

Phone: (919) 835-4032 Fax: n/a Email: matthewcarpenter@parkerpoe.com

Engineer: BGE, Inc. c/o Bob Zumwalt

Address: 5438 Wade Park Blvd, Suite 420

City: Raleigh State: NC Zip: 27607

Phone: (919) 475-7314 Fax: n/a Email: bzumwalt@bgeinc.com

Builder (if known): Wood Partners c/o Matthew Carpenter

Address: 301 Fayetteville Street, Suite1400

City: Raleigh State: NC Zip: 27601

Phone: (919) 835-4032 Fax: n/a Email: matthewcarpenter@parkerpoe.com

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

## Town of Apex Department Contacts

Planning Department Main Number (Provide development name or location to be routed to correct planner)	(919) 249-3426
Parks, Recreation & Cultural Resources Department Angela Reincke, Parks Planning Project Manager	(919) 372-7468
Public Works - Transportation Russell Dalton, Traffic Engineering Manager	(919) 249-3358
Water Resources Department Jessica Bolin, Environmental Engineering Manager (Stormwater, Sedimentation & Erosion Control)	(919) 249-3537
Matt Echols, Utility Engineering Manager (Water & Sewer)	(919) 372-7505
Electric Utilities Division Rodney Smith, Electric Technical Services Manager	(919) 249-3342

**Exhibit A**  
**Ownership Addendum**  
**Altera Jenks Road Rezoning**

**PIN 0722673959**

Address: 8108 Jenks Road

Acreage: 9.66 acres

Owner: Terry Cichocki

Deed Book/Page: 16193/229

Owner Address: 8108 Jenks Road, Apex, NC 27523

**PIN 0722682430**

Address: 1508 Wimberly Road

Acreage: 2.07 acres

Owner: Danny Ottaway and Joan Ottaway

Deed Book/Page: 13368/821

Owner Address: 10401 Chapel Hill Road, Morrisville, NC 27560

**PIN 0722681610**

Address: 1440 Wimberly Road

Acreage: 1.83 acres

Owner: Terry Poole

Deed Book/Page: 12394/1101

Owner Address: 1440 Wimberly Road, Apex, NC 27523



# 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.

<b>Noise &amp; Hours of Construction:</b>	<b>Non-Emergency Police</b>	<b>919-362-8661</b>
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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.

<b>Construction Traffic:</b>	<b>James Misciagno</b>	<b>919-372-7470</b>
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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).

<b>Road Damage &amp; Traffic Control:</b>	<b>Water Resources – Infrastructure Inspections</b>	<b>919-362-8166</b>
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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.

<b>Parking Violations:</b>	<b>Non-Emergency Police</b>	<b>919-362-8661</b>
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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.

<b>Dirt in the Road:</b>	<b>James Misciagno</b>	<b>919-372-7470</b>
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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.

<b>Dirt on Properties or in Streams:</b>	<b>James Misciagno</b> <b>Danny Smith</b>	<b>919-372-7470</b> <b><a href="mailto:Danny.Smith@ncdenr.gov">Danny.Smith@ncdenr.gov</a></b>
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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](mailto:danny.smith@ncdenr.gov)) with the State.

<b>Dust:</b>	<b>James Misciagno</b>	<b>919-372-7470</b>
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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.

<b>Trash:</b>	<b>James Misciagno</b>	<b>919-372-7470</b>
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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.

<b>Temporary Sediment Basins:</b>	<b>James Misciagno</b>	<b>919-372-7470</b>
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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.

<b>Stormwater Control Measures:</b>	<b>Jessica Bolin</b>	<b>919-249-3537</b>
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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 Jessica Bolin at 919-249-3537.

<b>Electric Utility Installation:</b>	<b>Rodney Smith</b>	<b>919-249-3342</b>
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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: Virtual (Zoom) - See attached notice letter  
Date of meeting: May 22, 2024 Time of meeting: 6:00  
Property Owner(s) name(s): See attached  
Applicant(s): Wood Partners c/o Matthew Carpenter

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

	NAME/ORGANIZATION	ADDRESS	PHONE #	EMAIL	SEND PLANS & UPDATES
1.	R. Mills; Woodward Management	12 Piedmont Center, Suite 100, Atlanta, GA	404-467-6300	[REDACTED]n	<input checked="" type="checkbox"/>
2.					<input type="checkbox"/>
3.					<input type="checkbox"/>
4.					<input type="checkbox"/>
5.					<input type="checkbox"/>
6.					<input type="checkbox"/>
7.					<input type="checkbox"/>
8.					<input type="checkbox"/>
9.					<input type="checkbox"/>
10.					<input type="checkbox"/>
11.					<input type="checkbox"/>
12.					<input type="checkbox"/>
13.					<input type="checkbox"/>
14.					<input type="checkbox"/>

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): See attached

Applicant(s): Wood Partners c/o Matthew Carpenter

Contact information (email/phone): \_\_\_\_\_

Meeting Address: Virtual (Zoom) - See attached notice letter

Date of meeting: May 22, 2024 Time of meeting: 6:00

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

Question/Concern #1:  
See attached

\_\_\_\_\_

\_\_\_\_\_

Applicant’s Response:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Question/Concern #2:

\_\_\_\_\_

\_\_\_\_\_

Applicant’s Response:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Question/Concern #3:

\_\_\_\_\_

\_\_\_\_\_

Applicant’s Response:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Question/Concern #4:

\_\_\_\_\_

\_\_\_\_\_

Applicant’s Response:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Altera Heights PUD  
Summary of Neighborhood Meeting**

- I. WELCOME
  - a. Introduction of development team
  - b. Explanation of process. This is a pre-filing neighborhood meeting for a potential rezoning case. The purpose of this meeting is to hear your feedback and consider it as we put together our rezoning application. So, I'll start by providing an overview of the request and then we'll be happy to answer any questions.
- II. PRESENTATION
  - a. Site Overview - location, existing uses adjacent, and surrounding development in progress.
    - i. 13.55 acres at the corner of Jenks and Wimberly Roads.
    - ii. Cary-Apex water plant adjacent to the west.
    - iii. Town owned property adjacent to the south. Town plans to use this property for utilities.
    - iv. Mix of housing types in the area including apartments, townhomes, and single-family homes
  - b. Land Use Map Designation
    - i. LUM designation is office/commercial services.
    - ii. Office market is in poor shape, so unlikely for office to be developed here.
    - iii. Other developers have looked at doing commercial here but commercial uses are hindered by the lack of frontage and access on Jenks Road.
  - c. Sketch Plan
    - i. Purpose of the rezoning is to permit an attainable housing project with middle market rents aimed at police officers, teachers, nurses, etc.
    - ii. Around 300 apartment units across several 4-story buildings.
  - d. Rezoning Process and Timeline
    - i. Working on our application and plan to submit in June. After that, we will have several months of staff review. During that time, staff will provide comments on our application and we'll make changes to address staff comments. Once comments have been addressed, the project will go to Planning Board. Planning Board will hold a public hearing and make a recommendation to Council. After that, Town Council will hold a public hearing and make the final decision on the rezoning.
- III. QUESTION AND ANSWER
  - a. No questions were asked

OWNER	MAILING ADDRESS	
AKOZER, PERI ELA AKOZER, EREN	1615 WIMBERLY RD	APEX NC 27523-6803
ALBERT, DAVID MILTON-ALBERT, VASANTHI	719 WHITE OAK POND RD	APEX NC 27523-8507
ARORA, VISHIT THAREJA, MEDHA	2609 RAMBLING CREEK RD	APEX NC 27523-7806
CARY TOWN OF APEX TOWN OF	PO BOX 8005	CARY NC 27512-8005
CHEN, TSUNG PING TSAI, CHIEH JU	2638 RAMBLING CREEK RD	APEX NC 27523-7806
CHIGURUPATI, POOJA ALURI, VENKAT SUMAN	2617 RAMBLING CREEK RD	APEX NC 27523-7806
CICHOCKI, TERRY	8108 JENKS RD	APEX NC 27523-9423
COLUMBIA INVESTMENTS LLC	PO BOX 1897	APEX NC 27502-1100
CRP/BI JENKS RD APEX OWNER LLC	1001 PENNSYLVANIA AVE NW STE 220	WASHINGTON DC 20004-2525
DAS, DEBRUP TRUSTEE PATRA, PAMELA TRUSTEE	2637 RAMBLING CREEK RD	APEX NC 27523-7806
DRAGUN, BRIAN TRUSTEE DRAGUN, MARCI TRUSTEE	2608 PRINDLE RD	BELMONT CA 94002-1512
DURAISAMY, SARAVANAKUMAR CHANDRAN, DEEPIKA	772 MIRKWOOD AVE	APEX NC 27523-6260
GUHA, SUBHAJIT DASGUPTA, NIKITA	2642 RAMBLING CREEK RD	APEX NC 27523-7806
JADHAV, RAVIPRAKASH JADHAV, ANITA	2641 RAMBLING CREEK RD	APEX NC 27523-7806
JOHNEY, ANUP ANUP, ALLUJA	2624 RAMBLING CREEK RD	APEX NC 27523-7806
KASIVISWANATHAN, MUTHURAMAN MUTHURAMAN TRUSTEE LAKSHMANAN, YEGAMMAI TRUSTEE	2629 RAMBLING CREEK RD	APEX NC 27523-7806
KASULA, NIKHIL KALASHIKA, KEERTHANA	2601 RAMBLING CREEK RD	APEX NC 27523-7806
KASYAP, GOVIND DABIRU DABIRU, VISALI	776 MIRKWOOD AVE	APEX NC 27523-6260
LIU, YONG JUAN	1611 WIMBERLY RD	APEX NC 27523-6803
LOFARO, WINTER NACOLE	728 WHITE OAK POND RD	APEX NC 27523-8507
NELAPATI, MADHUSUDHANARAO CHUNCHU, ASWINI	2605 RAMBLING CREEK RD	APEX NC 27523-7806
OLEN VILLAGES AT WESTFORD CORP	OLEN PROPERTIES CORP	7 CORPORATE PLAZA DR
OTTAWAY, DANNY L OTTAWAY, JOAN M	10401 CHAPEL HILL RD	MORRISVILLE NC 27560-8710
PABBAREDDY, UPENDRASAI BEERAM, SRI KAIVALYA	2633 RAMBLING CREEK RD	APEX NC 27523-7806
PADINHARECHALIL KOYILERIAN, RANJEETH KUMAR SASIDHARAN, NIMMY	2645 RAMBLING CREEK RD	APEX NC 27523-7806
PAMIDI, ABHIRAM GUDUPUDI, RAMYA	780 MIRKWOOD AVE	APEX NC 27523-6260
PATEL, VRAJESH RAMESHBHAI PATEL, MEGHA VRAJESH	724 WHITE OAK POND RD	APEX NC 27523-8507
PENNETSA, DILEEP KUMAR TRUSTEE NADIMPALLI, ARUNA TRUSTEE	2621 RAMBLING CREEK RD	APEX NC 27523-7806
POOLE, TERRY D	1440 WIMBERLY RD	APEX NC 27523-9660
POONIA, KAMALKUMAR KADIAN, MEENAKSHI	2625 RAMBLING CREEK RD	APEX NC 27523-7806
SAHA, SUKANYA GHOSH, SHATADAL	1617 WIMBERLY RD	APEX NC 27523-6803
SATHYAMURTHY, JAYAPRAKASH SHANKAR, SUMA	2649 RAMBLING CREEK RD	APEX NC 27523-7806
SHELL, JOHN SCOTT SHELL, SUSAN FINK	720 WHITE OAK POND RD	APEX NC 27523-8507
SURYAPRAKASAM, HEMACHANDRAN TRUONG-HEMACHANDRAN, NGAN	736 MEADOWSIDE CT	APEX NC 27523-7845
SUTRADHAR, DIPAN SUTRADHAR, KANCHI	2613 RAMBLING CREEK RD	APEX NC 27523-7806
THE PRESERVE AT WHITE OAK CREEK HOMEOWNERS ASSOCIA	15501 WESTON PKWY STE 100	CARY NC 27513-8636
TOWN OF APEX	PO BOX 250	APEX NC 27502-0250
TOWNES AT WESTFORD OWNERS ASSOCIATION INC	15501 WESTON PKWY STE 100	CARY NC 27513-8636
WELLFIELD DEVELOPMENT LLC	4441 SIX FORKS RD STE 106-117	RALEIGH NC 27609-5729
XU, XIN LI, ZHE	2618 RAMBLING CREEK RD	APEX NC 27523-7806
ZHANG, KEVIN HUA	1619 WIMBERLY RD	APEX NC 27523-6803
APEX TOWN OF	PO BOX 250	APEX NC 27502
Current Tenant	13101 Fletcherstone WAY	APEX NC 27523
Current Tenant	13102 Fletcherstone WAY	APEX NC 27523
Current Tenant	13103 Fletcherstone WAY	APEX NC 27523
Current Tenant	13104 Fletcherstone WAY	APEX NC 27523
Current Tenant	13105 Fletcherstone WAY	APEX NC 27523
Current Tenant	13106 Fletcherstone WAY	APEX NC 27523
Current Tenant	13107 Fletcherstone WAY	APEX NC 27523
Current Tenant	13108 Fletcherstone WAY	APEX NC 27523
Current Tenant	13201 Fletcherstone WAY	APEX NC 27523
Current Tenant	13202 Fletcherstone WAY	APEX NC 27523
Current Tenant	13203 Fletcherstone WAY	APEX NC 27523
Current Tenant	13204 Fletcherstone WAY	APEX NC 27523
Current Tenant	13205 Fletcherstone WAY	APEX NC 27523
Current Tenant	13206 Fletcherstone WAY	APEX NC 27523
Current Tenant	13207 Fletcherstone WAY	APEX NC 27523
Current Tenant	13208 Fletcherstone WAY	APEX NC 27523
Current Tenant	13301 Fletcherstone WAY	APEX NC 27523
Current Tenant	13302 Fletcherstone WAY	APEX NC 27523
Current Tenant	13303 Fletcherstone WAY	APEX NC 27523
Current Tenant	13304 Fletcherstone WAY	APEX NC 27523
Current Tenant	13305 Fletcherstone WAY	APEX NC 27523
Current Tenant	13306 Fletcherstone WAY	APEX NC 27523
Current Tenant	13307 Fletcherstone WAY	APEX NC 27523
Current Tenant	13308 Fletcherstone WAY	APEX NC 27523
Current Tenant	15101 Fletcherstone WAY	APEX NC 27523
Current Tenant	15102 Fletcherstone WAY	APEX NC 27523
Current Tenant	15103 Fletcherstone WAY	APEX NC 27523
Current Tenant	15104 Fletcherstone WAY	APEX NC 27523
Current Tenant	15201 Fletcherstone WAY	APEX NC 27523
Current Tenant	15202 Fletcherstone WAY	APEX NC 27523
Current Tenant	15203 Fletcherstone WAY	APEX NC 27523
Current Tenant	15204 Fletcherstone WAY	APEX NC 27523
Current Tenant	15301 Fletcherstone WAY	APEX NC 27523
Current Tenant	15302 Fletcherstone WAY	APEX NC 27523
Current Tenant	15303 Fletcherstone WAY	APEX NC 27523
Current Tenant	15304 Fletcherstone WAY	APEX NC 27523
Current Tenant	16101 Fletcherstone WAY	APEX NC 27523



[illegible]

[illegible]

[illegible]

Current Tenant	11106 Haybeck LN	APEX NC 27523
Current Tenant	11107 Haybeck LN	APEX NC 27523
Current Tenant	11108 Haybeck LN	APEX NC 27523
Current Tenant	11201 Haybeck LN	APEX NC 27523
Current Tenant	11202 Haybeck LN	APEX NC 27523
Current Tenant	11203 Haybeck LN	APEX NC 27523
Current Tenant	11204 Haybeck LN	APEX NC 27523
Current Tenant	11205 Haybeck LN	APEX NC 27523
Current Tenant	11206 Haybeck LN	APEX NC 27523
Current Tenant	11207 Haybeck LN	APEX NC 27523
Current Tenant	11208 Haybeck LN	APEX NC 27523
Current Tenant	11301 Haybeck LN	APEX NC 27523
Current Tenant	11302 Haybeck LN	APEX NC 27523
Current Tenant	11303 Haybeck LN	APEX NC 27523
Current Tenant	11304 Haybeck LN	APEX NC 27523
Current Tenant	11305 Haybeck LN	APEX NC 27523
Current Tenant	11306 Haybeck LN	APEX NC 27523
Current Tenant	11307 Haybeck LN	APEX NC 27523
Current Tenant	11308 Haybeck LN	APEX NC 27523
Current Tenant	1408 Wimberly RD	APEX NC 27523
Current Tenant	1533 Wimberly RD	APEX NC 27523
Current Tenant	1613 Wimberly RD	APEX NC 27523

# 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, Matthew J. Carpenter, do hereby declare as follows:  
Print Name

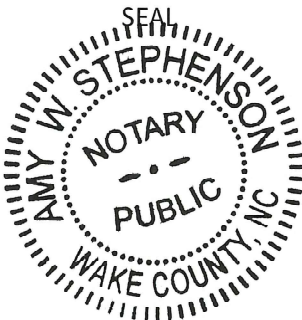
1. I have conducted a Neighborhood Meeting for the proposed Rezoning, Major Site Plan, Minor Site Plan, Residential Master Subdivision Plan, or Special Use Permit in accordance with UDO Sec. 2.2.7.B *Neighborhood Meeting*.
2. The meeting invitations were mailed to the Apex Planning Department, all property owners and tenants abutting and within 300 feet of the subject property and any neighborhood association that represents citizens in the notification area via first class mail a minimum of 14 days in advance of the Neighborhood Meeting.
3. The meeting was conducted at virtually via Zoom (location/address) on 5/22/2024 (date) from 6:00pm (start time) to 7:00pm (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.

5/23/2024  
Date

By: [Signature]

STATE OF NORTH CAROLINA  
COUNTY OF WAKE

Sworn and subscribed before me, Matthew J. Carpenter, a Notary Public for the above State and County, on this the 23rd day of May, 2024.



Amy W. Stephenson  
Notary Public  
Amy W. Stephenson  
Print Name

My Commission Expires: October 2, 2028

# APEX ENVIRONMENTAL ADVISORY BOARD

## Suggested Zoning Conditions



Project Name: Altera Heights

Date: \_\_\_\_\_

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

**The decision to include any of the recommendations below is voluntary by the applicant and the Board does not expect applicants to add all of the suggested conditions.** Planning staff will include all zoning conditions suggested by this Board and will note which conditions have been added by the applicant in the staff reports to the Planning Board and Town Council. Applicants should review this list before meeting with the Board. NOTE: Text in green indicates suggested zoning condition language from Planning Staff. Underlined text indicates text or numbers that may be changed based on the specific project. Additional conditions may be suggested by the EAB at the meeting.

This document is divided into two parts:

- Part I – Residential applies to single-family dwellings and townhome subdivisions, but does not include the parking lots, exterior building lights or exterior architecture.
- Part II – Non-Residential includes condominiums, apartments, and multi-family, common areas in residential developments (e.g. amenity areas, parking lots, exterior building lights, and exterior architecture), commercial, office, and industrial areas. Your development may include elements of each part.

**Please be sure to read and complete the entire document. Please provide a response to each goal and/or sub-goal. Any proposed modifications to the green zoning language should be listed in the section at the end of the document.**

### Part I – Residential

Single-family dwelling and townhome subdivisions (excluding parking lots, exterior building lights and exterior architecture).

STORMWATER AND WATER CONSERVATION – WATER QUALITY (1-5)	YES	NO	N/A
<b>Goal 1. Increase riparian buffer widths from surface waters in environmentally sensitive areas.</b> The project shall increase the riparian buffer width by at least ____ feet above the minimum required by the Unified Development Ordinance. The additional buffer width shall be measured from the top of bank on each side of the stream.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Goal 2. Install signage near environmental sensitive areas in order to reduce pet waste and excess nutrient inputs near Stormwater Control Measure (SCM) drainage areas.</b>			

Environmental Advisory Board – Suggested Zoning Conditions

STORMWATER AND WATER CONSERVATION – WATER QUALITY (1-5)	YES	NO	N/A
The project shall install one (1) sign per SCM to reduce pet waste and prohibit fertilizer, in locations that are publicly accessible, such as adjacent to amenity centers, sidewalks, greenways, or side paths.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Goal 3. Implement Low Impact Development (LID) techniques as defined by the NC Department of Environmental Quality.</b> The project shall install a minimum of _____ Low Impact Development Technique as defined and approved by the NC Department of Environmental Quality. The specific type of LID technique shall be reviewed and approved by the Water Resources Department at site or subdivision plan review.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Goal 4. Increase pervious surface to reduce stormwater runoff and pollutant concentrations.</b> <u>Option 5.1:</u> Install pervious pavements where practicable (e.g. when parking maximums are exceeded). The Department of Public Works & Transportation does not currently support these options within the right-of-way (ROW). These may be done on private sites, but not within the public ROW. a. The project shall utilize pervious pavement when constructing the parking spaces for parking lot-style townhomes. The specific type of pervious pavement system shall be reviewed and approved by the Water Resources Department at site or subdivision plan review. The selected system shall be maintained by the developer and/or owner's association. <p align="center"><b>AND/OR</b></p> b. The project shall utilize pervious pavement when constructing the driveways for residential units. The specific type of pervious pavement system shall be reviewed and approved by the Water Resources Department at site or subdivision plan review. The selected system shall be maintained by the developer and/or owner's association.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Goal 5. Use the stormwater captured in the on-site SCM to irrigate landscaping within the development.</b> At least _____ SCM shall be designed and constructed to provide irrigation to the surrounding landscaping on site. The design shall be reviewed and approved by the Water Resources Department at site plan.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

PLANTING AND LANDSCAPING (6-13)	YES	NO	N/A
<b>Goal 6. Preserve tree canopy and prioritize medium to large, healthy, desirable species.</b> <u>Option 6.1:</u> Preserve existing trees (percentage-based). Numbers shown may be changed based on project. The project shall preserve a minimum of _____% of the existing tree canopy. Where the project abuts adjacent developments, special effort shall be taken to locate the preserved trees adjacent to areas of preserved open space, including but not limited to, RCA, perimeter landscape buffers, riparian buffers, and/or HOA maintained open spaces. <u>Option 6.2:</u> Replace canopy (percentage- or DBH size-based) where there is sufficient space. The project shall replace any large type trees, that measure 18-inches in caliper size or larger, and small type trees, that measure 8-inches in caliper size or larger, that are removed as a part of the development. The ratio of replacement shall be 1 large tree to 1 replacement tree of similar species or mature size. The UDO's required landscaping may be used to satisfy this requirement. To determine the number of trees that must be replaced, a tree survey for the full property shall be provided to the Planning Department. The survey shall be independently verified by a third-party licensed arborist.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Advisory Board – Suggested Zoning Conditions

PLANTING AND LANDSCAPING (6-13)	YES	NO	N/A
<b>Goal 7. Plant trees to improve energy efficiency.</b> <u>Option 7.1:</u> Plant deciduous shade trees on southern side of buildings. To improve energy efficiency, a combination of large and small deciduous shade trees shall be planted on the southern side of any buildings.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Option 7.2:</u> Plant evergreen trees as a windbreak on northern side of buildings. To improve energy efficiency, the project shall plant evergreen trees on the northern side of all buildings to act as a windbreak.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Goal 8. Increase biodiversity.</b> Note: Invasive species are prohibited. Please see the Town's <a href="#">Design and Development Manual</a> for a link to the list of prohibited species. <u>Option 8.1:</u> Plant pollinator-friendly flora. Provide diverse and abundant pollinator and bird food sources (e.g. Snectar, pollen, and berries from blooming plants) that bloom in succession from spring to fall. (Refer to the Apex <a href="#">Design &amp; Development Manual</a> for suggested native species).			
a. The project shall ensure that _____% of the landscaping shall be native species, which shall provide diverse and abundant pollinator and bird food sources. Special attention shall be paid to providing diverse and abundant pollinator and bird food sources, including plants that bloom in succession from spring to fall. Landscaping shall be coordinated with and approved by the Planning Department at site or subdivision review.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Option 8.2:</u> Provide and allow for undisturbed spaces (e.g. leaf piles, unmown fields, fallen trees) for nesting and overwintering for native pollinators and wildlife. In order to support wildlife and pollinators, HOA covenants shall not require that fallen leaves or dormant plants be removed during the winter on areas without turf grass, including individual homes and HOA owned common areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Option 8.3:</u> Retain and protect old ponds if the dam is structurally sound. To preserve and protect existing species, existing ponds shall be preserved if structurally sound.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Option 8.4:</u> Increase the number of native trees and shrubs.			
a. The project shall increase biodiversity within perimeter buffers, common owned open space, and other landscape areas by providing a variety of native and adaptive species for the canopy, understory and shrub levels. A minimum of _____% of the species selected shall be native or a native of North Carolina.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>AND/OR</b>			
b. No single species of native or adaptive vegetation shall constitute more than <u>20%</u> of the plant material of its type within a single development site.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Goal 9. Implement xeriscaping in design, which will use landscaping that requires less irrigation and chemical use. Contact Planning for assistance, if needed.</b>			
a. The project commits to planting only drought tolerant plants, of which _____% of the plants selected shall be native. Landscaping shall be coordinated with and approved by the Planning Department at site or subdivision review.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>OR</b>			
b. To reduce irrigation requirements, the project shall select and plant only warm season grasses.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Goal 10. Promote the benefits of native pollinators.</b> The project shall plant at least _____ native pollinator demonstration garden within the development. The developer shall coordinate with a local or state agency that specializes in the design or certification of such gardens. Informational signage regarding the purpose of the garden and selected vegetation shall be provided. The pollinator garden shall be maintained by the developer or HOA.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Goal 11. Improve soil quality to be amenable for a variety of native and non-invasive plantings.</b>			



Environmental Advisory Board – Suggested Zoning Conditions

PLANTING AND LANDSCAPING (6-13)	YES	NO	N/A
To encourage the establishment of healthy plants, reduce fertilizers, and reduce stormwater runoff, topsoil shall be retained on site and a minimum of 4 inches of topsoil shall be placed on each lot and within disturbed common areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Goal 12. Increase perimeter buffer requirements, especially in transitional areas (nonresidential to residential areas).</b> The UDO requires a ____-foot buffer along the ____perimeter of the property. The applicant shall add ____-foot buffer in that location, which would be an increase of ____-feet above the requirement.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Goal 13. Reduce impacts to resource conservation Areas (RCAs).</b> a. The project shall install signage adjacent to wooded or natural condition Resource Conservation Area. The signage shall indicate that the area is RCA and is to be preserved in perpetuity and not disturbed. <b>OR</b> b. A farm-style split rail fence shall be installed where wooded or natural condition Resource Conservation Area (RCA) abuts individual residential lots.	<input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>	<input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>

SUSTAINABLE BUILDINGS (14)	YES	NO	N/A
<b>Goal 14. Apply for green building certifications, such as LEED, Energy Star, BREEAM, Green Globes, NGBS Green, or GreenGuard.</b> The project shall be designed to meet the requirements for one of the green building certifications listed above. A third-party consultant shall be hired to evaluate the project and certify to the Town of Apex that the project meets the standards for the certification. The applicant shall forward a copy of the certification application to the Town of Apex Planning Department to verify that the application has been submitted.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

WASTE MANAGEMENT (15)	YES	NO	N/A
<b>Goal 15. Encourage the proper disposal of pet waste to reduce environmental impacts.</b> <i>Numbers shown may be changed based on project.</i> The project shall install at least one (1) pet waste station per 25 residential units throughout the community in locations that are publicly accessible, such as adjacent to amenity centers, SCMs, sidewalks, greenways or side paths. If there fewer than 25 homes, at least one (1) pet waste station shall be installed.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CLEAN ENERGY (16-18)	YES	NO	N/A
<b>Goal 16. Install rooftop solar on buildings.</b> a. A solar PV system of at least ____ kW shall be installed on at least ____homes within the development. All solar installation required by this condition shall be completed or under construction prior to 90% of the building permits being issued for the development. The lot(s) on which this home/these homes is/are located shall be identified on the Master Subdivision Plat, which may be amended from time to time. <b>AND/OR</b> b. A solar PV system shall be installed on a minimum of ____model home. All solar installation required by this condition shall be completed or under construction prior to ____% of the building permits being issued for the development. The lot(s) on which this home/these homes is/are located shall be identified on the Master Subdivision Plat, which may be amended from time to time. <b>AND/OR</b>	<input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>	<input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>

Environmental Advisory Board – Suggested Zoning Conditions

CLEAN ENERGY (16-18)	YES	NO	N/A
c. The amenity center for the project shall include a rooftop solar PV system with a capacity of at least ____ kWhs.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Goal 17. Include solar conduit in building design.</b> All homes shall be pre-configured with conduit for a solar energy system.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Goal 18. Encourage clean transportation.</b> The developer shall install at least ____ electric vehicle charging station in amenity centers or common area parking lots.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Part II - Non-Residential**

Includes condominiums, apartments, and multi-family, common areas in residential developments (e.g. amenity areas, parking lots, exterior building lights, and exterior architecture), commercial, office, and industrial areas.

STORMWATER AND WATER CONSERVATION – WATER QUANTITY (1)	YES	NO	N/A
<b>Goal 1. Increase design storm for retention basin in flood-prone areas.</b> The UDO requires that treatment for the first 1-inch of runoff will be provided such that the removal of 85% Total Suspended Solids is achieved. Each option is intended to be used as an improvement to the minimum UDO requirements. If an area is already required to mitigate the 25-year storm, option b should not be selected.			
a. Post-development peak runoff shall not exceed pre-development peak runoff for the 24-hour, 1-year, 10-year, 25-year and <u>100-year storm events</u> in accordance with the Unified Development Ordinance.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>OR</b>			
b. Post development peak runoff shall not exceed pre-development peak runoff for the 24-hour, 1-year, 10-year, and <u>25-year storm events</u> in accordance with the Unified Development Ordinance.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

STORMWATER AND WATER CONSERVATION – WATER QUALITY (2-7)	YES	NO	N/A
<b>Goal 2. Increase riparian buffer widths from surface waters in environmentally sensitive areas.</b> The project shall increase the riparian buffer width by at least ____feet above the minimum required by the Unified Development Ordinance. The additional buffer width shall be measured from the top of bank on each side of the stream.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Goal 3. Limit tree clearing, stormwater control measures (SCM), or infrastructure in either zone of the riparian buffer.</b> No clearing or land disturbance shall be permitted within the riparian buffer, except the minimum necessary to install required sewer infrastructure and SCM outlets. The SCM water storage and treatment area shall not be permitted within the riparian buffer. The sewer shall be designed to minimize impacts to the riparian buffer.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Goal 4. Install signage near environmental sensitive areas in order to reduce pet waste and excess nutrient inputs near Stormwater Control Measure (SCM) drainage areas.</b> The project shall install one (1) sign per SCM to reduce pet waste and prohibit fertilizer, in locations that are publicly accessible, such as adjacent to amenity centers, sidewalks, greenways, or side paths.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Goal 5. Implement low impact development (LID) techniques as defined by the NC Department of Environmental Quality.</b> The project shall install a minimum of ____Low Impact Development Technique as defined and approved by the NC Department of Environmental Quality. The specific	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Environmental Advisory Board – Suggested Zoning Conditions

STORMWATER AND WATER CONSERVATION – WATER QUALITY (2-7)	YES	NO	N/A
type of LID technique shall be reviewed and approved by the Water Resources Department at site or subdivision plan review.			
<p><b>Goal 6. Increase pervious surface to reduce stormwater runoff and pollutant concentrations.</b> The Department of Public Works &amp; Transportation does not currently support these options within the ROW. These may be done on private sites, but not within the public ROW.</p> <p><u>Option 6.1:</u> Install pervious pavements where practicable (e.g. when parking maximums are exceeded).</p> <p>a. The project shall utilize pervious pavement when constructing parking spaces that are in excess of the minimum parking requirement. The specific type of pervious pavement system shall be reviewed and approved by the Water Resources Department at site or subdivision plan review.</p> <p style="text-align: center;"><b>AND/OR</b></p> <p>b. The project shall utilize pervious pavement for all of the parking spaces provided. The specific type of pervious pavement system shall be reviewed and approved by the Water Resources Department at site or subdivision plan review.</p> <p><u>Option 6.2:</u> Modify curb and gutters to provide stormwater infiltration and evaporation, such as swale-only, reverse curbs, Silva cells, or curb cuts with rain gardens.</p> <p>To increase stormwater infiltration and evaporation, the project shall use modified curb and gutter designs to direct driveway runoff to one or more stormwater device, such as, but not limited to, bioswales, Silva cells, or rain gardens. The specific type and design shall be selected at site or subdivision plan review. The proposal shall be reviewed and approved by the Water Resources Department and Department of Public Works and Transportation.</p> <p><u>Option 6.3:</u> Utilize green street design. May be done within the public ROW if it's in the form of a bioretention cell within a landscaped median or large roundabout. Will require approval by the Department of Public Works and Transportation.</p> <p>The project shall design and install one or more bioretention cells within the landscape median or roundabout along the primary road. The specific type and design shall be determined at site or subdivision plan review. The proposal shall be reviewed and approved by the Water Resources Department and Department of Public Works and Transportation.</p>	<input type="checkbox"/>                      	<input checked="" type="checkbox"/>                      	<input type="checkbox"/>                      
<b>Goal 7. Stormwater re-use application:</b> Integrate irrigation from the SCM (wet pond) on site.			
At least one _____SCM shall be designed and constructed to provide irrigation to the surrounding landscaping on site. The design shall be reviewed and approved by the Water Resources Department at site plan.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

PLANTING AND LANDSCAPING (8-15)	YES	NO	N/A
<p><b>Goal 8. Preserve tree canopy and prioritize medium to large, healthy, desirable species.</b></p> <p><i>Option 8.1:</i> Preserve existing trees (percentage-based). Numbers shown may be changed based on project. The EAB's preference is for a minimum of 50%.</p> <p>a. The project shall preserve a minimum of ____% of the existing tree canopy. Preserved areas may include, but are not limited to, RCA, perimeter buffers, riparian buffers and/or HOA maintained open space throughout the neighborhood.</p> <p style="text-align: center;"><b>OR</b></p> <p>b. The project shall preserve a minimum of ____% of the existing tree canopy. Where the project abuts adjacent developments, special effort shall be taken to</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



## Environmental Advisory Board – Suggested Zoning Conditions

PLANTING AND LANDSCAPING (8-15)	YES	NO	N/A
<p>locate the preserved trees adjacent to areas of existing preserved open space, including but not limited to, RCA, perimeter landscape buffers, riparian buffers, and/or HOA maintained open spaces.</p> <p><u>Option 8.2:</u> Replace canopy (percentage- or DBH size-based) where there is sufficient space.</p> <p>The project shall replace any large type trees, that measure 18-inches in caliper size or larger, and small type trees, that measure 8-inches in caliper size or larger, that are removed as a part of the development. The ratio of replacement shall be 1 large tree to 1 replacement tree. The UDO's required landscaping may be used to satisfy this requirement. To determine the number of trees that must be replaced, a tree survey for the full property shall be provided to the Planning Department. The survey shall be independently verified by a third-party licensed arborist.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>Goal 9. Plant trees for improved energy efficiency.</b></p> <p><u>Option 9.1:</u> Plant deciduous shade trees on southern side of buildings.</p> <p>To improve energy efficiency, a combination of large and small deciduous shade trees shall be planted on the southern side of any buildings.</p> <p><u>Option 9.2:</u> Plant evergreen trees as a windbreak on northern side of buildings.</p> <p>To improve energy efficiency, the project shall plant evergreen trees on the northern side of all buildings to act as a windbreak.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>Goal 10. Increase biodiversity.</b></p> <p><u>Option 10.1:</u> Plant pollinator-friendly flora. Provide diverse and abundant pollinator and bird food sources (e.g. nectar, pollen, and berries from blooming plants) that bloom in succession from spring to fall. (Refer to the Apex <a href="#">Design &amp; Development Manual</a> for suggested native species).</p> <p>a. The project shall select and install tree, shrub and perennial species with special attention to providing diverse and abundant pollinator and bird food sources, including plants that bloom in succession from spring to fall.</p> <p style="text-align: center;"><b>OR</b></p> <p>b. The project shall ensure that <u>60</u>% of the landscaping shall be native species. Landscaping shall be coordinated with and approved by the Planning Department at site or subdivision review.</p> <p><u>Option 10.2:</u> Retain and protect old ponds if the dam is structurally sound.</p> <p>To preserve and protect existing species, existing ponds shall be preserved if structurally sound.</p> <p><u>Option 10.3:</u> Increase the number of native tree and shrub species selected.</p> <p>a. The project shall increase biodiversity within perimeter buffers, common owned open space, and other landscape areas by providing a variety of native and adaptive species for the canopy, understory and shrub levels. A minimum of _____% of the species selected shall be native or a native of North Carolina.</p> <p style="text-align: center;"><b>OR</b></p> <p>b. No invasive species shall be permitted. No single species of tree or shrub shall constitute more than 20% of the plant material of its type within a single development site.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>Goal 11. Implement green infrastructure.</b></p> <p><u>Option 11.1:</u> Plant rain gardens.</p> <p>The project shall install one or more rain gardens throughout the site.</p> <p><u>Option 11.2:</u> Install vegetated rooftops.</p> <p>a. The project shall install a vegetated rooftop, aka green roof, on each building.</p> <p style="text-align: center;"><b>OR</b></p> <p>b. The project shall install a vegetated rooftop, aka green roof, on at least _____ft<sup>2</sup> of each building.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Advisory Board – Suggested Zoning Conditions

PLANTING AND LANDSCAPING (8-15)	YES	NO	N/A
<u>Option 11.3:</u> Implement xeriscaping in design.			
a. The project commits to planting ____% drought tolerant native plants. Landscaping shall be coordinated with and approved by the Planning Department at site or subdivision review.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
OR			
b. The project commits to planting only drought tolerant plants. At least ____% of the plants selected shall be native. Landscaping shall be coordinated with and approved by the Planning Department at site or subdivision review.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
OR			
c. To reduce irrigation requirements, the project shall select and plant only warm season grasses.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Goal 12. Install community gardens and native pollinator demonstration gardens.</b> The project shall plant at least ____ native pollinator demonstration garden within the development. The developer shall coordinate with a local or state agency that specializes in the design or certification of such gardens. Informational signage regarding the purpose of the garden and selected vegetation shall be provided.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Goal 13. Improve soil quality to be amenable for a variety of native and non-invasive plantings.</b> To encourage the establishment of healthy plants, reduce fertilizers, and reduce stormwater runoff, topsoil shall be retained on site and a minimum of 4 inches of topsoil shall be placed within disturbed areas.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Goal 14. Increase perimeter buffer requirements, especially in transitional areas (nonresidential to residential areas).</b> The UDO requires a ____-foot buffer along the ____perimeter of the property. The applicant is proposing a ____-foot buffer in that location, which would be an increase of ____-feet above the requirement.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Goal 15. Add information signage or other marking at the boundary of lots when they are adjacent to a wooded or natural condition resource conservation area (RCA) indicating that the area beyond the sign is RCA and is not to be disturbed.</b>			
a. The project shall install signage adjacent to wooded or natural condition Resource Conservation Area. The signage shall indicate that the area is RCA and is to be preserved in perpetuity and not disturbed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OR			
b. A farm-style split rail fence shall be installed where wooded or natural condition Resource Conservation Area (RCA) abuts individual residential lots.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUSTAINABLE BUILDINGS (16)	YES	NO	N/A
<b>Goal 16. Apply for green building certifications, such as LEED, Energy Star, BREEAM, Green Globes, NGBS Green, or GreenGuard.</b> The project shall be designed to meet the requirements for ____green building certification. A third-party consultant shall be hired to evaluate the project and certify to the Town of Apex that the project meets the standards for the certification. The applicant shall forward a copy of the certification application to the Town of Apex Planning Department to verify that the application has been submitted.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

WASTE REDUCTION (17)	YES	NO	N/A
<b>Goal 17. Install pet waste stations in public areas for multi-family, apartments, or condominiums or dog friendly businesses.</b>			

Environmental Advisory Board – Suggested Zoning Conditions

WASTE REDUCTION (17)	YES	NO	N/A
The project shall install at least <u>2</u> pet waste stations throughout the community, in locations that are publicly accessible, such as adjacent to amenity centers, SCMs, sidewalks, greenways or side paths.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CLEAN ENERGY (18-20)	YES	NO	N/A
<b>Goal 18. Install rooftop solar on buildings.</b> a. A solar PV system shall be incorporated into buildings to be constructed on the property. Such PV systems shall have a capacity of not less than 2 kW/1,000 heated square feet of building floor area. <b>OR</b> b. A solar PV system of at least 3.5kW shall be installed on at least _____% of or _____ buildings within the development. All solar installation required by this condition shall be completed or under construction prior to _____% of the building permits being issued for the development. The buildings on which these PV systems are located shall be identified on the Site Plan, which may be amended from time to time. <b>OR</b> c. The amenity center for the project shall include a rooftop solar PV system with a capacity of at least _____ kWhs.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Goal 19. Include solar conduit in building design.</b> The project shall install conduit for solar energy systems for all non-residential buildings. The roof shall also be engineered to support the weight of a future rooftop solar PV system.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Goal 20. Encourage clean transportation.</b> a. The installation of EV charging spaces shall not reduce the width of adjacent sidewalk to less than 5 feet. <b>AND/OR</b> b. EV charging spaces shall be located such that the cords shall not cause a trip hazard. <b>AND/OR</b> c. The developer shall provide 5% of all parking spaces as EV charging spaces.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

LIGHTING EFFICIENCY (21-24)	YES	NO	N/A
<b>Goal 21. Include energy efficient lighting in building design.</b> <u>Option 21.1:</u> Increase the use of LEDs. The exterior lighting for all multi-family and commercial buildings and parking lots will consist entirely of LED fixtures. <u>Option 21.2:</u> Lower maximum foot-candles outside of buildings. On the lighting plan, the average footcandle measurement for parking, building lighting and driveways shall be at least <u>0.5</u> footcandles lower than the UDO requires.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Goal 22. Install timers or light sensors or smart lighting technology.</b> a. The project shall install light timers, motion sensors, or other smart lighting technology for all exterior lighting.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Goal 23. Include International Dark Sky Association compliance standards.</b> The project shall use full cutoff LED fixtures that have a maximum color temperature of 3000K for all exterior lighting, including, but not limited to, parking lot and building mounted fixtures.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



## Environmental Advisory Board – Suggested Zoning Conditions

<b>Applicant Clarification/Additional Language:</b>
<b>Additional Board Recommendations:</b>

# 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.

April 1, 2025

Date

Dear Neighbor:

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

See attached Exhibit A

See attached Exhibit A

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. If you are unable to attend, please refer to the Project Contact Information page for ways to contact the applicant. Notified neighbors may request that the applicant provide updates and send plans via email or mail. Once an application has been submitted to the Town, it may be tracked using the [Interactive Development Map](#) or the [Apex Development Report](#) located on the Town of Apex website at <http://www.apexnc.org/180>. Applications for Rezoning must hold a second Neighborhood Meeting in the month prior to the anticipated public hearing date.

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

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

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

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

The applicant is proposing to rezone the property to Planned Unit Development-Conditional Zoning (PUD-CZ)

to facilitate a multi-family development.

Estimated submittal date: Submitted on June 3, 2024

## MEETING INFORMATION:

Property Owner(s) name(s):

Wood Partners

Applicant(s):

Wood Partners c/o Mark D. Frederick

Contact information (email/phone):

markfrederick@parkerpoe.com; (919) 835-4023

Meeting Address:

Virtual (Zoom) - See attached notice letter

Date/Time of meeting\*\*:

April 15, 2025

Welcome: 5:30 PM

Project Presentation: 5:30PM

Question & Answer: 6:00PM

\*\*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>.



To: Neighboring Property Owners and Tenants  
From: Mark D. Frederick  
Date: April 1, 2025  
  
Re: Notice of Second Virtual Neighborhood Meeting

You are invited to attend a second virtual neighborhood meeting on April 15, 2025 at 5:30 PM to discuss 24CZ11, the requested rezoning of three parcels of land located at 8108 Jenks Road (PIN 07226739), 1440 Wimberly Road (PIN 0722681610), and 1508 Wimberly Road (PIN 0722682430) (collectively, the "Property") from Rural Residential (RR) to Planned Unit Development-Conditional Zoning (PUD-CZ) to facilitate a multi-family development. If approved, the rezoning will change the 2045 Land Use Map ("LUM") designation from Office Employment/Commercial Services to High Density Residential.

During the meeting, the applicant will describe the nature of the rezoning request and proposed change to the LUM, provide updates since the first neighborhood meeting, and field any questions from the public. Enclosed are: (1) a vicinity map outlining the location of the parcels; (2) a zoning map of the subject area; (3) a LUM exhibit; (4) an updated preliminary concept plan; (5) a project contact information sheet; and (6) a common construction issues & who to call information sheet.

The meeting will be held virtually. You can participate online via Zoom or by telephone. To participate in the Zoom online meeting:

Visit:	<a href="https://zoom.us/join">https://zoom.us/join</a>
Enter the following meeting ID:	875 5404 5321
Enter the following password:	804443

To participate by telephone:

Dial:	1 929 205 6099
Enter the following meeting ID:	875 5404 5321
Enter the Participant ID:	#
Enter the Meeting password:	804443

If you have any questions about this rezoning, please contact me at (919) 835-4023 or via email at [markfrederick@parkerpoe.com](mailto:markfrederick@parkerpoe.com).

Sincerely,

Mark D. Frederick





8108 Jenks Road; &  
1440/1508 Wimberly Road



0 50 400 800  
1 inch equals 400 feet

## Vicinity Map

### Disclaimer

iMaps makes every effort to produce and publish the most current and accurate information possible. However, the maps are produced for information purposes, and are **NOT** surveys. No warranties, expressed or implied, are provided for the data therein, its use, or its interpretation.

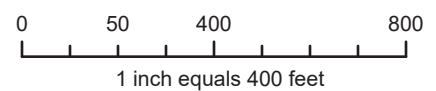




8108 Jenks Road; &  
1440/1508 Wimberly Road

Zoning Map

Current Zoning: RR

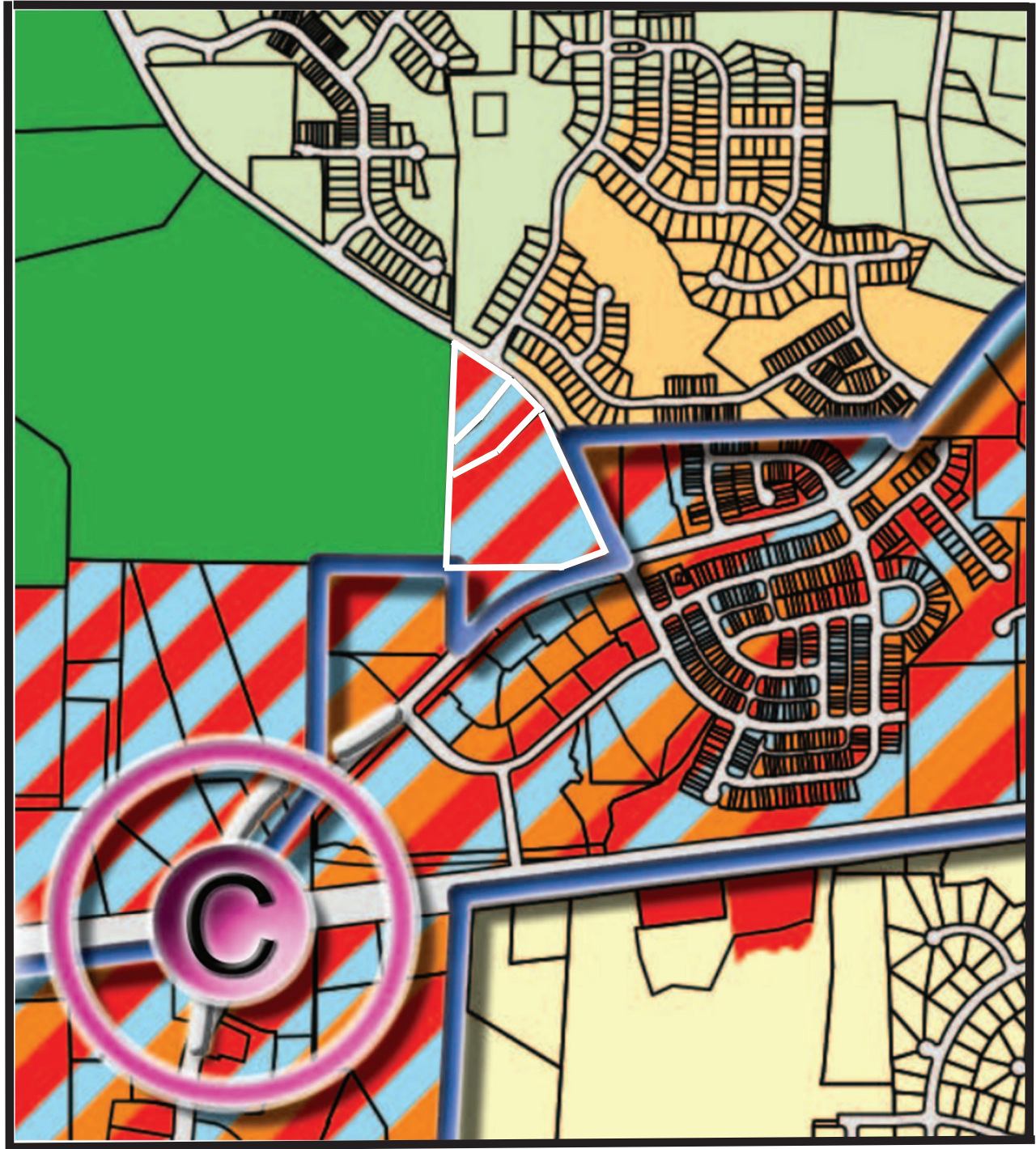


**Disclaimer**

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# 2045 LAND USE MAP EXHIBIT












**8108 Jenks Road; &  
1440/1508 Wimberly Road**

**Current LUM Designation: Office Employment/  
Commercial Services**

**Proposed LUM Designation: High Density Residential**



	PROPERTY LINE
	MULTIFAMILY CONCEPTUAL DEVELOPMENT BLOCK
	RESOURCE CONSERVATION AREA
	ACTIVE RECREATION AREA
	CONCEPTUAL PRIVATE VEHICULAR CIRCULATION
	CONCEPTUAL 6' SIDEWALK
	CONCEPTUAL 10' SIDEWALK
	CONCEPTUAL WATERLINE CONNECTION
	CONCEPTUAL SANITARY SEWER CONNECTION

## PRELIMINARY LAYOUT NOTES

GENERAL NOTES:

- [illegible]

UTILITY NOTES:

- UTILITY NOTES:
1. THIS PROJECT IS REQUESTING FULL TOWN SERVICES, INCLUDING BUT NOT LIMITED TO, WATER, SEWER AND ELECTRICITY.
  2. THE SITE WILL NOT UTILIZE PRIVATE SEWAGE DISPOSAL SYSTEMS.
  3. ALL UTILITY EASEMENTS SHALL BE PROVIDED AS NECESSARY. EXACT LOCATION SHALL BE DETERMINED AT THE TIME OF CONSTRUCTION DRAWINGS.
  4. ALL CONSTRUCTION SHALL COMPLY WITH THE TOWN OF APEX STANDARDS AND SPECIFICATIONS.
  5. ALL WATER AND SEWER MAINS WITHIN PUBLIC EASEMENTS SHALL BE OWNED, OPERATED, AND MAINTAINED BY THE TOWN OF APEX.



FILE NUMBER:

DATE: 06/03/2024

C1-1

WP EAST  
ACQUISITIONS, LLC.

**ALTERA HEIGHTS**  
APEX, NORTH CAROLINA 27523-9423

# PRELIMINARY LAYOUT PLAN

FILE NUMBER:

DATE: 06/03/2024

C1-1

WP EAST  
ACQUISITIONS, LLC.

**ALTERA HEIGHTS**  
APEX, NORTH CAROLINA 27523-9423

# PRELIMINARY LAYOUT PLAN

FILE NUMBER:

DATE: 06/03/2024

C1-1



# 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: Altera Jenks Road Zoning: Rural Residential (RR)

Location: See attached Exhibit A

Property PIN(s): See attached Exhibit A Acreage/Square Feet: 13.56 acres

Property Owner: See attached Exhibit A

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Developer: Wood Partners c/o Mark D. Frederick

Address: 301 Fayetteville Street, Suite1400

City: Raleigh State: NC Zip: 27601

Phone: (919) 835-4023 Fax: n/a Email: markfrederick@parkerpoe.com

Engineer: BGE, Inc. c/o Bob Zumwalt

Address: 5438 Wade Park Blvd, Suite 420

City: Raleigh State: NC Zip: 27607

Phone: (919) 475-7314 Fax: n/a Email: bzumwalt@bgeinc.com

Builder (if known): Wood Partners c/o Mark D. Frederick

Address: 301 Fayetteville Street, Suite1400

City: Raleigh State: NC Zip: 27601

Phone: (919) 835-4023 Fax: n/a Email: markfrederick@parkerpoe.com

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

Town of Apex Department Contacts	
Planning Department Main Number (Provide development name or location to be routed to correct planner)	(919) 249-3426
Parks, Recreation & Cultural Resources Department Angela Reincke, Parks Planning Project Manager	(919) 372-7468
Public Works - Transportation Russell Dalton, Traffic Engineering Manager	(919) 249-3358
Water Resources Department Jessica Bolin, Environmental Engineering Manager (Stormwater, Sedimentation & Erosion Control)	(919) 249-3537
Matt Echols, Utility Engineering Manager (Water & Sewer)	(919) 372-7505
Electric Utilities Division Rodney Smith, Electric Technical Services Manager	(919) 249-3342

**Exhibit A**  
**Ownership Addendum**  
**Altera Jenks Road Rezoning**

**PIN 0722673959**

Address: 8108 Jenks Road

Acreage: 9.66 acres

Owner: Terry Cichocki

Deed Book/Page: 16193/229

Owner Address: 8108 Jenks Road, Apex, NC 27523

**PIN 0722682430**

Address: 1508 Wimberly Road

Acreage: 2.07 acres

Owner: Danny Ottaway and Joan Ottaway

Deed Book/Page: 13368/821

Owner Address: 10401 Chapel Hill Road, Morrisville, NC 27560

**PIN 0722681610**

Address: 1440 Wimberly Road

Acreage: 1.83 acres

Owner: Terry Poole

Deed Book/Page: 12394/1101

Owner Address: 1440 Wimberly Road, Apex, NC 27523

# 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.

<b>Noise &amp; Hours of Construction:</b>	<b>Non-Emergency Police</b>	<b>919-362-8661</b>
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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.

<b>Construction Traffic:</b>	<b>James Misciagno</b>	<b>919-372-7470</b>
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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).

<b>Road Damage &amp; Traffic Control:</b>	<b>Water Resources – Infrastructure Inspections</b>	<b>919-362-8166</b>
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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.

<b>Parking Violations:</b>	<b>Non-Emergency Police</b>	<b>919-362-8661</b>
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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.

<b>Dirt in the Road:</b>	<b>James Misciagno</b>	<b>919-372-7470</b>
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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.

<b>Dirt on Properties or in Streams:</b>	<b>James Misciagno</b> <b>Danny Smith</b>	<b>919-372-7470</b> <b><a href="mailto:Danny.Smith@ncdenr.gov">Danny.Smith@ncdenr.gov</a></b>
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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](mailto:danny.smith@ncdenr.gov)) with the State.

<b>Dust:</b>	<b>James Misciagno</b>	<b>919-372-7470</b>
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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.

<b>Trash:</b>	<b>James Misciagno</b>	<b>919-372-7470</b>
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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.

<b>Temporary Sediment Basins:</b>	<b>James Misciagno</b>	<b>919-372-7470</b>
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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.

<b>Stormwater Control Measures:</b>	<b>Jessica Bolin</b>	<b>919-249-3537</b>
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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 Jessica Bolin at 919-249-3537.

<b>Electric Utility Installation:</b>	<b>Rodney Smith</b>	<b>919-249-3342</b>
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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: \_\_\_\_\_

Date of meeting: \_\_\_\_\_ Time of meeting: \_\_\_\_\_

Property Owner(s) name(s): \_\_\_\_\_

Applicant(s): \_\_\_\_\_

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

	NAME/ORGANIZATION	ADDRESS	PHONE #	EMAIL	SEND PLANS & UPDATES
1.	Lauren B	Not provided	Not provided	la [REDACTED] n	yes
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					

Use additional sheets, if necessary.



# SUMMARY OF DISCUSSION FROM THE NEIGHBORHOOD MEETING

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

Property Owner(s) name(s): See attached

Applicant(s): Wood Partners c/o Mark Frederick

Contact information (email/phone): markfrederick@parkerpoe.com / 919-835-4023

Meeting Address: Virtual (Zoom) - see attached notice letter

Date of meeting: April 15, 2025 Time of meeting: 5:30 PM

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

Question/Concern #1:  
See attached.

Applicant’s Response:

Question/Concern #2:

Applicant’s Response:

Question/Concern #3:

Applicant’s Response:

Question/Concern #4:

Applicant’s Response:

## **Summary of Neighborhood Meeting**

**April 15, 2025**

### **Altera Heights PUD**

#### **I. WELCOME**

- a. Introduction of development team
  - i. Mark Frederick w/ Parker Poe
  - ii. Caitlin Shelby and Emmitt Visconti w/ Wood Partners
  - iii. Bob Zumwalt and Kevin Dean w/ Kimley Horn, civil engineer and transportation engineer
- b. Purpose of the rezoning is to allow an attainable housing project with middle market rents.
- c. Explanation of process. This is a neighborhood meeting for a rezoning request called Altera Heights PUD. We filed this rezoning request in June last year. Some of you may remember that we held a pre-filing neighborhood meeting in May last year. Since that initial neighborhood meeting, we filed our application and have been in staff review. Tonight we will provide some updates to the case and explain the upcoming public meetings.
- d. We have a brief presentation for you tonight and then we will open up the floor for questions. I believe you can enter your questions in the chat function, which you can at any time and we will get them after the presentation. We can also unmute folks to ask their questions.

#### **II. PRESENTATION**

- a. Site Overview - location, existing uses adjacent, and surrounding development in progress.
  - i. 13.55 acres at the corner of Jenks and Wimberly Roads.
  - ii. Cary-Apex water plant adjacent to the west.
  - iii. Town owned property adjacent to the south. Town plans to use this property for utilities.
  - iv. Mix of housing types in the area including apartments, townhomes, and single-family homes
- b. Current Zoning - Rural Residential
- c. 2045 Land Use Map (LUM) Designation
  - i. The LUM is the primary policy document the Town uses to evaluate rezoning request.
  - ii. This property is designated office/commercial services.
  - iii. Office market is in poor shape, so unlikely for office to be developed here
  - iv. Other developers have looked at doing commercial here but commercial uses are hindered by the lack of frontage and access on Jenks Road
- d. PUD Plan
  - i. As part of our PUD rezoning, we have a concept plan that shows approximate locations of proposed uses, buffers, conceptual access locations, etc.
  - ii. Project includes a maximum of 300 apartment units across several buildings with a maximum height of 4 stories
  - iii. Yellow area is the buildable area, so where the buildings and parking will be located.
  - iv. Dark green area is the location of the active area, which will be the clubhouse and pool
  - v. Light green area is resource conservation area

- vi. One update we have recently added to the case is the area along Wimberly Road across from the homes in the Preserve at White Oak Creek will be limited to 3 story buildings as compared to the 4 stories allowed on the rest of the site. The intent here is to create a more compatible transition from this project to the homes across the street.
- vii. The project will also include the standard transportation improvements along the property's frontage, including a 10 ft side path.
- viii. Conceptual access locations are also shown on the plan, but will be finalized at Master Subdivision Plan.
- e. Rezoning Process and Timeline
  - i. We have gone through several months of staff review of the application and the expectation is that this case will have public hearings in May.
  - ii. This includes a public hearing with the Planning Board on May 12<sup>th</sup>, at which the Board will review the case and provide a recommendation to approve or deny based on the case's consistency with town plans.
  - iii. Next, Town Council will hold a public hearing and make the final decision on the rezoning. We are expecting this case to be heard at the May 27<sup>th</sup> meeting.

### III. QUESTION AND ANSWER

- a. Q: Have studies been done to understand if more residential development is needed in this area?
  - i. A: Yes, Wood Partners looks at occupancy rates in the area to understand whether there is demand for additional residential development before moving forward with projects.
- b. Q: Will this project include commitments to affordable housing and will those commitments be enforceable?
  - i. A: Yes, this case includes a zoning condition that requires a certain percentage of the residential units to be affordable to households earning a certain percentage of the area median income. The zoning condition will become a legally binding requirement if this rezoning is approved.
- c. Q: Will a transition or buffer be provided between this project and the adjacent single family homes?
  - i. A: Yes, a landscaped buffer along Wimberly Road is proposed. In addition, building height is limited to 3 stories along Wimberly Road in order to provide a gradual transition from the single family homes to the 4 story buildings on the rest of this site.
- d. Q: Will there be preserved areas on the site and are there any requirements for landscaping on the property?
  - i. A: Yes, a certain percentage of the property will be dedicated as resource conservation area. For this property, it is the area along the stream in the southwest portion of the site. As for landscaping, zoning conditions require a minimum of 70% of plants to be native species, and no invasive species are permitted.
- e. Q: Does this project have a governing document with all of the development standards?
  - i. A: Yes. A PUD rezoning includes a narrative document with development standards.

OWNER	MAILING ADDRESS	
AKOZER, PERI ELA AKOZER, EREN	1615 WIMBERLY RD	APEX NC 27523-6803
ALBERT, DAVID MILTON-ALBERT, VASANTHI	719 WHITE OAK POND RD	APEX NC 27523-8507
ARORA, VISHIT THAREJA, MEDHA	2609 RAMBLING CREEK RD	APEX NC 27523-7806
CARY TOWN OF APEX TOWN OF	REAL ESTATE DEPT TOWN OF CARY	PO BOX 8005
CHEN, TSUNG PAIG TSAI, CHIEH JU	2638 RAMBLING CREEK RD	APEX NC 27523-7806
CHIGURUPATI, POOJA ALURI, VENKAT SUMAN	2617 RAMBLING CREEK RD	APEX NC 27523-7806
CICHOCKI, TERRY	8108 JENKS RD	APEX NC 27523-9423
COLUMBIA INVESTMENTS LLC	PO BOX 1897	APEX NC 27502-1100
CRP/BI JENKS RD APEX OWNER LLC	1001 PENNSYLVANIA AVE NW STE 220	WASHINGTON DC 20004-2525
DJ 1300 HOLDINGS LLC	1300 WIMBERLY RD	APEX NC 27523
DRAGUN, BRIAN TRUSTEE DRAGUN, MARCI TRUSTEE	2608 FRINDLE RD	BELMONT CA 94002-1512
DURAISAMY, SARAVANAKUMAR CHANDRAN, DEEPIKA	772 MIRKWOOD AVE	APEX NC 27523-6260
GUHA, SUBHAJIT DASGUPTA, NIKITA	2642 RAMBLING CREEK RD	APEX NC 27523-7806
JADHAV, RAVIPRAKASH JADHAV, ANITA	2641 RAMBLING CREEK RD	APEX NC 27523-7806
JOHNEY, ANUP ANUP, ALLIJA	2624 RAMBLING CREEK RD	APEX NC 27523-7806
KASIVISWANATHAN, MUTHURAMAN MUTHURAMAN TRUSTEE LAKSHMANAN, YEGAMMAI TRUSTEE	2629 RAMBLING CREEK RD	APEX NC 27523-7806
KASULA, NIKHIL KALASHIKA, KEERTHANA	2601 RAMBLING CREEK RD	APEX NC 27523-7806
KASYAP, GOVIND DABIRU DABIRU, VISALI	776 MIRKWOOD AVE	APEX NC 27523-6260
LIU, YONG JUAN	1611 WIMBERLY RD	APEX NC 27523-6803
LOFARO, WINTER NACOLE	728 WHITE OAK POND RD	APEX NC 27523-8507
NELAPATI, MADHUSUDHANARAO CHUNCHU, ASWINI	2605 RAMBLING CREEK RD	APEX NC 27523-7806
OLEN VILLAGES AT WESTFORD CORP	OLEN PROPERTIES CORP	7 CORPORATE PLAZA DR
PABBAREDDY, UPENDRASAI BEERAM, SRI KAIVALYA	2633 RAMBLING CREEK RD	APEX NC 27523-7806
PADINHARECHALIL, KOYLERIAN, RANJEETH KUMAR SASIDHARAN, NIMMY	2645 RAMBLING CREEK RD	APEX NC 27523-7806
PAMIDI, ABHIRAM GUDUPUDI, RAMYA	780 MIRKWOOD AVE	APEX NC 27523-6260
PATEL, VRAJESH RAMESHBHAI PATEL, MEGHA VRAJESH	724 WHITE OAK POND RD	APEX NC 27523-8507
PATRA, PAMELA	2637 RAMBLING CREEK RD	APEX NC 27523-7806
PENIMETSA, DILEEP KUMAR TRUSTEE NADIMPALLI, ARUNA TRUSTEE	2621 RAMBLING CREEK RD	APEX NC 27523-7806
POOLE, TERRY D	1440 WIMBERLY RD	APEX NC 27523-9660
POONIA, KAMALKUMAR KADIAN, MEENAKSHI	2625 RAMBLING CREEK RD	APEX NC 27523-7806
SAHA, SUKANYA GHOSH, SHATADAL	1617 WIMBERLY RD	APEX NC 27523-6803
SATHYAMURTHY, JAYAPRAKASH SHANKAR, SUMA	2649 RAMBLING CREEK RD	APEX NC 27523-7806
SHELL, JOHN SCOTT SHELL, SUSAN FINK	720 WHITE OAK POND RD	APEX NC 27523-8507
SURYAPRAKASAM, HEMACHANDRAN TRUONG-HEMACHANDRAN, NGAN	736 MEADOWSIDE CT	APEX NC 27523-7845
SUTRADHAR, DIPAN SUTRADHAR, KANCHI	2613 RAMBLING CREEK RD	APEX NC 27523-7806
THE PRESERVE AT WHITE OAK CREEK HOMEOWNERS ASSOCIA	15501 WESTON PKWY STE 100	CARY NC 27513-8636
TOWN OF APEX	PO BOX 250	APEX NC 27502-0250
TOWNES AT WESTFORD OWNERS ASSOCIATION INC	15501 WESTON PKWY STE 100	CARY NC 27513-8636
WELLFIELD DEVELOPMENT LLC	4441 SIX FORKS RD STE 106-117	RALEIGH NC 27609-5729
XU, XIN LI, ZHE	2618 RAMBLING CREEK RD	APEX NC 27523-7806
ZHANG, KEVIN HUA	1619 WIMBERLY RD	APEX NC 27523-6803
Current Tenant	13101 Fletcherstone WAY	APEX NC 27523
Current Tenant	13102 Fletcherstone WAY	APEX NC 27523
Current Tenant	13103 Fletcherstone WAY	APEX NC 27523
Current Tenant	13104 Fletcherstone WAY	APEX NC 27523
Current Tenant	13105 Fletcherstone WAY	APEX NC 27523
Current Tenant	13106 Fletcherstone WAY	APEX NC 27523
Current Tenant	13107 Fletcherstone WAY	APEX NC 27523
Current Tenant	13108 Fletcherstone WAY	APEX NC 27523
Current Tenant	13201 Fletcherstone WAY	APEX NC 27523
Current Tenant	13202 Fletcherstone WAY	APEX NC 27523
Current Tenant	13203 Fletcherstone WAY	APEX NC 27523
Current Tenant	13204 Fletcherstone WAY	APEX NC 27523
Current Tenant	13205 Fletcherstone WAY	APEX NC 27523
Current Tenant	13206 Fletcherstone WAY	APEX NC 27523
Current Tenant	13207 Fletcherstone WAY	APEX NC 27523
Current Tenant	13208 Fletcherstone WAY	APEX NC 27523
Current Tenant	13301 Fletcherstone WAY	APEX NC 27523
Current Tenant	13302 Fletcherstone WAY	APEX NC 27523
Current Tenant	13303 Fletcherstone WAY	APEX NC 27523
Current Tenant	13304 Fletcherstone WAY	APEX NC 27523
Current Tenant	13305 Fletcherstone WAY	APEX NC 27523
Current Tenant	13306 Fletcherstone WAY	APEX NC 27523
Current Tenant	13307 Fletcherstone WAY	APEX NC 27523
Current Tenant	13308 Fletcherstone WAY	APEX NC 27523
Current Tenant	15101 Fletcherstone WAY	APEX NC 27523
Current Tenant	15102 Fletcherstone WAY	APEX NC 27523
Current Tenant	15103 Fletcherstone WAY	APEX NC 27523
Current Tenant	15104 Fletcherstone WAY	APEX NC 27523
Current Tenant	15201 Fletcherstone WAY	APEX NC 27523
Current Tenant	15202 Fletcherstone WAY	APEX NC 27523
Current Tenant	15203 Fletcherstone WAY	APEX NC 27523
Current Tenant	15204 Fletcherstone WAY	APEX NC 27523
Current Tenant	15301 Fletcherstone WAY	APEX NC 27523
Current Tenant	15302 Fletcherstone WAY	APEX NC 27523
Current Tenant	15303 Fletcherstone WAY	APEX NC 27523
Current Tenant	15304 Fletcherstone WAY	APEX NC 27523
Current Tenant	16101 Fletcherstone WAY	APEX NC 27523
Current Tenant	16102 Fletcherstone WAY	APEX NC 27523
Current Tenant	16103 Fletcherstone WAY	APEX NC 27523
Current Tenant	16104 Fletcherstone WAY	APEX NC 27523
Current Tenant	16201 Fletcherstone WAY	APEX NC 27523
Current Tenant	16202 Fletcherstone WAY	APEX NC 27523
Current Tenant	16203 Fletcherstone WAY	APEX NC 27523
Current Tenant	16204 Fletcherstone WAY	APEX NC 27523
Current Tenant	16301 Fletcherstone WAY	APEX NC 27523
Current Tenant	16302 Fletcherstone WAY	APEX NC 27523
Current Tenant	16303 Fletcherstone WAY	APEX NC 27523
Current Tenant	16304 Fletcherstone WAY	APEX NC 27523
Current Tenant	18101 Fletcherstone WAY	APEX NC 27523
Current Tenant	18102 Fletcherstone WAY	APEX NC 27523
Current Tenant	18103 Fletcherstone WAY	APEX NC 27523
Current Tenant	18104 Fletcherstone WAY	APEX NC 27523
Current Tenant	18105 Fletcherstone WAY	APEX NC 27523
Current Tenant	18106 Fletcherstone WAY	APEX NC 27523
Current Tenant	18107 Fletcherstone WAY	APEX NC 27523
Current Tenant	18108 Fletcherstone WAY	APEX NC 27523
Current Tenant	18201 Fletcherstone WAY	APEX NC 27523
Current Tenant	18202 Fletcherstone WAY	APEX NC 27523
Current Tenant	18203 Fletcherstone WAY	APEX NC 27523
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Current Tenant	18307 Fletcherstone WAY	APEX NC 27523
Current Tenant	18308 Fletcherstone WAY	APEX NC 27523
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Current Tenant	20103 Fletcherstone WAY	APEX NC 27523
Current Tenant	20104 Fletcherstone WAY	APEX NC 27523
Current Tenant	20105 Fletcherstone WAY	APEX NC 27523
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Current Tenant	20201 Fletcherstone WAY	APEX NC 27523
Current Tenant	20202 Fletcherstone WAY	APEX NC 27523
Current Tenant	20203 Fletcherstone WAY	APEX NC 27523
Current Tenant	20204 Fletcherstone WAY	APEX NC 27523
Current Tenant	20205 Fletcherstone WAY	APEX NC 27523
Current Tenant	20206 Fletcherstone WAY	APEX NC 27523
Current Tenant	20207 Fletcherstone WAY	APEX NC 27523
Current Tenant	20208 Fletcherstone WAY	APEX NC 27523
Current Tenant	20301 Fletcherstone WAY	APEX NC 27523
Current Tenant	20302 Fletcherstone WAY	APEX NC 27523
Current Tenant	20303 Fletcherstone WAY	APEX NC 27523
Current Tenant	20304 Fletcherstone WAY	APEX NC 27523
Current Tenant	20305 Fletcherstone WAY	APEX NC 27523
Current Tenant	20306 Fletcherstone WAY	APEX NC 27523
Current Tenant	20307 Fletcherstone WAY	APEX NC 27523
Current Tenant	20308 Fletcherstone WAY	APEX NC 27523
Current Tenant	1101 Haybeck LN	APEX NC 27523
Current Tenant	1102 Haybeck LN	APEX NC 27523
Current Tenant	1103 Haybeck LN	APEX NC 27523
Current Tenant	1104 Haybeck LN	APEX NC 27523

CARY NC 27512-8005

NEWPORT BEACH CA 92660-7904



[illegible]

Current Tenant	6107 Haybeck LN	APEX NC 27523
Current Tenant	6108 Haybeck LN	APEX NC 27523
Current Tenant	6201 Haybeck LN	APEX NC 27523
Current Tenant	6202 Haybeck LN	APEX NC 27523
Current Tenant	6203 Haybeck LN	APEX NC 27523
Current Tenant	6204 Haybeck LN	APEX NC 27523
Current Tenant	6205 Haybeck LN	APEX NC 27523
Current Tenant	6206 Haybeck LN	APEX NC 27523
Current Tenant	6207 Haybeck LN	APEX NC 27523
Current Tenant	6208 Haybeck LN	APEX NC 27523
Current Tenant	6301 Haybeck LN	APEX NC 27523
Current Tenant	6302 Haybeck LN	APEX NC 27523
Current Tenant	6303 Haybeck LN	APEX NC 27523
Current Tenant	6304 Haybeck LN	APEX NC 27523
Current Tenant	6305 Haybeck LN	APEX NC 27523
Current Tenant	6306 Haybeck LN	APEX NC 27523
Current Tenant	6307 Haybeck LN	APEX NC 27523
Current Tenant	6308 Haybeck LN	APEX NC 27523
Current Tenant	7101 Haybeck LN	APEX NC 27523
Current Tenant	7102 Haybeck LN	APEX NC 27523
Current Tenant	7103 Haybeck LN	APEX NC 27523
Current Tenant	7104 Haybeck LN	APEX NC 27523
Current Tenant	7105 Haybeck LN	APEX NC 27523
Current Tenant	7106 Haybeck LN	APEX NC 27523
Current Tenant	7107 Haybeck LN	APEX NC 27523
Current Tenant	7108 Haybeck LN	APEX NC 27523
Current Tenant	7201 Haybeck LN	APEX NC 27523
Current Tenant	7202 Haybeck LN	APEX NC 27523
Current Tenant	7203 Haybeck LN	APEX NC 27523
Current Tenant	7204 Haybeck LN	APEX NC 27523
Current Tenant	7205 Haybeck LN	APEX NC 27523
Current Tenant	7206 Haybeck LN	APEX NC 27523
Current Tenant	7207 Haybeck LN	APEX NC 27523
Current Tenant	7208 Haybeck LN	APEX NC 27523
Current Tenant	7301 Haybeck LN	APEX NC 27523
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Current Tenant	7304 Haybeck LN	APEX NC 27523
Current Tenant	7305 Haybeck LN	APEX NC 27523
Current Tenant	7306 Haybeck LN	APEX NC 27523
Current Tenant	7307 Haybeck LN	APEX NC 27523
Current Tenant	7308 Haybeck LN	APEX NC 27523
Current Tenant	9101 Haybeck LN	APEX NC 27523
Current Tenant	9102 Haybeck LN	APEX NC 27523
Current Tenant	9103 Haybeck LN	APEX NC 27523
Current Tenant	9104 Haybeck LN	APEX NC 27523
Current Tenant	9201 Haybeck LN	APEX NC 27523
Current Tenant	9202 Haybeck LN	APEX NC 27523
Current Tenant	9203 Haybeck LN	APEX NC 27523
Current Tenant	9204 Haybeck LN	APEX NC 27523
Current Tenant	9301 Haybeck LN	APEX NC 27523
Current Tenant	9302 Haybeck LN	APEX NC 27523
Current Tenant	9303 Haybeck LN	APEX NC 27523
Current Tenant	9304 Haybeck LN	APEX NC 27523
Current Tenant	1408 Wimberly RD	APEX NC 27523
Current Tenant	1533 Wimberly RD	APEX NC 27523
Current Tenant	1613 Wimberly RD	APEX NC 27523

# 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, Mark Frederick, do hereby declare as follows:

Print Name

1. I have conducted a Neighborhood Meeting for the proposed Rezoning, Major Site Plan, Minor Site Plan, Residential Master Subdivision Plan, or Special Use Permit in accordance with UDO Sec. 2.2.7.B *Neighborhood Meeting*.
2. The meeting invitations were mailed to the Apex Planning Department, all property owners and tenants abutting and within 300 feet of the subject property and any neighborhood association that represents citizens in the notification area via first class mail a minimum of 14 days in advance of the Neighborhood Meeting.
3. The meeting was conducted at virtual via Zoom (location/address) on 4/15/25 (date) from 5:30 (start time) to 6:30 (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.

4/16/25

Date

By: [Signature]

STATE OF NORTH CAROLINA  
COUNTY OF WAKE

Sworn and subscribed before me, Mark Frederick, a Notary Public for the above State and County, on this the 16th day of April, 2025.



Amy W. Stephenson  
Notary Public  
Amy W. Stephenson  
Print Name

My Commission Expires: October 2, 2028



## ALTERA HEIGHTS

Planned Unit Development

Apex, North Carolina

### **Submittal Dates**

First Submittal: June 3, 2024

Second Submittal: August 2, 2024

Third Submittal: February 7, 2024

Fourth Submittal: April 4, 2025

Fifth Submittal: April 23, 2025

### **Developer**

Wood Partners

1414 Raleigh Road, Suite 429

Chapel Hill, NC 27517

### **Civil Engineer**

BGE, Inc.

5438 Wade Park Blvd, Suite 420

Raleigh, NC 27607

### **Land Use Attorney**

Matthew J. Carpenter

Parker Poe Adams & Bernstein LLP

301 Fayetteville Street, Suite 1400

Raleigh, NC 27601



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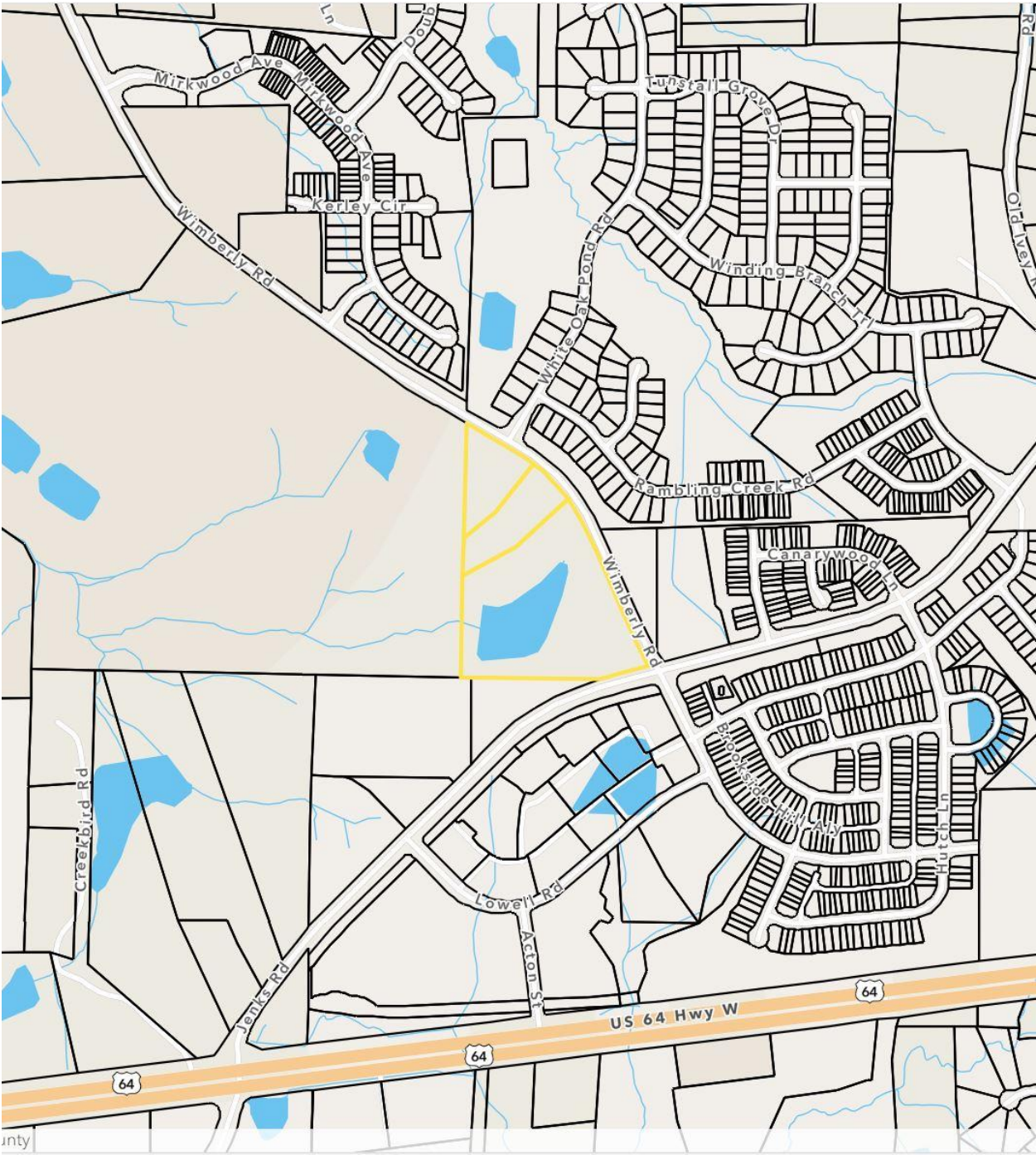




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VICINITY MAP



## PROJECT DATA

<b>Name of Project:</b>	Altera Heights
<b>Property Owner:</b>	See attached <b><u>Exhibit B</u></b>
<b>Developer:</b>	Wood Partners 1414 Raleigh Road, Suite 429 Chapel Hill, NC 27517
<b>Prepared by:</b>	Parker Poe Adams & Bernstein LLP 301 Fayetteville Street, Suite 1400 Raleigh, NC 27601  BGE, Inc. 5438 Wade Park Blvd., Suite 420 Raleigh, NC 27607
<b>Current Zoning:</b>	Rural Residential (RR)
<b>Proposed Zoning:</b>	Planned Unit Development Conditional Zoning (PUD-CZ)
<b>Current 2045 LUM Designations:</b>	Office Employment/Commercial Services
<b>Proposed 2045 LUM Designations:</b>	High Density Residential
<b>Site Address:</b>	8108 Jenks Rd, 1508 Wimberly Rd, 1440 Wimberly Rd
<b>Property Identification Number:</b>	0722673959, 0722682430, 0722681610
<b>Total Acreage:</b>	13.55 acres
<b>Area Designated as Mixed Use on LUM:</b>	None
<b>Area Proposed as Non-Residential:</b>	None

## PURPOSE STATEMENT

This document and the accompanying exhibits submitted herewith (collectively, the “PUD”) are provided pursuant to the Town of Apex Unified Development Ordinance (“UDO”) Planned Unit Development provisions. This PUD addresses the development of an approximately 13.55-acre site at the corner of Wimberly Road and Jenks Road. The property is in the Town’s ETJ and primarily undeveloped with two existing single-family homes.

Altera Heights aims to offer upscale living at cost-effective rates to fill a gap in the housing market. The project will be an attainable housing community for middle income earners, those often overlooked by the multi-family housing market which consists primarily of government subsidized affordable projects on one end and luxury high rent apartment communities on the other. In addition, the community will provide 10% of the total units as AMI restricted affordable units to ensure affordability for different income bands. The community will be conveniently located near goods and services and future commercial development on US-64, offering people of all backgrounds the opportunity to live in and enjoy Apex.

The Town of Apex 2045 Land Use Map (the “LUM”) designates the property as Office/Commercial Services. However, non-residential uses are infeasible on the property. The office market has not recovered from COVID-19; in first quarter 2024, the direct vacancy rate for office space in Raleigh-Durham increased to 15.6% and the suburban vacancy rate increased to 16.2%.<sup>1</sup> Seven of the ten largest vacancies were in suburban submarkets, mostly concentrated in the RTP/I-40 Corridor submarket which had the highest overall vacancy rate of 30.9%. Commercial uses on the site face challenges due to the lot configuration. Because of the configuration of the Town owned property to the south (PIN 0722671588), the property has minimal frontage on Jenks Road, the primary transportation corridor, and will only have driveway access to Wimberly Road. Additionally, non-residential development is drawn to US-64 where visibility is better and daily trips are higher.

Given these constraints, an attainable housing community is the highest and best use of the property. It will further Goal 1.2(d) of the Affordable Housing Incentive Zoning Policy and Procedures Manual, to create “mixed-income communities, with affordable housing units integrated within residential and mixed-use market rate developments.” According to the Affordable Housing Plan, over the next decade, Apex is projected to add 1,900 jobs with incomes below \$75,000, which will further contribute to the Town’s affordable housing need; jobs such as grocery cashiers, firefighters, and nurses.

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<sup>1</sup> See Cushman & Wakefield Q1 2024 Raleigh Office Report. [https://cw-gbl-gws-prod.azureedge.net/-/media/cw/marketbeat-pdfs/2024/q1/us-reports/office/raleigh-durham\\_americas\\_marketbeat\\_office\\_q12024.pdf?rev=e3d179927e8343c69bd3895c5d3d6fab](https://cw-gbl-gws-prod.azureedge.net/-/media/cw/marketbeat-pdfs/2024/q1/us-reports/office/raleigh-durham_americas_marketbeat_office_q12024.pdf?rev=e3d179927e8343c69bd3895c5d3d6fab)

**CONSISTENCY WITH PLANNED UNIT DEVELOPMENT STANDARDS**

- (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***

**RESPONSE:** The uses permitted within this PUD are permitted within this designation in the UDO Section 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 the 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.***

**RESPONSE:** Altera Heights is a multi-family development. None of the parcels in the PUD have three stripes on the LUM. Accordingly, this PUD is not required to designate 30% of the property as non-residential.

- (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.***

**RESPONSE:** This PUD specifies intensity and dimensional standards for the project. The proposed PUD is consistent with the UDO Planned Unit Development standards – to provide site specific, high-quality neighborhoods that preserve natural features and exhibit compatibility with, and connectivity to, surrounding land uses. Except as specifically stated in this PUD, the development will comply with all requirements of the UDO and will comply with all applicable requirements of the North Carolina Building Code and the 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 Advance Apex: The 2045 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 Advance Apex: The 2045 Transportation Plan. In addition, sidewalks shall be provided on both sides of all streets for single-family detached homes.***

**RESPONSE:** The project will have 10-foot Side Paths along its frontage on Wimberly Road and Jenks Road as recommended by the Bicycle and Pedestrian System Plan Map. Internal sidewalks will connect to the Side Paths to improve pedestrian connectivity and safety.



- (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.***

**RESPONSE:** The project does not propose any new public streets. Additionally, vehicular cross access connections are undesirable due to the use of adjacent properties. The adjacent property to the west is the Cary-Apex Water Plant. The adjacent property to the south is owned by the Town and will be used for utilities. The project will improve pedestrian connectivity by constructing Side Paths along its frontage on Wimberly Road and Jenks Road.

- (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.***

**RESPONSE:** The proposed development is compatible with the character of the existing and planned uses in the surrounding area. This area of Town includes a wide array of housing types including the Villages at Westford luxury apartments and Westford Townhomes to the south, the Alderwood single-family subdivision to the east, and the future Arden 55+ community to the west. The project will add an attainable rental housing type, with conditions to ensure a high quality product that complements existing neighborhoods in the area.

- (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.***

**RESPONSE:** The development will feature high quality and thoughtful design. Architectural standards, design controls, and conceptual elevations are included in this PUD.

#### **CONSISTENCY WITH CONDITIONAL ZONING STANDARDS**

Altera Heights is consistent with the conditional zoning standards set forth in UDO Section 2.3.3.F.1-10. Please see the accompanying PUD-CZ Application for the statements of consistency addressing each standard.

## PERMITTED USES

The Property may be used for the uses listed 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. Homeowners Association covenants shall not restrict the construction of accessory dwelling units.

The following uses shall be permitted:

### ***Residential***

- Multi-family or apartment
- Condominium

### ***Utilities***

- Utility, minor

### ***Recreational***

- Greenway
- Park, Active
- Park, Passive
- Recreation Facility, private

## AFFORDABLE HOUSING

A minimum of 10% of the total residential apartment units (as shown on the first site plan submittal) shall be designated as restricted low-income affordable housing rental units (the “Affordable Units”) for a minimum affordability period of 15 years starting from the date of issuance of the first residential Certificate of Occupancy (the “Affordable Restriction Period”).

- 1/2 of the Affordable Units shall be occupied by low-income households earning no more than 80% of the Raleigh, NC Metropolitan Statistical Area (MSA) Area Median Income, adjusted for family size, as most recently published by the U.S. Department of Housing and Urban Development (HUD)(the “AMI”) and rented at maximum rent limits per bedroom count, no greater than the 80% AMI limits as stipulated by the most recently published NC Housing Finance Agency Low-Income Housing Tax Credit Multifamily Tax Subsidy Program income and rent limits for the Wake County Metropolitan Area (the “MTSP Rent Limits”).
- 1/2 of the Affordable Units shall be occupied by low-income households earning no more than 100% AMI and rented at maximum rent limits as stipulated by the 100% AMI MTSP Rent Limits.
- If the Affordable Units calculation results in a fraction between 0.00 and 0.49, the number of Affordable Units shall be rounded down to the nearest whole number. If the Affordable Units calculation results in a fraction between 0.50 and 0.99, the number of Affordable Units shall be rounded up to the nearest whole number.
- Prior to issuance of the first residential Certificate of Occupancy, a restrictive covenant between the Town and property owner shall be executed and recorded in the Wake County Registry to memorialize the affordable housing terms and conditions.
- During the Affordable Restriction Period, the property owner shall be responsible for performing, or contracting for, all property management and administration duties to ensure compliance with this affordable housing condition and shall submit annual compliance reports to the Town verifying compliance.
- Following expiration of the Affordable Restriction Period, this affordable housing condition shall expire, and the property owner shall be relieved of all obligations set forth in this affordable housing condition, and the Affordable Units may be freely marketed and leased at market-rate rents.

## DESIGN CONTROLS

### Multi-Family Design Controls

- Acreage: 13.55
- Maximum number of multi-family apartment units: 300
- Maximum Building Height: 60 ft./4 stories
- Minimum Building Setbacks
  - Front 10 ft.
  - Rear 10 ft.
  - Corner 10 ft.
  - Minimum Building Separation 30 ft.
  - From Buffer or RCA 10 ft.

### LANDSCAPING, BUFFERING, AND SCREENING

Perimeter buffers shall be built and planted to the following lot width and planting standards:

Location:	Buffer Size & Type:
Along the southern property line	30 ft. Type B/15 ft. Type B*
Along the western property line	25 ft. Type A
Along Wimberly Road	20 ft. Type B**

\*There is an existing Duke Energy Electric Easement (Deed Book 5389, Page 112)(the “Jenks Duke Easement”) along the property’s Jenks Road frontage. The Jenks Road right of way dedication and road widening set forth in the Transportation Improvements section of this PUD may require relocation of the Jenks Duke Easement north onto the property as shown on the Preliminary Layout Plan (the “Relocation”). If the Relocation occurs, the portion of the buffer adjacent to the easement shall be reduced to a 15-foot Type B buffer and located outside of the relocated Jenks Duke Easement.

\*\*This buffer may overlap with the existing Town of Apex Electric Easement (Deed Book 16203, Page 1465) and Duke Energy Electric Easement along Wimberly Road provided there is a 10-foot wide planting area as measured from the edge of the easement.

## ARCHITECTURAL STANDARDS

Altera Heights 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. Elevations included are conceptual examples. Final elevations must comply with these architectural standards but may vary from the conceptual elevations. Further details may be provided at the time of Site Plan submittal.

## RESIDENTIAL DESIGN GUIDELINES

### *Multi-Family/Apartments/Condominiums:*

1. Vinyl siding is not permitted; however, vinyl windows, decorative elements, and trim are permitted.
2. Rear and side elevations of units that have right-of-way frontage shall have trim around the windows.
3. A minimum of three of the following features shall be used on each building:
  - a. Decorative shake
  - b. Board and batten
  - c. Decorative porch railing/posts
  - d. Shutters
  - e. Decorative/functional air vents on roof or foundation
  - f. Recessed windows
  - g. Decorative windows
  - h. Decorative brick/stone
  - i. Gables
  - j. Decorative cornices
  - k. Tin/metal roof
4. Garage doors must have windows, decorative details, or carriage-style adornments on them.
5. Windows that are not recessed must be trimmed.

## PARKING AND LOADING

Multi-Family buildings shall provide the following minimum parking spaces per dwelling unit based on the number of bedrooms:

Bedrooms per unit	Minimum ratio
1 or 2	1.3 spaces per dwelling unit
3	1.8 spaces per dwelling unit

## SIGNAGE

Signage shall comply with UDO Section 8.7.

## NATURAL RESOURCES AND ENVIRONMENTAL DATA

### RIVER BASINS AND WATERSHED PROTECTION OVERLAY DISTRICTS

The property is in the Primary Watershed Protection Overlay District as shown on the Town of Apex Watershed Protection Overlay Map 2019. This PUD will comply with all built upon area,



vegetated conveyances, structural SCMs and riparian stream buffer requirements of UDO Section 6.1.8.

### **Resource Conservation Areas (RCA)**

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

The PUD will provide a minimum of 25% of the gross project area as Resource Conservation Area ("RCA"). Designated RCA areas will be consistent with the items listed in UDO Section 8.1.2(B). Preserved streams, wetlands, and associated riparian buffers provide the primary RCAs throughout the site. Additional RCA areas may include perimeter and street front buffers, stormwater management areas, and greenways.

### **Floodplain**

The project site does not sit within a designated current or future 100-year floodplain as shown on the Town of Apex Watershed & FEMA Map dated April 2015. FIRM Panel 3720072200J dated May 2, 2006 does not include a floodplain within the property boundary.

### **Historic Structures**

There are no known historic structures present on the Property.

### **Environmental Commitments Summary**

As shown elsewhere in the PUD, the following environmental conditions shall apply to the Development:

- The project shall install at least one (1) sign per SCM discouraging the use of fertilizer and to reduce pet waste near SCM drainage areas. The sign shall be installed in locations that are publicly accessible, such as adjacent to, but outside of public property and/or public easement(s), amenity centers, sidewalks, greenways, or side paths.
- At least 70% of plants shall be native species. Landscaping will be coordinated with and approved by the Planning Director at site plan or subdivision review.
- The project shall install a sign adjacent to wooded or natural condition Resource Conservation Area that indicates the area is RCA and to be preserved in perpetuity and not disturbed.
- The project shall install at least two (2) pet waste stations in the project in locations that are publicly accessible, such as adjacent to amenity centers, SCMs, sidewalks, greenways, or side paths.
- No invasive species shall be permitted. No single species of tree or shrub shall constitute more than 20% of the plant material of its type within a single development site.

- The project shall use full cutoff LED fixtures that have a maximum color temperature of 3,000K for all exterior lighting, including, but not limited to, parking lot and building mounted fixtures.

## STORMWATER MANAGEMENT

The Development shall meet all stormwater management requirements for quality and quantity treatment in accordance with Section 6.1 of the UDO.

Acceptable stormwater structures shall include detention ponds, constructed wetlands, bio-retention areas, or other approved devices consistent with the NC DEQ Stormwater Design Manual and the Town of Apex UDO.

## PARKS AND RECREATION

Altera Heights PUD #24CZ11 was reviewed at the 02/26/2025 PRCR Advisory Commission meeting. The Commission unanimously recommended a fee in lieu of dedication for a maximum of 300 Multi-Family units. The fee in lieu rate will be set at the time of Town Council action on the Rezoning and run for the life of the project. The total fee-in-lieu (based on the final unit count) will be calculated at Site Plan and Construction Document review and deposited prior to issuance of the first building permit for each building.

## 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 to comply with the Town's Sewer and Water Master Plan and Standards and Specifications. Road and utility infrastructure shall be as follows:

## TRANSPORTATION IMPROVEMENTS

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

1. **Wimberly Road Widening.** Developer shall widen Wimberly Road to accommodate turn lanes as required based on a minimum 35-foot back to back curb and gutter 2-lane section with a 10-foot Side Path in a 60-foot right-of-way. Developer shall dedicate up to 5 feet of additional right of way along the property's frontage where needed to accommodate required turn lanes.

2. **Wimberly Road/White Oak Pond Road/North Site Driveway Intersection.** Developer shall construct a full-movement stop-controlled two-lane driveway across from White Oak Pond Road.
3. **Wimberly Road/Retreat at Preserve at White Oak Driveway/South Site Driveway Intersection.** Developer shall construct:
  - a. a full-movement stop-controlled two-lane driveway across from the planned Alderwood commercial site driveway approximately 550 feet north of Jenks Road;
  - b. a northbound left turn lane on Wimberly Road with a minimum 50 feet of storage and appropriate deceleration length and taper; and
  - c. a southbound left turn lane on Wimberly Road with a minimum 25 feet of storage and appropriate deceleration length and taper.
4. **Jenks Road/Wimberly Road Intersection.**
  - a. Developer shall dedicate right-of-way in the northwestern quadrant of the intersection sufficient for the future construction of a metal pole traffic signal with signal cabinet and associated equipment.
  - b. Prior to recordation of the Final Plat for the last phase of the development, Developer shall pay a fee in lieu for 50% of the estimated costs to design, acquire easements for, and construct a metal pole span wire traffic signal with pedestrian accommodations. Prior to Final Plat approval for the last phase of the development, Developer shall provide a preliminary signal geometric plan and engineer's estimate to the Town for review and approval.
5. **Jenks Road Widening.** Developer shall dedicate right of way and widen the northern half of Jenks Road for the length of the property's Jenks Road frontage based on a minimum 84-foot back to back curb and gutter 4-lane divided section with a 10-foot Side Path in a 110-foot right-of-way (the "Jenks Road Widening").
6. **Right of Way/Easement Acquisition.** The Road Improvements are intended to be located in existing Jenks Road and Wimberly Road rights of way and in additional right of way to be dedicated along the subject property's road frontage. If any Road Improvements require offsite rights of way, easements, or other property interests, the developer shall be responsible for acquiring all offsite easements and right of way necessary to construct committed transportation improvements. In the event that developer is unable to acquire the aforementioned easements and right of way through good faith efforts, Developer shall request assistance from the Town of Apex. In the event that the Town is unwilling or unable to assist with the acquisitions, Developer shall update engineering plans accordingly and pay a fee in lieu based on the fair market value of the offsite easements and right of way and estimated construction cost of the improvements, based on an engineer's estimate, subject to Town review and approval. Payment of the fee in

lieu shall satisfy the requirement to construct the committed transportation improvements.

### **CROSS ACCESS**

Adjacent to the west of the property is the Cary-Apex Water Treatment Plant (PIN 0722488535). Adjacent to the south of the property is an undeveloped tract owned by the Town of Apex to be used for utilities (PIN 0722671588). Due to the nature of adjacent uses, the project shall not be required to provide vehicular or pedestrian cross access to adjacent properties.

### **PEDESTRIAN AND BICYCLE IMPROVEMENTS**

Per the Town of Apex Bicycle and Pedestrian System Plan Map and UDO requirements, the developer shall construct a 10-foot Side Path along the property's Jenks Road and Wimberly Road frontage.

### **WATER AND SANITARY SEWER**

All lots within the Development will be served by Town of Apex water and sanitary sewer. The utility design will be finalized at the time of Site Plan approval and be based on available facilities adjacent to the site at that time. The design will meet the current Town of Apex Sewer and Water Master Plan and Standards and Specifications. A conceptual utility plan is included in the PUD Concept Plan for reference.

### **OTHER UTILITIES**

Electricity will be provided by Apex Electric. Phone and cable will be provided by the Developer via third parties and shall meet Town of Apex standards as outlined in the UDO.

### **PHASING**

The project may be completed in phases. Final locations of phases will be determined at the time of Site Plan review and approval.

### **CONSISTENCY WITH LAND USE PLAN**

The Town of Apex 2045 Land Use Map (the "LUM") designates the property as Office/Commercial Services. However, non-residential uses are infeasible on the property. The office market has not recovered from COVID-19; in first quarter 2024, the direct vacancy rate for office space in Raleigh-Durham increased to 15.6% and the suburban vacancy rate increased to 16.2%.<sup>2</sup> Seven of the ten largest vacancies were in suburban submarkets, mostly concentrated in the RTP/I-40

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<sup>2</sup> See Cushman & Wakefield Q1 2024 Raleigh Office Report. [https://cw-gbl-gws-prod.azureedge.net/-/media/cw/marketbeat-pdfs/2024/q1/us-reports/office/raleigh-durham\\_americas\\_marketbeat\\_office\\_q12024.pdf?rev=e3d179927e8343c69bd3895c5d3d6fab](https://cw-gbl-gws-prod.azureedge.net/-/media/cw/marketbeat-pdfs/2024/q1/us-reports/office/raleigh-durham_americas_marketbeat_office_q12024.pdf?rev=e3d179927e8343c69bd3895c5d3d6fab)

Corridor submarket which had the highest overall vacancy rate of 30.9%. Commercial uses on the site face challenges due to the lot configuration. Because of the configuration of the Town owned property to the south (PIN 0722671588), the property has minimal frontage on Jenks Road, the primary transportation corridor, and will only have driveway access to Wimberly Road. Additionally, non-residential development is drawn to US-64 where visibility is better and daily trips are higher.

Given those constraints, an attainable housing community is the highest and best use of the property. It will further Goal 1.2(d) of the Affordable Housing Incentive Zoning Policy and Procedures Manual (the "Affordable Policy"), to create "mixed-income communities, with affordable housing units integrated within residential and mixed-use market rate developments." According to the Affordable Housing Plan (the "Affordable Plan"), over the next decade, Apex is projected to add 1,900 jobs with incomes below \$75,000, which will further contribute to the Town's affordable housing need; jobs such as grocery cashiers, firefighters, and nurses.



## **COMPLIANCE WITH UDO**

The development standards proposed for this PUD comply with those set forth in the Town's Unified Development Ordinance (UDO). This PUD shall be the primary governing document for the development of Altera Heights. All standards and regulations in this PUD shall control over general standards of the UDO. Provided, however, that if a specific regulation is not addressed in this PUD, UDO regulations shall control.

**EXHIBIT A**  
**Legal Description**  
**The Property**

BEGINNING ON THE SOUTHERN RIGHT OF WAY OF WIMBERLY ROAD (60' PUBLIC RIGHT OF WAY) AT AN EXISTING IRON PIPE ON THE NORTHEASTERN CORNER OF LOT 1 RECORDED IN BOOK OF MAPS 1994 PAGE 435 RECORDED IN THE WAKE COUNTY REGISTER OF DEEDS AND HAVING N.C. GRID COORDINATES OF N: 728,630.67, E: 2,026,294.61 NAD83/2011, THENCE FROM SAID POINT AND WITH THE SOUTHERN RIGHT OF WAY SOUTH 49° 11' 09" EAST FOR A DISTANCE OF 107.51 FEET TO AN IRON PIPE SET, THENCE SOUTH 40° 46' 30" EAST FOR A DISTANCE OF 106.86 FEET TO AN IRON PIPE SET, THENCE SOUTH 33° 47' 29" EAST FOR A DISTANCE OF 79.92 FEET TO AN IRON PIPE SET, THENCE SOUTH 28° 06' 25" EAST FOR A DISTANCE OF 94.74 FEET TO AN IRON PIPE SET, THENCE SOUTH 24° 00' 16" EAST FOR A DISTANCE OF 484.42 FEET TO AN IRON PIPE SET, THENCE SOUTH 25° 31' 04" EAST FOR A DISTANCE OF 82.88 FEET TO AN IRON PIPE SET, THENCE SOUTH 27° 41' 54" EAST FOR A DISTANCE OF 31.47 FEET TO AN IRON PIPE SET, THENCE SOUTH 23° 56' 01" WEST FOR A DISTANCE OF 47.61 FEET TO AN IRON PIPE SET ON THE NORTHERN RIGHT OF WAY OF JENKS ROAD (60' PUBLIC RIGHT OF WAY), THENCE ALONG THE NORTHERN RIGHT OF WAY SOUTH 75° 33' 56" WEST FOR A DISTANCE OF 115.59 FEET TO AN IRON PIPE, THENCE SOUTH 74° 18' 49" WEST A DISTANCE OF 68.97 FEET TO AN IRON PIPE WITH CAP, THENCE LEAVING THE NORTHERN RIGHT OF WAY OF JENKS ROAD (60' PUBLIC RIGHT OF WAY) NORTH 88° 58' 44" WEST FOR A DISTANCE OF 563.29 FEET TO AN ANGLE IRON, THENCE NORTH 88° 58' 44" WEST FOR A DISTANCE OF 47.06 FEET TO AN IRON PIPE, THENCE NORTH 01° 32' 21" EAST FOR A DISTANCE OF 424.08 FEET TO AN AXLE, THENCE NORTH 01° 32' 21" EAST FOR A DISTANCE OF 12.51 FEET TO AN IRON PIPE THENCE NORTH 01° 32' 21" EAST A DISTANCE OF 151.76 FEET TO AN IRON PIPE, THENCE NORTH 01° 32' 21" EAST FOR A DISTANCE OF 15.73 FEET TO AN IRON PIPE, THENCE NORTH 01° 32' 21" EAST A DISTANCE OF 84.35 FEET TO AN IRON PIPE, THENCE NORTH 01° 32' 18" EAST FOR A DISTANCE OF 411.13 FEET TO AN IRON PIPE SET ON THE SOUTHERN RIGHT OF WAY OF WIMBERLY ROAD (60' PUBLIC RIGHT OF WAY), THENCE WITH THE SOUTHERN RIGHT OF WAY SOUTH 61° 03' 43" EAST FOR A DISTANCE OF 170.57 FEET TO AN IRON PIPE SET, THENCE SOUTH 59° 15' 00" EAST FOR A DISTANCE OF 74.16 FEET TO AN IRON PIPE SET, THENCE SOUTH 56° 01' 14" EAST FOR A DISTANCE OF 93.72 FEET TO THE POINT AND PLACE OF BEGINNING CONTAINING 13.55 ACRES, MORE OR LESS.

**EXHIBIT B**  
**Ownership Addendum**

**PIN 0722673959**

Address: 8108 Jenks Road

Acreage: 9.64 acres

Owner: Terry Cichocki

Deed Book/Page: 16193/229

Owner Address: 8108 Jenks Road, Apex, NC 27523

**PIN 0722682430**

Address: 1508 Wimberly Road

Acreage: 2.08 acres

Owner: Danny Ottaway and Joan Ottaway

Deed Book/Page: 13368/821

Owner Address: 10401 Chapel Hill Road, Morrisville, NC 27560

**PIN 0722681610**

Address: 1440 Wimberly Road

Acreage: 1.83 acres

Owner: Terry Poole

Deed Book/Page: 12394/1101

Owner Address: 1440 Wimberly Road, Apex, NC 27523



G:\NCA\Projects\Wood Partners\13123-00 Jenks Road Multifamily\03 - DWG\Plan\Sheets\On-Site\Planned Development Plan\CD-0 - COVER.dwg Layout: CD-0 Plotted: 4/4/2025 9:28:04 AM

PLANNED DEVELOPMENT PLAN FOR PUD-CZ

ALTERA HEIGHTS

JENKS ROAD AND WIMBERLY ROAD

APEX, NORTH CAROLINA

FIRST SUBMITTAL: JUNE 3RD, 2024  
SECOND SUBMITTAL: AUGUST 2ND, 2024  
THIRD SUBMITTAL: FEBRUARY 7TH, 2025  
FOURTH SUBMITTAL: APRIL 4TH, 2025

SITE DATA TABLE		
DEVELOPER	WP EAST ACQUISITIONS, LLC. 1414 RALEIGH ROAD, SUITE 429 CHAPEL HILL, NC 27517	
PARCELS	0722681610, 0722682430, 0722673959	
SITE AREA	GROSS	13.55 ACRES
	R/W DEDICATION	0.13 ACRES
	NET	13.42 ACRES
EXISTING ZONING	RR (RURAL RESIDENTIAL)	
PROPOSED ZONING	PUD-CZ	
RIVER BASIN	CAPE FEAR	
WATERSHED OVERLAY	PRIMARY WATERSHED PROTECTION OVERLAY DISTRICT	
HISTORIC STRUCTURES	NONE	
MAX BUILT UPON AREA (IMPERVIOUS)	9.39 ACRES (70%)	
2045 LAND USE MAP (LUM) DESIGNATION	OFFICE EMPLOYMENT, COMMERCIAL	
AREA DESIGNATED AS MIXED-USE ON 2045 LUM	NONE	
AREA OF MIXED-USE PROPOSED AS NON-RESIDENTIAL	NONE	
PROPOSED USE	MULTI-FAMILY APARTMENTS	
MAXIMUM DENSITY	300 UNITS	
BUFFER CALL IDENTIFICATION NUMBER	APEX 23-008	
EXISTING SF OF BUILDINGS	4,158 SF	
PROPOSED BLDG HEIGHT	60 FEET (4 STORIES)	
REQUIRED PARKING SPACES	1-2 BEDROOMS	1.3 SPACES PER DWELLING
	3+ BEDROOMS	1.8 SPACES PER DWELLING
REQUIRED RESOURCE CONSERVATION AREA	25% (RCA AREA WILL MEET CRITERIA IN UDO SECTION 8.1.2.)	
SETBACKS	FRONT	10 FEET
	CORNER	10 FEET
	REAR	10 FEET
	BUILDING SEPARATION	30 FEET

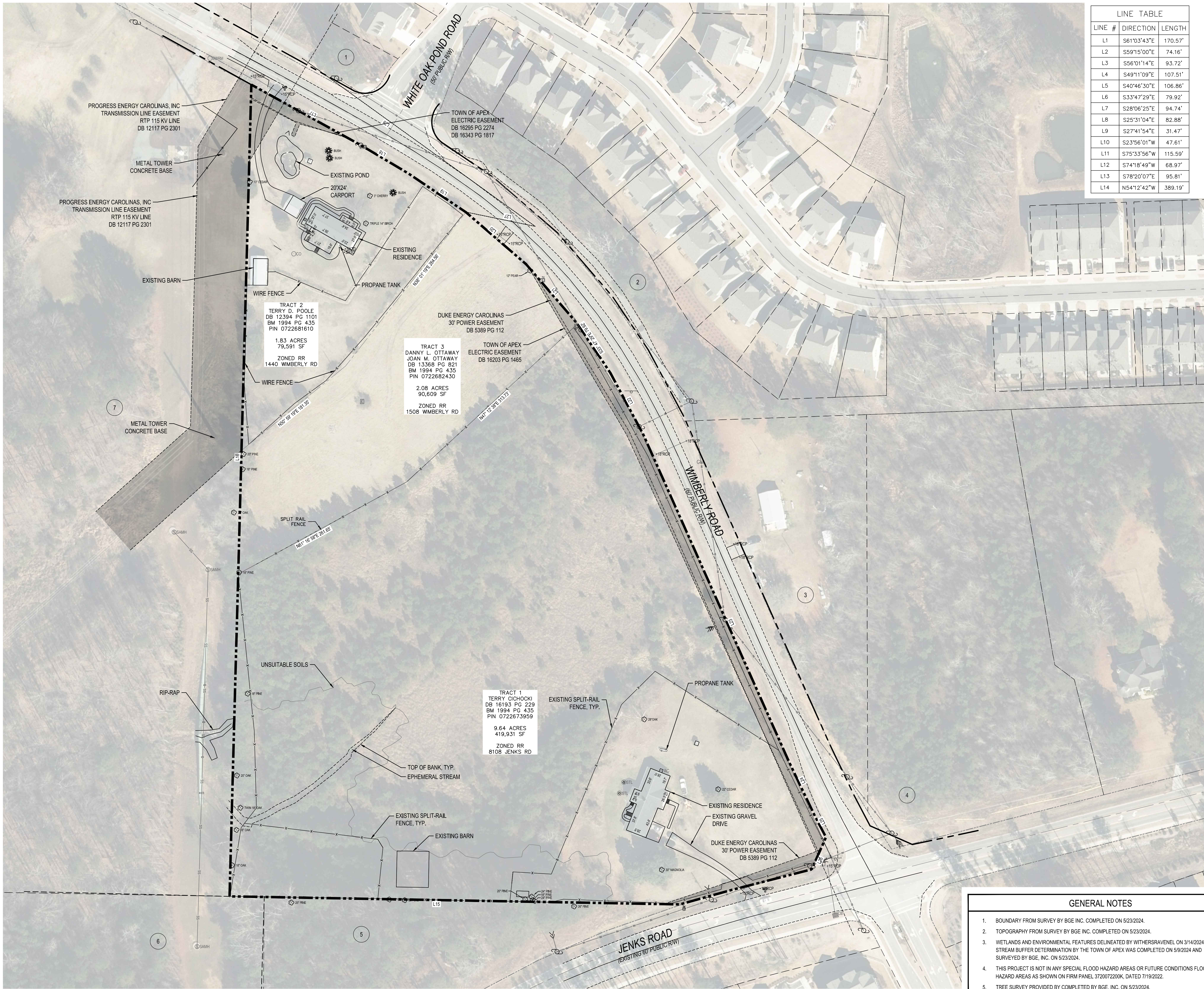
OWNERS	
1.	PIN: 0722673959 TERRY CICHOCKI 8108 JENKS ROAD APEX, NC 27523-9423
2.	PIN: 0722682430 DANNY L. AND JOAN M. OTTAWAY 10401 CHAPEL HILL ROAD MORRISVILLE, NC 27560-8710
3.	PIN: 0722681610 TERRY D. POOLE 1440 WIMBERLY ROAD APEX, NC 27523-9660

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
C0-0	COVER SHEET
C1-0	EXISTING CONDITIONS
C1-1	PRELIMINARY LAYOUT PLAN
C1-2	CONCEPTUAL BUILDING ELEVATIONS
C1-3	CONCEPTUAL BUILDING ELEVATIONS
C1-4	CONCEPTUAL BUILDING ELEVATIONS
C1-5	CONCEPTUAL BUILDING ELEVATIONS
C1-6	CONCEPTUAL BUILDING ELEVATIONS
C1-7	CONCEPTUAL BUILDING ELEVATIONS
C1-8	CONCEPTUAL BUILDING ELEVATIONS
C1-9	CONCEPTUAL BUILDING ELEVATIONS
C1-10	CONCEPTUAL BUILDING ELEVATIONS
C1-11	CONCEPTUAL BUILDING ELEVATIONS
C1-12	CONCEPTUAL BUILDING ELEVATIONS
C1-13	CONCEPTUAL BUILDING ELEVATIONS
C1-14	CONCEPTUAL BUILDING ELEVATIONS
C1-15	CONCEPTUAL BUILDING ELEVATIONS
C1-16	CONCEPTUAL BUILDING ELEVATIONS
C1-17	CONCEPTUAL BUILDING ELEVATIONS
C1-18	CONCEPTUAL BUILDING ELEVATIONS

REZONING CONDITIONS	
<b>ARCHITECTURAL CONDITIONS:</b> 1. VINYL SIDING IS NOT PERMITTED; HOWEVER, VINYL WINDOWS, DECORATIVE ELEMENTS, AND TRIM ARE PERMITTED. 2. REAR AND SIDE ELEVATIONS OF UNITS THAT HAVE RIGHT-OF-WAY FRONTAGE SHALL HAVE TRIM AROUND THE WINDOWS. 3. A MINIMUM OF THREE OF THE FOLLOWING FEATURES SHALL BE USED ON EACH BUILDING: a. DECORATIVE SHAKE b. BOARD AND BATTEN c. DECORATIVE PORCH RAILING/POSTS d. SHUTTERS e. DECORATIVE/FUNCTIONAL AIR VENTS ON ROOF OR FOUNDATION f. RECESSED WINDOWS g. DECORATIVE WINDOWS h. DECORATIVE BRICK/STONE i. GABLES j. DECORATIVE CORNICES k. TIN/METAL ROOF 4. GARAGE DOORS MUST HAVE WINDOWS, DECORATIVE DETAILS, OR CARRIAGE-STYLE ADORNMENTS ON THEM. 5. WINDOWS THAT ARE NOT RECESSED MUST BE TRIMMED.  AS SHOWN ELSEWHERE IN THE PUD, THE FOLLOWING ENVIRONMENTAL CONDITIONS SHALL APPLY TO THE DEVELOPMENT: 1. THE PROJECT SHALL INSTALL AT LEAST ONE (1) SIGN PER SCM DISCOURAGING THE USE OF FERTILIZER AND TO REDUCE PET WASTE NEAR SCM DRAINAGE AREAS. THE SIGN SHALL BE INSTALLED IN LOCATIONS THAT ARE PUBLICLY ACCESSIBLE, SUCH AS ADJACENT TO, BUT OUTSIDE OF PUBLIC PROPERTY AND/OR PUBLIC EASEMENT(S), AMENITY CENTERS, SIDEWALKS, GREENWAYS, OR SIDE PATHS. 2. AT LEAST 70% OF PLANTS SHALL BE NATIVE SPECIES. LANDSCAPING WILL BE COORDINATED WITH AND APPROVED BY THE PLANNING DIRECTOR AT SITE PLAN OR SUBDIVISION REVIEW. 3. NO INVASIVE SPECIES SHALL BE PERMITTED. NO SINGLE SPECIES OF TREE OR SHRUB SHALL CONSTITUTE MORE THAN 20% OF THE PLANT MATERIAL OF ITS TYPE WITHIN A SINGLE DEVELOPMENT SITE. 4. THE PROJECT SHALL INSTALL A SIGN ADJACENT TO WOODED OR NATURAL CONDITION RESOURCE CONSERVATION AREA THAT INDICATES THE AREA IS RCA AND TO BE PRESERVED IN PERPETUITY AND NOT DISTURBED. 5. THE PROJECT SHALL INSTALL AT LEAST TWO (2) PET WASTE STATIONS IN THE PROJECT IN LOCATIONS THAT ARE PUBLICLY ACCESSIBLE, SUCH AS ADJACENT TO AMENITY CENTERS, SCMS, SIDEWALKS, GREENWAYS, OR SIDE PATHS. 6. THE PROJECT SHALL USE FULL CUTOFF LED FIXTURES THAT HAVE A MAXIMUM COLOR TEMPERATURE OF 3000K FOR ALL EXTERIOR LIGHTING, INCLUDING, BUT NOT LIMITED TO, PARKING LOT AND BUILDING MOUNTED FIXTURES.	



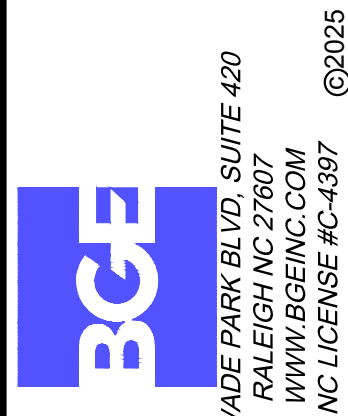




LINE TABLE		
LINE #	DIRECTION	LENGTH
L1	S61°03'43"E	170.57'
L2	S59°15'00"E	74.16'
L3	S56°01'14"E	93.72'
L4	S49°11'09"E	107.51'
L5	S40°46'30"E	106.86'
L6	S33°47'29"E	79.92'
L7	S28°06'25"E	94.74'
L8	S25°31'04"E	82.88'
L9	S27°41'54"E	31.47'
L10	S23°56'01"W	47.61'
L11	S75°33'56"W	115.59'
L12	S74°18'49"W	68.97'
L13	S78°20'07"E	95.81'
L14	N54°12'42"W	389.19'

ADJACENT PROPERTY OWNER INFORMATION:

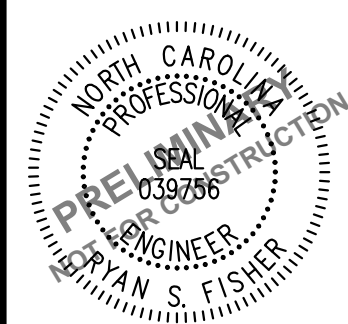
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DB: 018946 PG: 02091  
THE PRESERVE AT WHITE OAK CREEK HOMEOWNERS ASSOCIATION  
15501 WESTON PARKWAY, SUITE 100  
CARY, NC 27513-8636
- PIN: 0722689944  
DB: 017584 PG: 02495  
THE PRESERVE AT WHITE OAK CREEK HOMEOWNERS ASSOCIATION  
15501 WESTON PARKWAY, SUITE 100  
CARY, NC 27513-8636
- PIN: 0722687241  
D.B. 019165 PG. 02160  
COLUMBIA INVESTMENTS LLC.  
P.O. BOX 1897  
APEX, NC 27502-1100
- PIN: 0722689065  
D.B. 019165 PG. 02155  
COLUMBIA INVESTMENTS LLC.  
P.O. BOX 1897  
APEX, NC 27502-1100
- PIN: 0722671588  
D.B. 017267 PG. 01687  
TOWN OF APEX  
P.O. BOX 250  
APEX, NC 27502-0250
- PIN: 0722576478  
D.B. 019499 PG. 02788  
CRP/BJ JENKS ROAD APEX OWNER LLC  
1001 PENNSYLVANIA AVE NW SUITE 220  
WASHINGTON, DC 20004-2525
- PIN: 0722486535  
D.B. 004409 PG. 00746  
TOWN OF APEX / TOWN OF CARY  
P.O. BOX 8005  
CARY, NC 27512-8005



WP EAST  
ACQUISITIONS, LLC.  
1414 RALEIGH ROAD, SUITE 429  
CHAPEL HILL, NC 27517

ALTERA HEIGHTS  
APEX, NORTH CAROLINA 27523-9423

EXISTING CONDITIONS



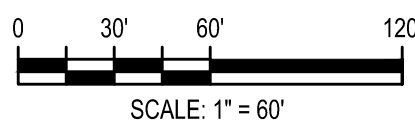
FILE NUMBER:

DATE: 06/03/2024










C1-0

GENERAL NOTES

- BOUNDARY FROM SURVEY BY BGE INC. COMPLETED ON 5/23/2024.
- TOPOGRAPHY FROM SURVEY BY BGE INC. COMPLETED ON 5/23/2024.
- WETLANDS AND ENVIRONMENTAL FEATURES DELINEATED BY WITHERSRAVEL ON 3/14/2024.  
STREAM BUFFER DETERMINATION BY THE TOWN OF APEX WAS COMPLETED ON 9/9/2024 AND SURVEYED BY BGE, INC. ON 5/23/2024.
- THIS PROJECT IS NOT IN ANY SPECIAL FLOOD HAZARD AREAS OR FUTURE CONDITIONS FLOOD HAZARD AREAS AS SHOWN ON FIRM PANEL 3720072200K, DATED 7/19/2022.
- TREE SURVEY PROVIDED BY COMPLETED BY BGE, INC. ON 5/23/2024.





	PROPERTY LINE
	MULTIFAMILY CONCEPTUAL DEVELOPMENT BLOCK
	BUILDINGS LOCATED IN THIS AREA BE LIMITED TO 3 FLOORS (50 FT)
	RESOURCE CONSERVATION AREA
	ACTIVE RECREATION AREA
	CONCEPTUAL SITE ACCESS
	CONCEPTUAL 10' SIDEPATH
	CONCEPTUAL WATERLINE CONNECTION
	CONCEPTUAL SANITARY SEWER CONNECTION

**GENERAL NOTES:**

1. ALL ZONING PLAN SHEETS ARE INTENDED FOR ILLUSTRATIVE PURPOSES ONLY. FINAL DESIGN COMPONENTS SHALL BE DETERMINED DURING THE MINOR SITE PLAN APPROVAL PROCESS.
2. REFER TO THE PUD TEXT DOCUMENTS FOR ALLOWABLE USES, ZONING CONDITIONS AND OTHER DESIGN STANDARDS.
3. ALL VEHICULAR ACCESS LOCATIONS AND PEDESTRIAN CIRCULATION ARE CONCEPTUAL AND SHALL BE FINALIZED DURING THE MINOR SITE PLAN APPROVAL PROCESS.
4. TREE PROTECTION FENCING SHALL BE PLACED IN ACCORDANCE WITH THE TOWN OF APEX'S UNIFIED DEVELOPMENT ORDINANCE.
5. EXACT LOCATION OF OPEN SPACE AND RESOURCE CONSERVATION AREA TO BE FINALIZED DURING THE MINOR SITE PLAN APPROVAL PROCESS.
6. NO SIGNS ARE APPROVED AS PART OF THE PUD-CZ APPROVAL PROCESS. A SEPARATE SIGN PERMIT MUST BE OBTAINED IN ACCORDANCE WITH THE TOWN OF APEX'S UNIFIED DEVELOPMENT ORDINANCE.
7. SITE ELEMENTS REQUIRED TO SATISFY RECREATIONAL REQUIREMENTS 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.
8. SITE ITEMS SUCH AS BUT NOT LIMITED TO, LIGHTING, LANDSCAPING, SCREENING, SITE STABILIZATION (SEEDING), PARKING, AND PAVEMENT MARKING, MUST BE COMPLETED PRIOR TO SCHEDULING A FINAL SITE INSPECTION.

**UTILITY NOTES:**

1. THIS PROJECT IS REQUESTING FULL TOWN SERVICES, INCLUDING BUT NOT LIMITED TO, WATER, SEWER AND ELECTRICITY.
2. THE SITE WILL NOT UTILIZE PRIVATE SEWAGE DISPOSAL SYSTEMS.
3. ALL UTILITY EASEMENTS SHALL BE PROVIDED AS NECESSARY. EXACT LOCATION SHALL BE DETERMINED AT THE TIME OF CONSTRUCTION DRAWINGS.
4. ALL CONSTRUCTION SHALL COMPLY WITH THE TOWN OF APEX STANDARDS AND SPECIFICATIONS.
5. ALL WATER AND SEWER MAINS WITHIN PUBLIC EASEMENTS SHALL BE OWNED, OPERATED, AND MAINTAINED BY THE TOWN OF APEX.

A circular professional engineer seal for the State of North Carolina. The outer ring contains the text "NORTH CAROLINA" at the top and "STATE OF" at the bottom. Inside the ring, the words "PROFESSIONAL" and "ENGINEER" are written in a larger font. In the center, the license number "039756" is displayed, with the name "BRYAN C. FISHER" printed below it. The seal is stamped over the signature of Bryan C. Fisher.



G:\NCA\Projects\Wood Partners\13123-00 Jenks Road Multifamily03 - DWG\PlanSheets\On-Site\Planned Development Plan\C1-2 - CONCEPTUAL BLDG ELEV.dwg Layout: C1-2 Plotted: 4/4/2025 9:30:33 AM



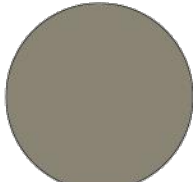
AMENITY BUILDING FRONT AND REAR ELEVATION

NOT TO SCALE

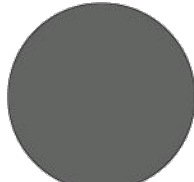
NOTE: FRONT AND REAR ELEVATIONS  
OF AMENITY BUILDING ARE IDENTICAL

Color selections are representative examples. Final colors selected  
may differ but will be materially consistent with options shown here.

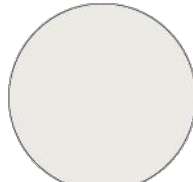
SCHEME 1



SW 6166:  
Connected Gray

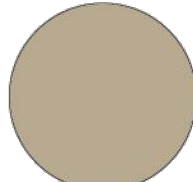


SW 7068:  
Grizzle Gray



SW 7004:  
Snowbound

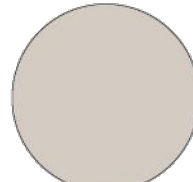
SCHEME 2



SW 6150:  
Universal Khaki

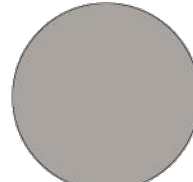


SW 7625:  
Mount Etna



SW 6071:  
Popular Gray

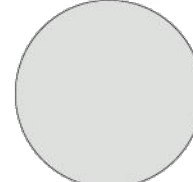
SCHEME 3



SW 7672:  
Knitting Needles



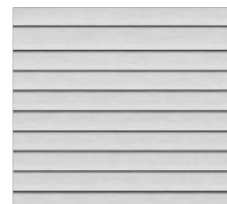
SW 7602:  
Indigo Batik



SW 7070: Site  
White



BOARD & BATTEN  
VENEER



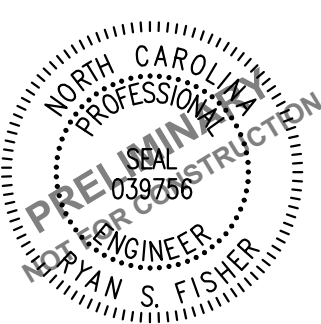
HORIZONTAL  
SIDING VENEER



ROOF SHINGLES



FIBER CEMENT  
PANEL & TRIM



FILE NUMBER:

DATE: 06/03/2024

C1-2

WP EAST  
ACQUISITIONS, LLC.  
1414 RALEIGH ROAD, SUITE 429  
CHAPEL HILL, NC 27517

ALTERA HEIGHTS  
APEX, NORTH CAROLINA 27523-9423

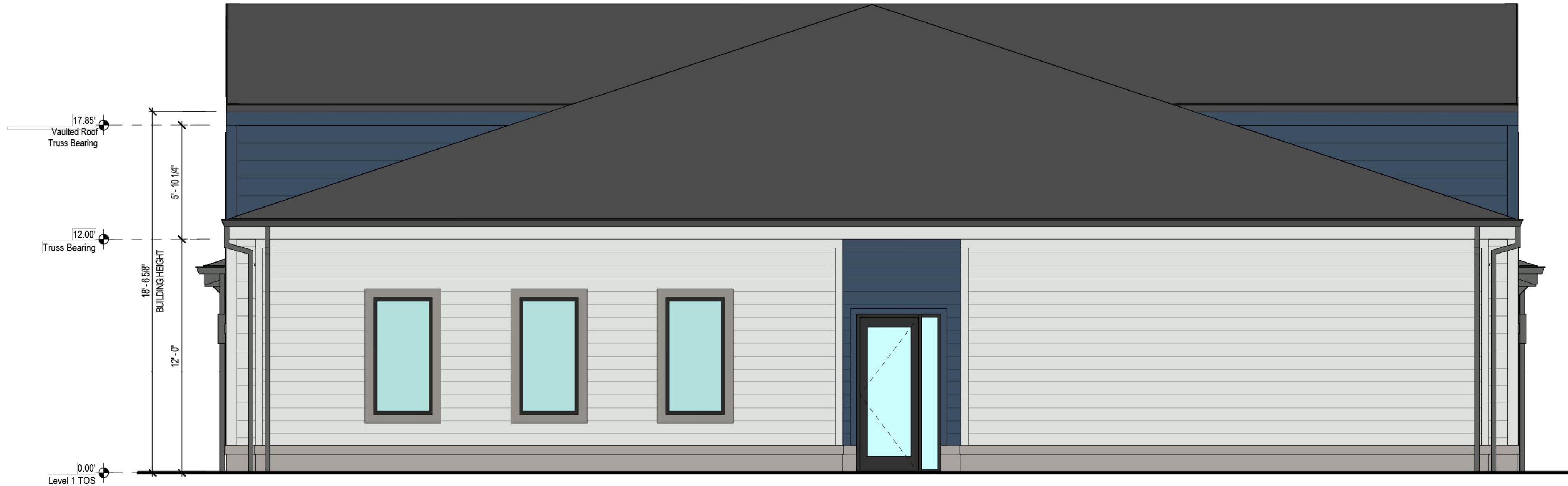
CONCEPTUAL BUILDING  
ELEVATIONS

**BCE**  
5438 WADE PARK BLVD, SUITE 420  
RALEIGH NC 27607  
WWW.BCEINC.COM  
NC LICENSE #C-4397

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DESIGNED BY:	CM	△		
DRAWN BY:	CM	△	04/04/2025	RESPONSE TO COMMENTS
REVIEWED BY:	RF	△	02/07/2025	RESPONSE TO COMMENTS
		△	08/02/2024	RESPONSE TO COMMENTS
			DATE	DESCRIPTION

G:\NCA\Projects\Wood Partners\13123-00 Jenks Road Multifamily03 - DWG\PlanSheets\On-Site\Planned Development Plan\C1-2 - CONCEPTUAL BLDG ELEV.dwg Layout: C1-3 Plotted: 4/4/2025 9:30:49 AM



AMENITY BUILDING WEST ELEVATION

NOT TO SCALE



AMENITY BUILDING EAST ELEVATION

NOT TO SCALE

Color selections are representative examples. Final colors selected may differ but will be materially consistent with options shown here.

<b>SCHEME 1</b>				<b>SCHEME 2</b>				<b>SCHEME 3</b>								
	SW 6165: Connected Gray	SW 7068: Grizzle Gray	SW 7004: Snowbound		SW 6150: Universal Khaki	SW 7625: Mount Etna	SW 6071: Popular Gray		SW 7672: Knitting Needles	SW 7602: Indigo Batik	SW 7070: Site White	BOARD & BATTEN VENEER	HORIZONTAL SIDING VENEER	ROOF SHINGLES	FIBER CEMENT PANEL & TRIM	



FILE NUMBER:

DATE: 06/03/2024

C1-3

WP EAST  
ACQUISITIONS, LLC.  
1414 RALEIGH ROAD, SUITE 429  
CHAPEL HILL, NC 27517

ALTERA HEIGHTS  
APEX, NORTH CAROLINA 27523-9423

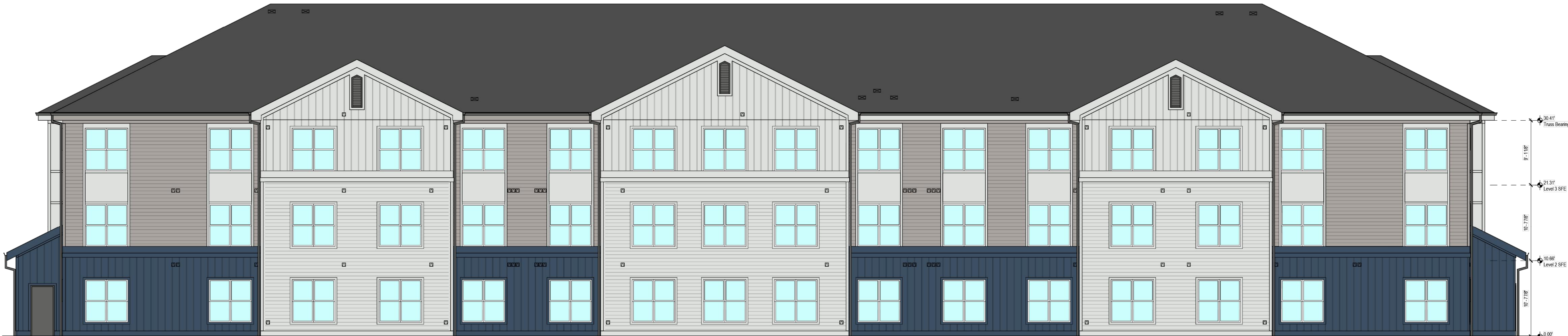
CONCEPTUAL BUILDING  
ELEVATIONS



DESIGNED BY:	CM	△ <sub>5</sub>			RESPONSE TO COMMENTS
DRAWN BY:	CM	△ <sub>4</sub>		04/04/2025	RESPONSE TO COMMENTS
REVIEWED BY:	RF	△ <sub>3</sub>		02/07/2025	RESPONSE TO COMMENTS
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		REV	DATE	DESCRIPTION	

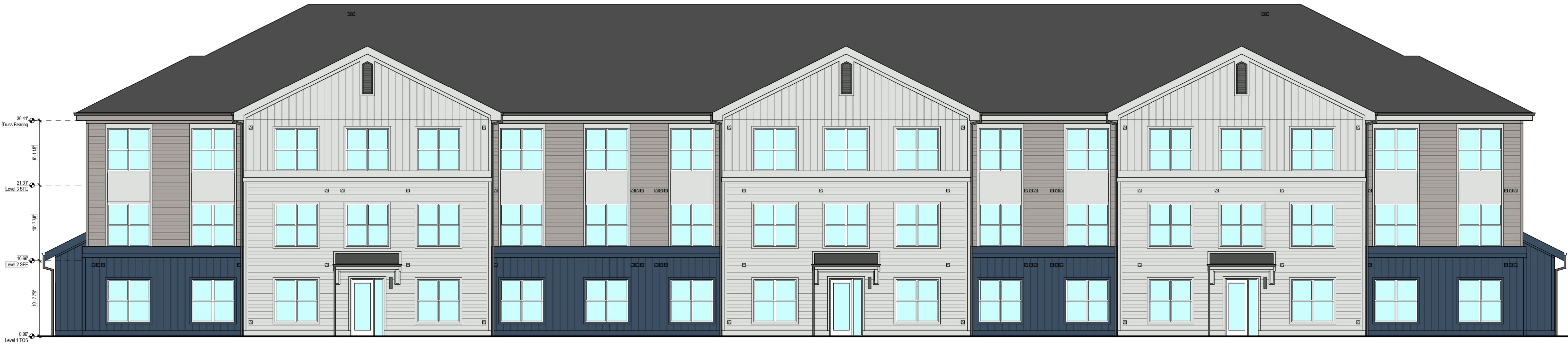


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RESIDENTIAL BUILDING TYPE B1 REAR ELEVATION - OPTION 2

NOT TO SCALE



RESIDENTIAL BUILDING TYPE B1 FRONT ELEVATION - OPTION 2

NOT TO SCALE

Color selections are representative examples. Final colors selected may differ but will be materially consistent with options shown here.

**SCHEME 1**

SW 6165: Connected Gray

SW 7068: Grizzle Gray

SW 7004: Snowbound

**SCHEME 2**

SW 6150: Universal Khaki

SW 7625: Mount Etna

SW 6071: Popular Gray

**SCHEME 3**

SW 7672: Knitting Needles

SW 7602: Indigo Batik

SW 7070: Site White

BOARD & BATTEN VENEER

HORIZONTAL SIDING VENEER

ROOF SHINGLES

FIBER CEMENT PANEL & TRIM

AXIOM ARCHITECTURE INTERIOR DESIGN

WOOD PARTNERS

		04/04/2025	RESPONSE TO COMMENTS	
		02/07/2025	RESPONSE TO COMMENTS	
		08/02/2024	RESPONSE TO COMMENTS	
		REV	DATE	DESCRIPTION
		DESIGNED BY:	CM	
		DRAWN BY:	CM	
		REVIEWED BY:	RF	
<div><div>BCE</div><div>5438 WADE PARK BLVD, SUITE 420 RALEIGH NC 27607 WWW.BCEINC.COM NC LICENSE #C-4397</div></div>				
WP EAST ACQUISITIONS, LLC. 1414 RALEIGH ROAD, SUITE 429 CHAPEL HILL, NC 27517				
ALTERA HEIGHTS APEX, NORTH CAROLINA 27523-9423				
CONCEPTUAL BUILDING ELEVATIONS				
<div><div>NORTH CAROLINA PROFESSIONAL ARCHITECT PRELIMINARY 03/2026 ENGINEER ADRIAN S. FISHER</div></div>				
FILE NUMBER:				
DATE: 06/03/2024				
C1-4				



G:\NCA\Projects\Wood Partners\13123-00 Jenks Road Multifamily03 - DWG\PlanSheets\On-Site\Planned Development Plan\C1-2 - CONCEPTUAL BLDG ELEV.dwg Layout: C1-5 Plotted: 4/4/2025 9:31:23 AM

NOT TO SCALE



**RESIDENTIAL BUILDING TYPE B1 EAST ELEVATION - OPTION 2**  
scale: 3/16" = 1'-0"

NOT TO SCALE



**RESIDENTIAL BUILDING TYPE B1 WEST ELEVATION - OPTION 2**  
scale: 3/16" = 1'-0"

NOT TO SCALE

Color selections are representative examples. Final colors selected may differ but will be materially consistent with options shown here.

<b>SCHEME 1</b>				
	SW 6185: Connected Gray	SW 7068: Grizzle Gray	SW 7004: Snowbound	
	<b>SCHEME 2</b>			
		SW 6150: Universal Khaki	SW 7625: Mount Elna	SW 6071: Popular Gray
<b>SCHEME 3</b>				
	SW 7672: Knitting Needles	SW 7602: Indigo Batik	SW 7070: Site White	

BOARD & BATTEN VENEER	HORIZONTAL SIDING VENEER	ROOF SHINGLES	FIBER CEMENT PANEL & TRIM	



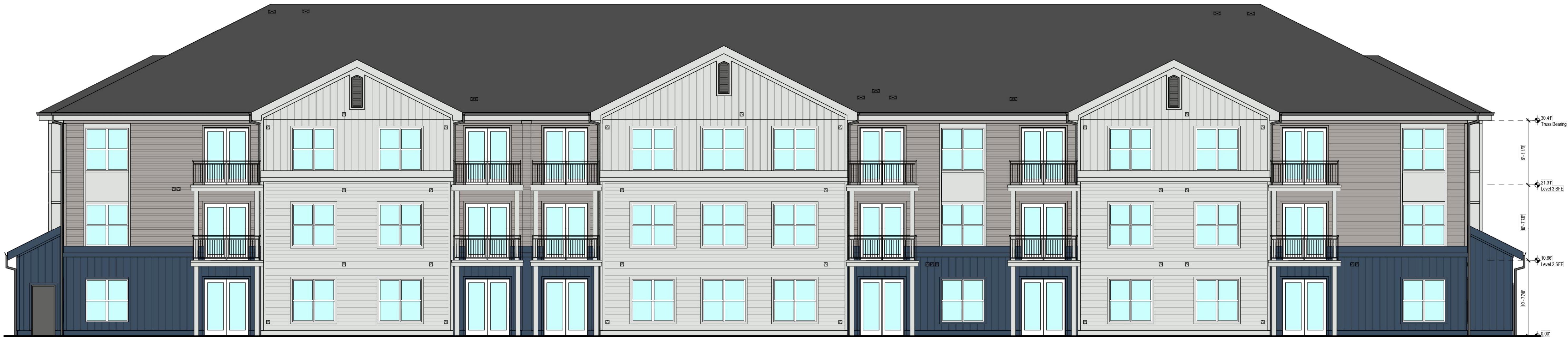
FILE NUMBER:  
DATE: 06/03/2024

C1-5

	5438 WADE PARK BLVD, SUITE 420 RALEIGH NC 27607 WWW.BCEINC.COM NC LICENSE #C-4397	WP EAST ACQUISITIONS, LLC. 1414 RALEIGH ROAD, SUITE 429 CHAPEL HILL, NC 27517	ALTERA HEIGHTS APEX, NORTH CAROLINA 27023-9423	CONCEPTUAL BUILDING ELEVATIONS		RESPONSE TO COMMENTS	04/04/2025	△
						RESPONSE TO COMMENTS	02/07/2025	△
						RESPONSE TO COMMENTS	08/02/2024	△
						DESCRIPTION	REV	DATE
DESIGNED BY:	CM	DRAWN BY:	CM	REVIEWED BY:	RF			

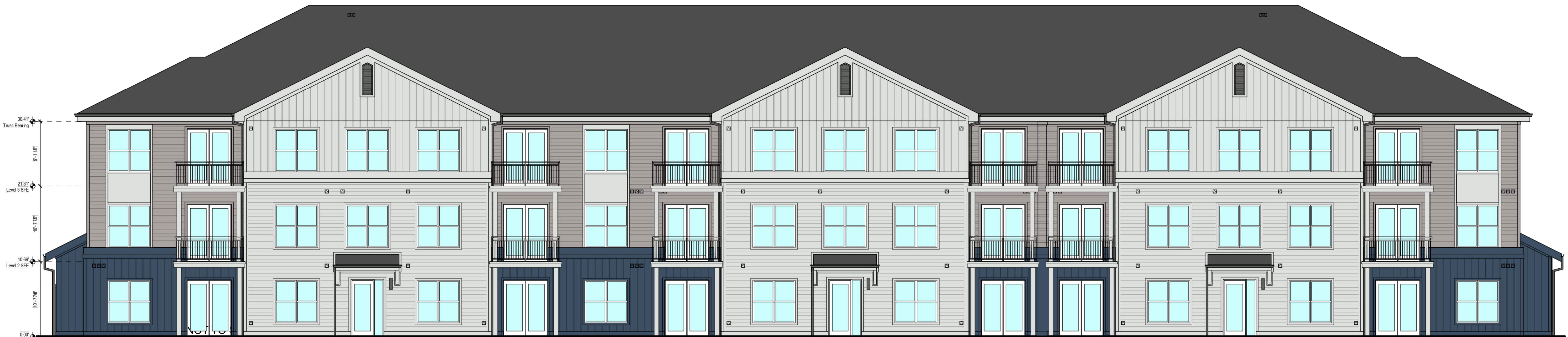


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**RESIDENTIAL BUILDING TYPE B1 W/ BALCONIES REAR ELEVATION - OPTION 2**

NOT TO SCALE



**RESIDENTIAL BUILDING TYPE B1 W/ BALCONIES FRONT ELEVATION - OPTION 2**

NOT TO SCALE

Color selections are representative examples. Final colors selected may differ but will be materially consistent with options shown here.

**SCHEME 1**

**SCHEME 2**

**SCHEME 3**



RESPONSE TO COMMENTS

04/04/2025

△

RESPONSE TO COMMENTS

02/07/2025

△

RESPONSE TO COMMENTS

08/02/2024

△

DESCRIPTION

DATE

REV

DESIGNED BY:

CM

DRAWN BY:

CM

REVIEWED BY:

RF

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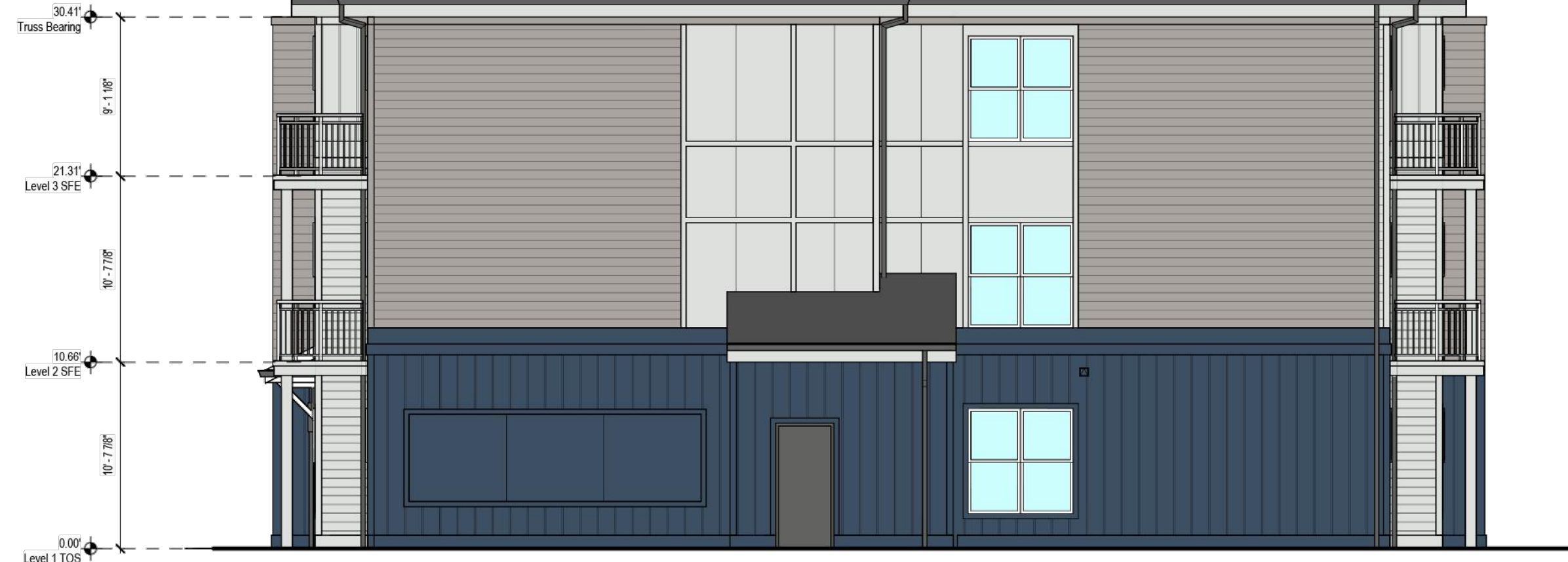
CONCEPTUAL BUILDING ELEVATIONS

FILE NUMBER:

DATE: 06/03/2024

C1-6





**RESIDENTIAL BUILDING TYPE B1 W/ BALCONIES EAST ELEVATION - OPTION 2**

NOT TO SCALE

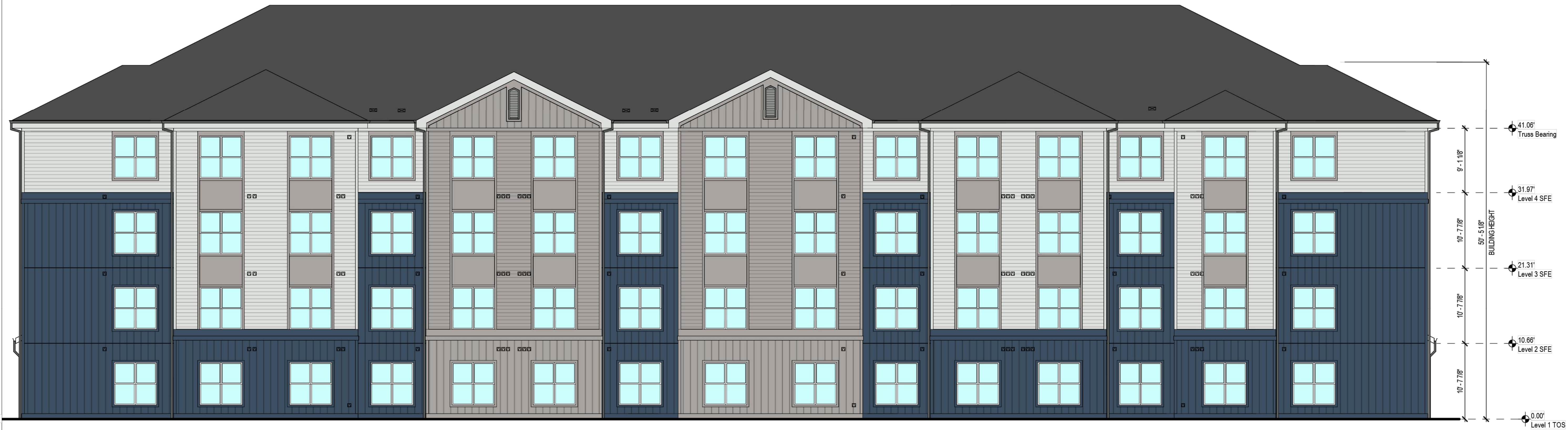
**RESIDENTIAL BUILDING TYPE B1 W/ BALCONIES WEST ELEVATION - OPTION 2**

NOT TO SCALE

*Color selections are representative examples. Final colors selected may differ but will be materially consistent with options shown here.*

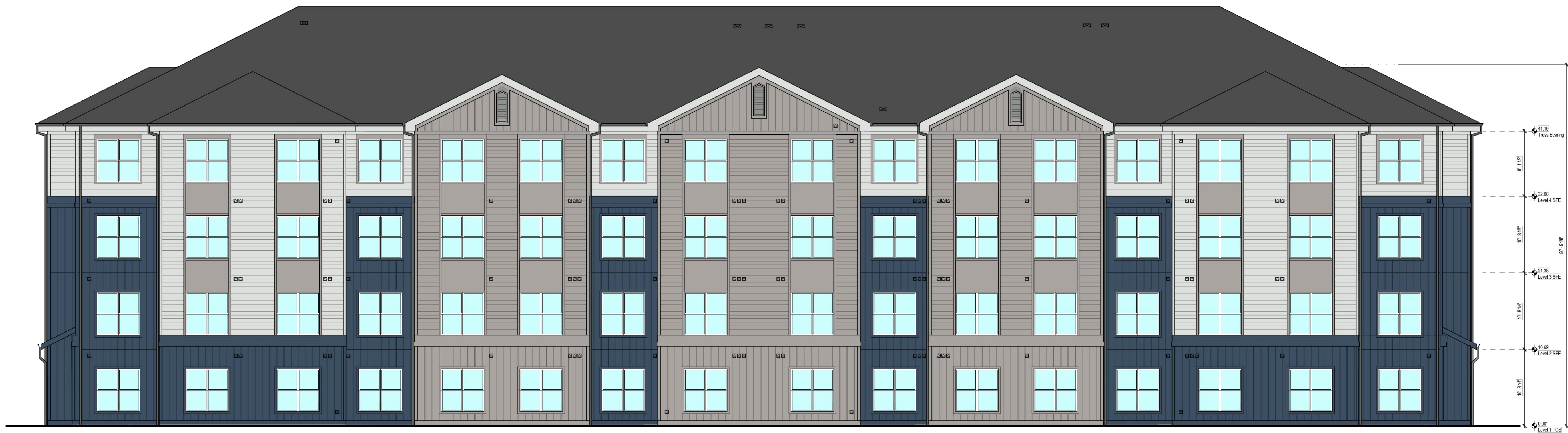


G:\NCA\Projects\Wood Partners\13123-00 Jenks Road Multifamily03 - DWG\PlanSheets\On-Site\Planned Development Plan\C1-2 - CONCEPTUAL BLDG ELEV.dwg Layout: C1-8 Plotted: 4/4/2025 9:32:14 AM



RESIDENTIAL BUILDING REAR ELEVATION - OPTION 1

NOT TO SCALE



RESIDENTIAL BUILDING FRONT ELEVATION - OPTION 1

NOT TO SCALE

Color selections are representative examples. Final colors selected may differ but will be materially consistent with options shown here.

<b>SCHEME 1</b>				<b>SCHEME 2</b>				<b>SCHEME 3</b>			
	SW 6165: Connected Gray	SW 7068: Grizzle Gray	SW 7004: Snowbound		SW 6150: Universal Khaki	SW 7625: Mount Etna	SW 6071: Popular Gray		SW 7672: Knitting Needles	SW 7602: Indigo Batik	SW 7070: Site White

				
BOARD & BATTEN VENEER	HORIZONTAL SIDING VENEER	ROOF SHINGLES	FIBER CEMENT PANEL & TRIM	



REV	DATE	DESCRIPTION
04/04/2025	02/07/2025	RESPONSE TO COMMENTS
08/02/2024		RESPONSE TO COMMENTS

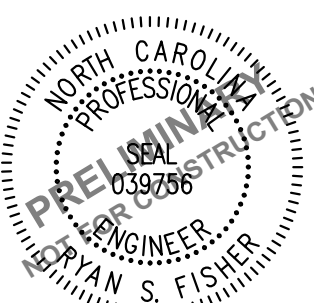
DESIGNED BY: CM  
DRAWN BY: CM  
REVIEWED BY: RF

**BCE**  
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WP EAST  
ACQUISITIONS, LLC.  
1414 RALEIGH ROAD, SUITE 429  
CHAPEL HILL, NC 27517

ALTERA HEIGHTS  
APEX, NORTH CAROLINA 27523-9423

CONCEPTUAL BUILDING  
ELEVATIONS

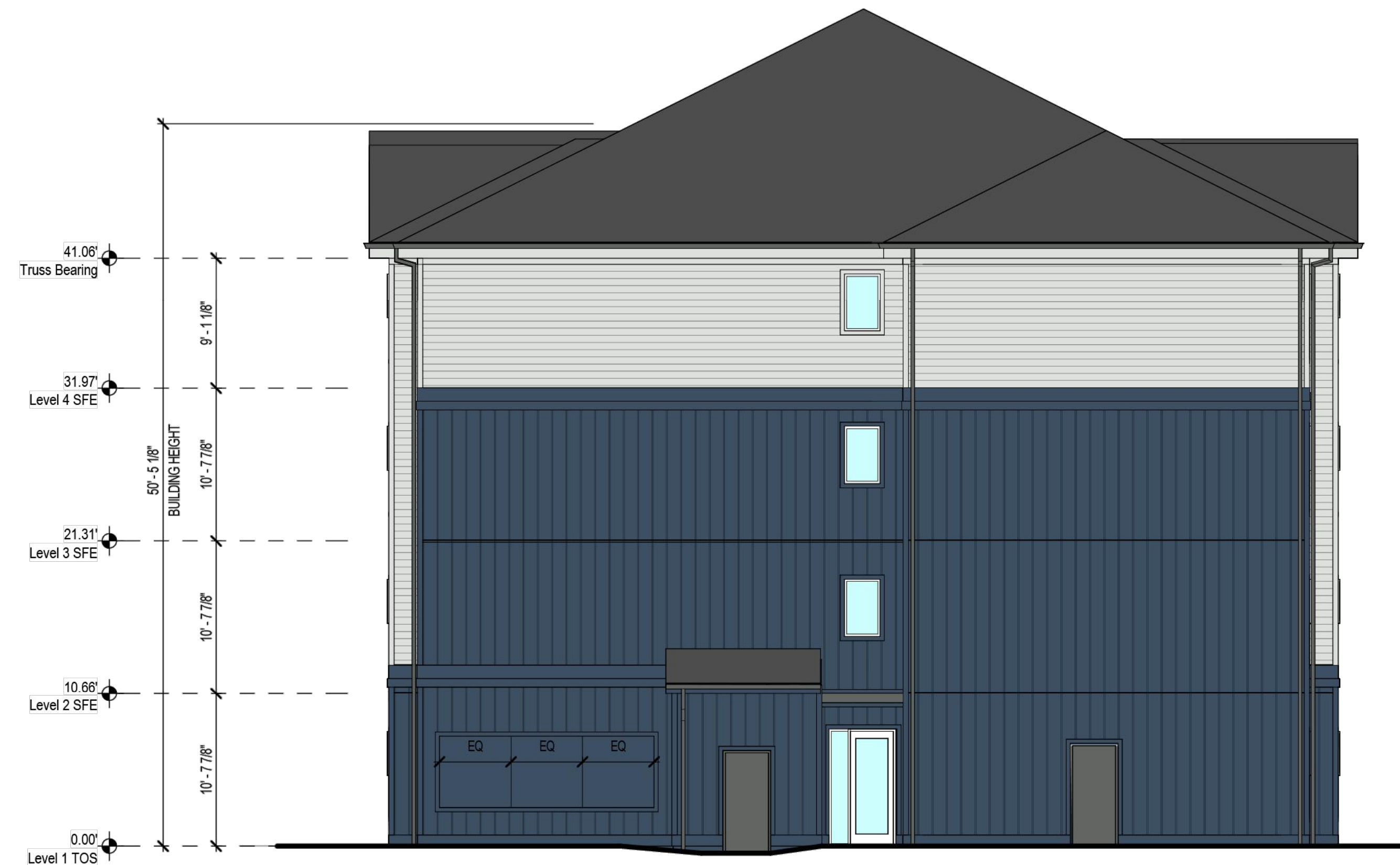


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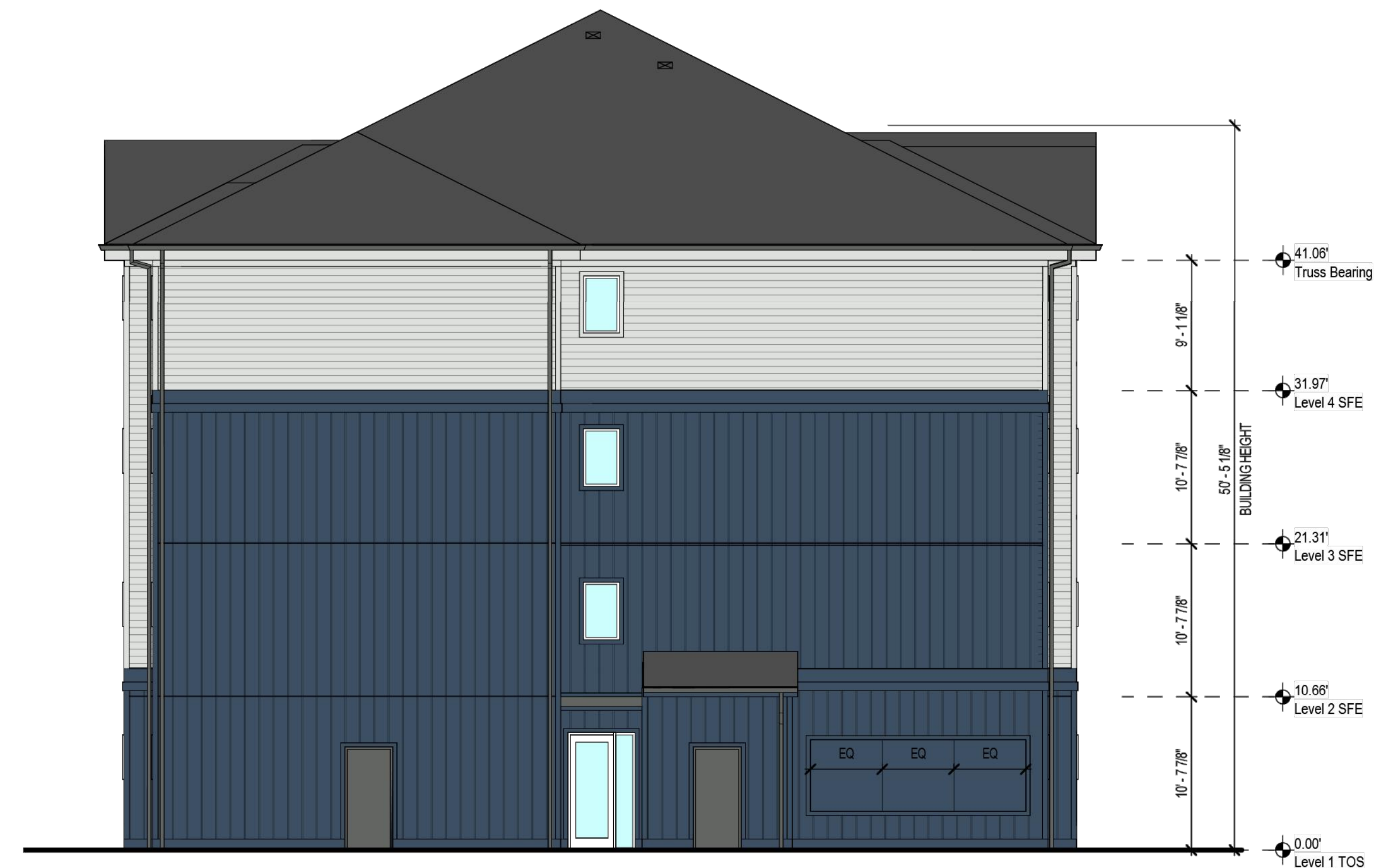
C1-8





### RESIDENTIAL BUILDING EAST ELEVATION - OPTION 1

NOT TO SCALE



### RESIDENTIAL BUILDING WEST ELEVATION - OPTION 1

NOT TO SCALE



### RESIDENTIAL BUILDING EAST ELEVATION - OPTION 2

NOT TO SCALE



### RESIDENTIAL BUILDING WEST ELEVATION - OPTION 2

NOT TO SCALE

*Color selections are representative examples. Final colors selected may differ but will be materially consistent with options shown here.*

**SCHEME 1**

- SW 6165: Connected Gray
- SW 7068: Grizzle Gray
- SW 7004: Snowbound

**SCHEME 2**

- SW 6150: Universal Khaki
- SW 7625: Mount Etna
- SW 6071: Popular Gray

**SCHEME 3**

- SW 7672: Knitting Needles
- SW 7602: Indigo Batik
- SW 7070: Site White

BOARD & BATTEN VENEER

HORIZONTAL SIDING VENEER

ROOF SHINGLES

FIBER CEMENT PANEL & TRIM



FILE NUMBER:

TE: 06/03/2024

C1-9

G:\INCA\Projects\Wood Partners\13123-00 Jerks Road Multifamily\03 - DWG\PlanSheets\On-Site\Planned Development Plan\C1-2 - CONCEPTUAL BLDG ELEV.dwg Layout: C1-9 Plotted: 4/4/2025 9:34:54 AM

REVIEWED BY:	RF		
DRAWN BY:	CM		
SIGNED BY:	CM		
		04/04/2025	RESPONSE TO COMMENTS
		02/07/2025	RESPONSE TO COMMENTS
		08/02/2024	RESPONSE TO COMMENTS
		REV	DATE DESCRIPTION

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ACQUISITIONS, LLC.**

1414 RALEIGH ROAD, SUITE 429  
CHAPEL HILL, NC 27517

**ALTERA HEIGHTS**  
APEX, NORTH CAROLINA 27523-9423

# CONCEPTUAL BUILDING ELEVATIONS



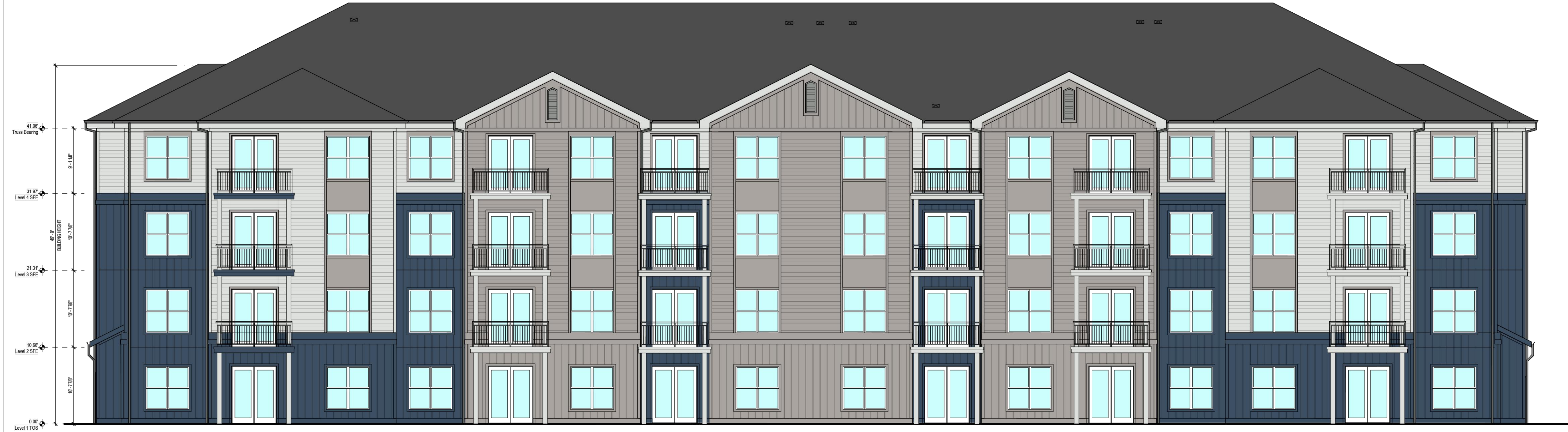
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C1-9



G:\NCA\Projects\Wood Partners\13123-00 Jenks Road Multifamily03 - DWG\PlanSheets\On-Site\Planned Development Plan\C1-2 - CONCEPTUAL BLDG ELEV.dwg Layout: C1-10 Plotted: 4/4/2025 9:35:18 AM



Color selections are representative examples. Final colors selected may differ but will be materially consistent with options shown here.

**SCHEME 1**

- SW 6185: Connected Gray
- SW 7068: Grizzle Gray
- SW 7004: Snowbound

**SCHEME 2**

- SW 6150: Universal Khaki
- SW 7625: Mount Etna
- SW 6071: Popular Gray

**SCHEME 3**

- SW 7672: Knitting Needles
- SW 7602: Indigo Batik
- SW 7070: Site White

BOARD & BATTEN VENEER

HORIZONTAL SIDING VENEER

ROOF SHINGLES

FIBER CEMENT PANEL & TRIM



### RESIDENTIAL BUILDING REAR ELEVATION - OPTION 2

NOT TO SCALE

### RESIDENTIAL BUILDING FRONT ELEVATION - OPTION 2

NOT TO SCALE

04/04/2025	RESPONSE TO COMMENTS	DATE	DESCRIPTION
02/07/2025	RESPONSE TO COMMENTS	REV	
08/02/2024	RESPONSE TO COMMENTS	REV	
DESIGNED BY: CM			
DRAWN BY: CM			
REVIEWED BY: RF			
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WP EAST ACQUISITIONS, LLC. 1414 RALEIGH ROAD, SUITE 429 CHAPEL HILL, NC 27517			
ALTERA HEIGHTS APEX, NORTH CAROLINA 27023-9423			
CONCEPTUAL BUILDING ELEVATIONS			
FILE NUMBER:			
DATE: 06/03/2024			
C1-10			



G:\NCA\Projects\Wood Partners\13123-00 Jenkins Road Multifamily\03 - DWG\PlanSheets\On-Site\Planned Development Plan\C1-2 - CONCEPTUAL BLDG ELEV.dwg Layout: C1-11 Plotted: 4/4/2025 9:35:34 AM



RESIDENTIAL BUILDING EAST ELEVATION - OPTION 3

NOT TO SCALE



RESIDENTIAL BUILDING WEST ELEVATION - OPTION 3

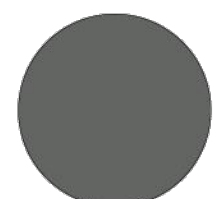
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Color selections are representative examples. Final colors selected may differ but will be materially consistent with options shown here.

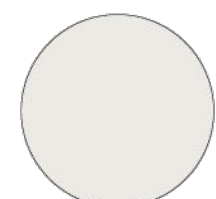
SCHEME 1



SW 6185:  
Connected Gray

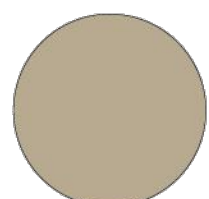


SW 7068:  
Grizzle Gray



SW 7004:  
Snowbound

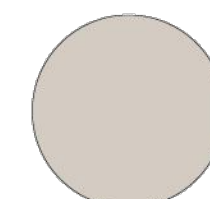
SCHEME 2



SW 6150:  
Universal Khaki

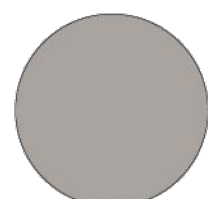


SW 7625:  
Mount Etna



SW 6071:  
Popular Gray

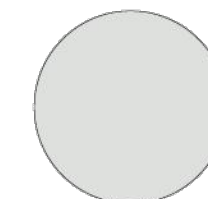
SCHEME 3



SW 7672:  
Knitting Needles



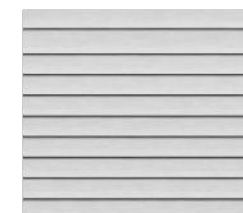
SW 7802:  
Indigo Batik



SW 7070: Site  
White



BOARD & BATTEN  
VENEER



HORIZONTAL  
SIDING VENEER



ROOF SHINGLES



FIBER CEMENT  
PANEL & TRIM



AXIOM  
ARCHITECTURE  
INTERIOR DESIGN

WOOD  
PARTNERS

FILE NUMBER:

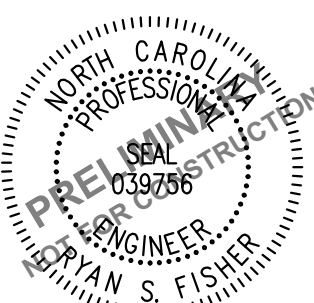
DATE: 06/03/2024

C1-11

WP EAST  
ACQUISITIONS, LLC.  
1414 RALEIGH ROAD, SUITE 429  
CHAPEL HILL, NC 27517

ALTERA HEIGHTS  
APEX, NORTH CAROLINA 27623-9423

CONCEPTUAL BUILDING  
ELEVATIONS



BCE  
5438 WADE PARK BLVD, SUITE 420  
RALEIGH NC 27607  
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DESIGNED BY: CM  
DRAWN BY: CM  
REVIEWED BY: RF

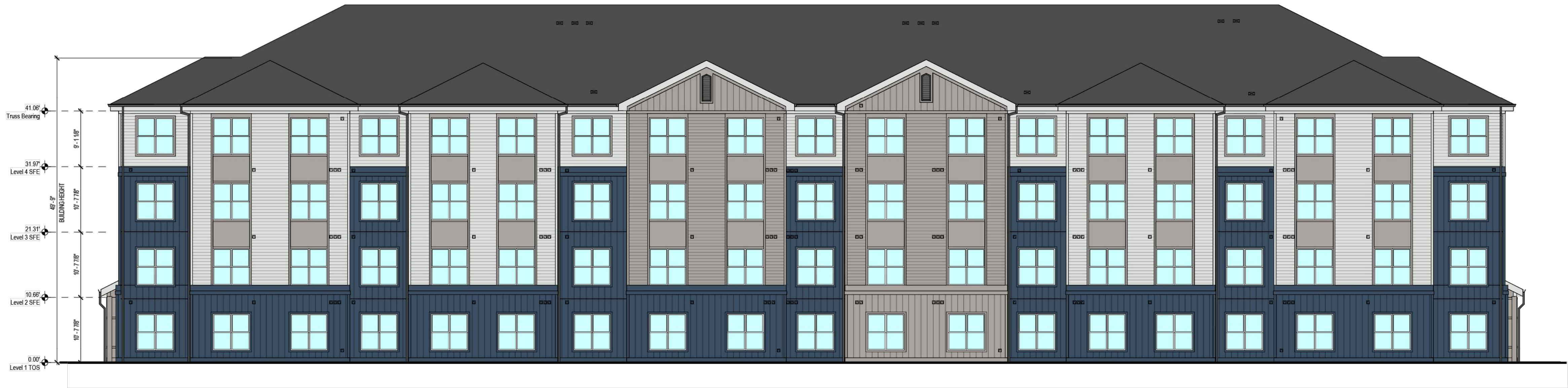
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△	04/04/2025	RESPONSE TO COMMENTS



G:\NCA\Projects\Wood Partners\13123-00 Jenkins Road Multifamily03 - DWG\PlanSheets\On-Site\Planned Development Plan\C1-12 - CONCEPTUAL BLDG ELEV.dwg Layout: C1-12 Plotted: 4/4/2025 9:36:54 AM



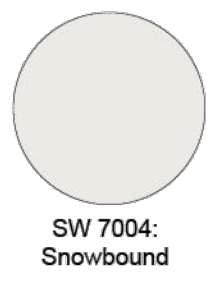
**RESIDENTIAL BUILDING TYPE D2 REAR ELEVATION**  
NOT TO SCALE



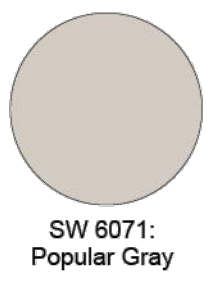
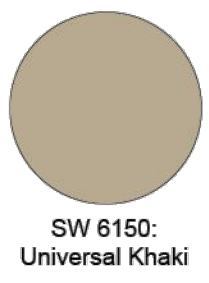
**RESIDENTIAL BUILDING TYPE D2 FRONT ELEVATION**  
NOT TO SCALE

Color selections are representative examples. Final colors selected may differ but will be materially consistent with options shown here.

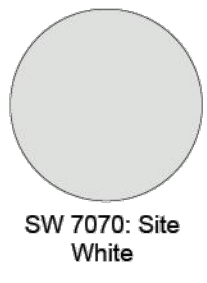
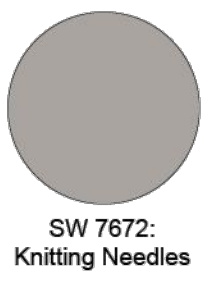
**SCHEME 1**



**SCHEME 2**



**SCHEME 3**



FILE NUMBER:

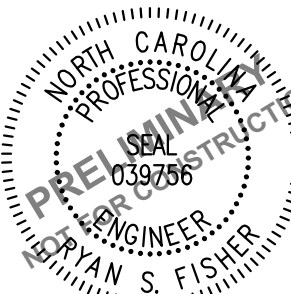
DATE: 06/03/2024

C1-12

WP EAST  
ACQUISITIONS, LLC.  
1414 RALEIGH ROAD, SUITE 429  
CHAPEL HILL, NC 27517

ALTERA HEIGHTS  
APEX, NORTH CAROLINA 27523-9423

CONCEPTUAL BUILDING  
ELEVATIONS



DESIGNED BY:	CM	
DRAWN BY:	CM	
REVIEWED BY:	RF	
△ <sub>5</sub>	04/04/2025	RESPONSE TO COMMENTS
△ <sub>4</sub>		
△ <sub>3</sub>	02/07/2025	RESPONSE TO COMMENTS
△ <sub>2</sub>		
△ <sub>1</sub>	08/02/2024	RESPONSE TO COMMENTS

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**RESIDENTIAL BUILDING TYPE D2 EAST ELEVATION**

NOT TO SCALE



**RESIDENTIAL BUILDING TYPE D2 WEST ELEVATION**

NOT TO SCALE

Color selections are representative examples. Final colors selected may differ but will be materially consistent with options shown here.

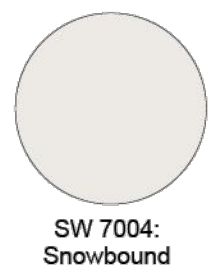
**SCHEME 1**



SW 6166:  
Connected Gray

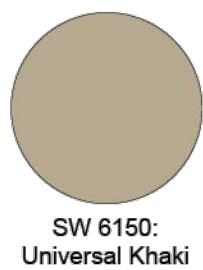


SW 7068:  
Grizzle Gray



SW 7004:  
Snowbound

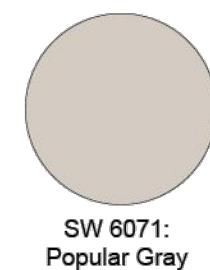
**SCHEME 2**



SW 6150:  
Universal Khaki

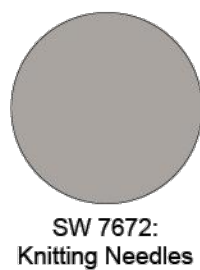


SW 7625:  
Mount Etna



SW 6071:  
Popular Gray

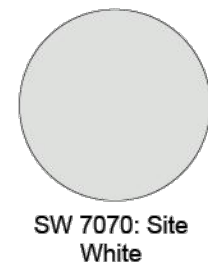
**SCHEME 3**



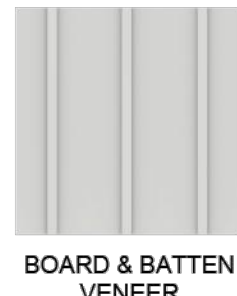
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SW 7602:  
Indigo Batik



SW 7070: Site  
White



BOARD & BATTEN  
VENEER



HORIZONTAL  
SIDING VENEER



ROOF SHINGLES



FIBER CEMENT  
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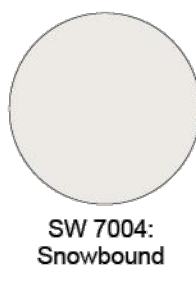


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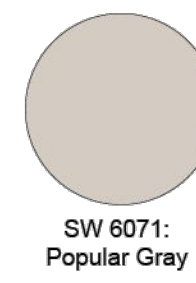
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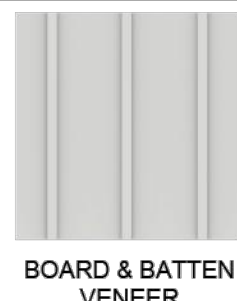
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**SCHEME 2**



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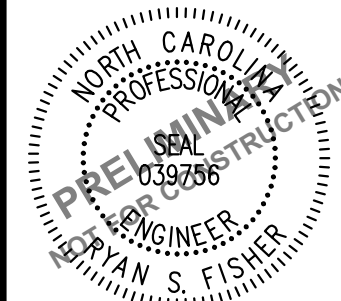
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ELEVATIONS



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DRAWN BY:	CM	02/07/2025	RESPONSE TO COMMENTS
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RESIDENTIAL BUILDING TYPE D2 W/ BALCONIES WEST ELEVATION

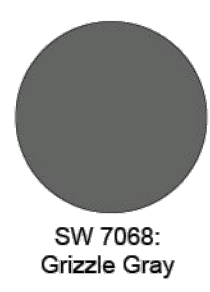
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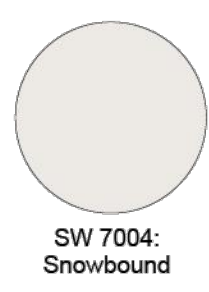
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SW 7004:  
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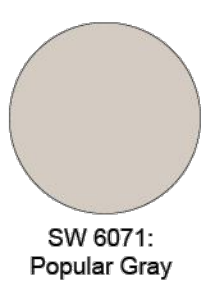
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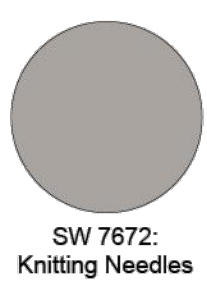


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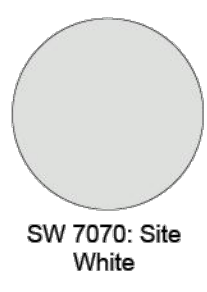
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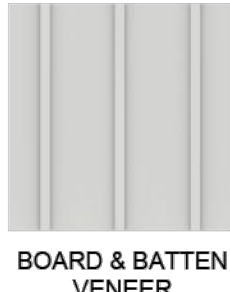
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Knitting Needles



SW 7602:  
Indigo Batik



SW 7070: Site  
White



BOARD & BATTEN  
VENEER



HORIZONTAL  
SIDING VENEER



ROOF SHINGLES



FIBER CEMENT  
PANEL & TRIM



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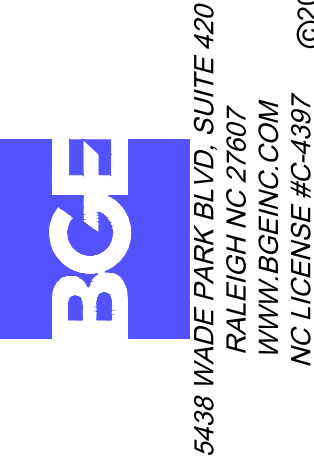
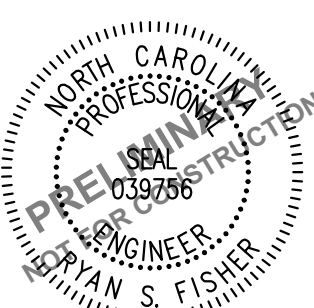
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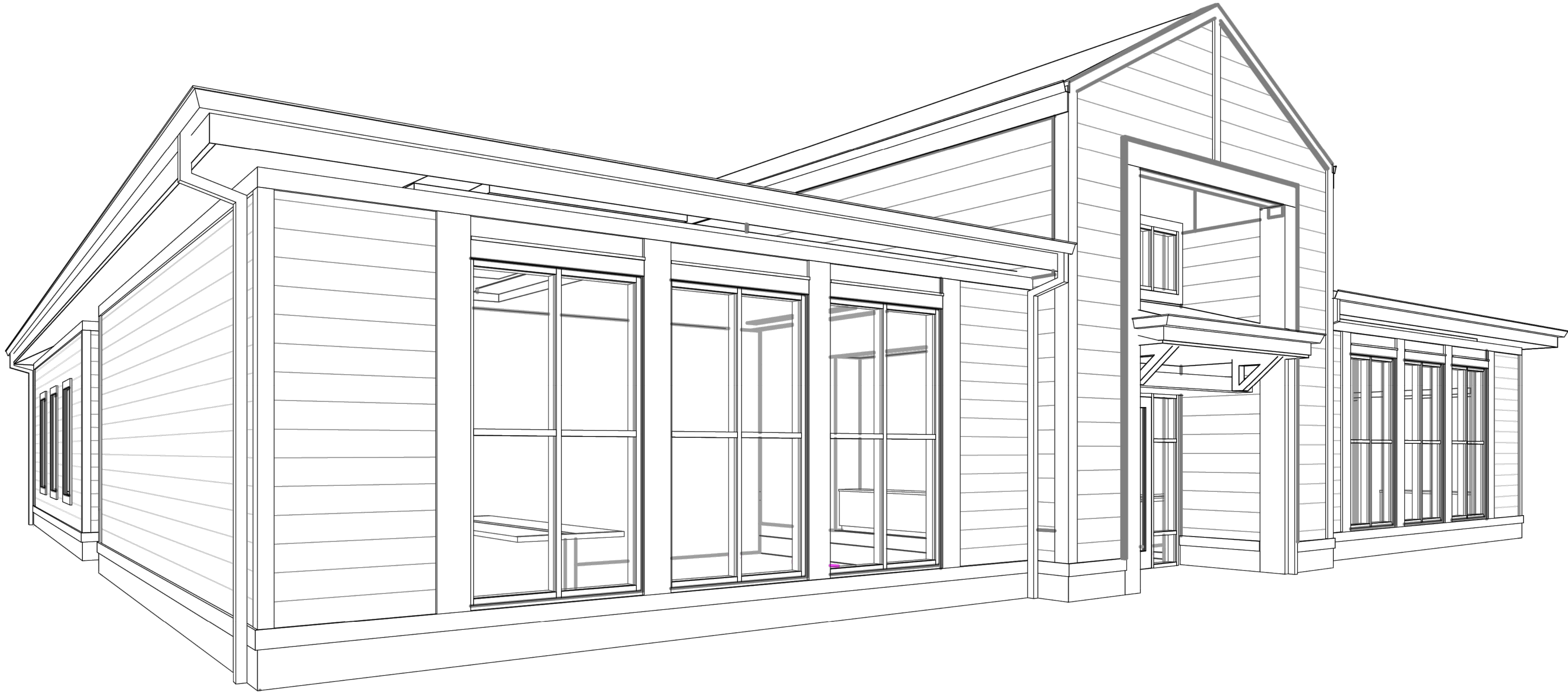


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Traffic Impact Analysis

# Jenks at Wimberly Residential

Apex, NC

Prepared for:  
Wood Partners

**Kimley»Horn**

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Traffic Impact Analysis for

# Jenks at Wimberly Residential

Apex, North Carolina

Prepared for:

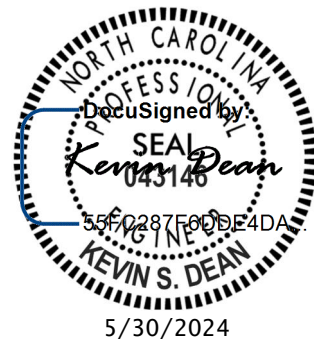
## Wood Partners

Raleigh, North Carolina

Prepared by:

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May 2024  
012095049



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## Executive Summary

Kimley-Horn and Associates has prepared a Traffic Impact Analysis (TIA) for the proposed Jenks at Wimberly Residential development, which will be located generally northwest of the Jenks Road – Wimberly Road intersection in Apex, North Carolina. As currently envisioned the project is expected to include approximately 300 mid-rise multifamily dwelling units and accessed via driveways along Wimberly Road, and project build-out is anticipated in 2027.

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 (2024) traffic condition, the projected (2027) background traffic condition, and the projected (2027) build-out traffic condition.

## Study Intersections

The study area for this development included the following intersections:

- US 64 Business Westbound at Jenks Road
- US 64 Business Eastbound at U-Turn West of Jenks Road
- Jenks Road at Wimberly Road
- Wimberly Road at White Oak Pond Road/North Site Driveway
- Wimberly Road at Retreat at Preserve at White Oak Driveway/South Site Driveway

## Existing Traffic Data

Weekday AM (7:00 to 9:00 AM) and PM (4:00 to 6:00 PM) peak hour turning movement counts were collected at the existing study intersections in April 2024 while Wake County Public Schools were in session.

## Future No-Build Traffic Volumes

To calculate projected (2027) background traffic volumes, a 2% annual growth rate was applied to the existing traffic up to the study year 2027 and site traffic from seven developments in the study area was included in this analysis as background traffic.

## Trip Generation

The traffic generation potential of the proposed development was determined using the traffic generation data published in the ITE *Trip Generation Manual*. As shown in [Table ES-1](#), the development has the potential to generate 1,386 new trips on a typical weekday, with 120 trips during the AM peak hour and 117 trips during the PM peak hour.

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 Housing (Mid-Rise)	300	d.u.	28	92	71	46



### Capacity Analyses

Capacity analyses were performed using Synchro Version 12 software. Table ES-2 summarizes the operation of the study intersections for the AM and PM peak hour traffic conditions. Note that minor-street approach delays were reported from SimTraffic per NCDOT guidance at the RCI left-over (US 64 WB @ Jenks Road) and for consistency at other study intersections/scenarios.

<b>Table ES-2 Level-of-Service Summary</b>		
<b>Condition</b>	<b>AM Peak-Hour LOS (Delay)</b>	<b>PM Peak-Hour LOS (Delay)</b>
<b>US 64 Business Westbound at Jenks Road</b>		
Existing (2024) Traffic – Unsignalized	SB – B (12.4) EBL – C (16.0)	SB – D (32.5) EBL – C (21.3)
Projected (2027) Background Traffic – Signalized by Others	D (45.1)	D (36.1)
Projected (2027) Build-out Traffic – Signalized by Others	D (54.6)	D (39.2)
<b>US 64 Business Eastbound at U-Turn West of Jenks Road</b>		
Existing (2024) Traffic – Unsignalized	WBU – C (21.9)	WBU – C (16.6)
Projected (2027) Background Traffic – Signalized by Others	B (18.2)	B (17.5)
Projected (2027) Build-out Traffic – Signalized by Others	C (20.8)	B (18.5)
<b>Jenks Road at Wimberly Road (Unsignalized)</b>		
Existing (2024) Traffic	NB – A (3.6) SB – A (4.0)	NB – A (4.6) SB – A (5.1)
Projected (2027) Background Traffic	NB – A (5.3) SB – A (7.1)	NB – A (6.4) SB – A (9.5)
Projected (2027) Build-out Traffic	NB – A (6.2) SB – A (9.9)	NB – A (8.4) SB – C (15.6)
<b>Wimberly Road at White Oak Pond Road/North Site Driveway (Unsignalized)</b>		
Existing (2024) Traffic	SB – A (4.1)	SB – A (6.4)
Projected (2027) Background Traffic	SB – A (4.6)	SB – A (7.2)
Projected (2027) Build-out Traffic	NB – A (4.0) SB – A (5.0)	NB – A (7.3) SB – A (7.2)
<b>Wimberly Road at Retreat at Preserve Driveway/South Site Driveway (Unsignalized)</b>		
Projected (2027) Background Traffic	WB – A (6.1)	WB – A (5.5)
Projected (2027) Build-out Traffic	EB – A (4.3) WB – A (6.6)	EB – A (7.1) WB – A (6.6)

**Improvements****Background Improvements by Others**

The following improvements are committed as part of other projects in the study area:

US 64 Business Westbound at Jenks Road (by Sweetwater Commercial):

- Install a traffic signal

US 64 Business at U-Turn West of Jenks Road (by Sweetwater Commercial):

- Install a traffic signal

Wimberly Road at Retreat at Preserve Driveway (by Retreat at Preserve at White Oak):

- Construct the Retreat at Preserve Driveway with one ingress lane and one egress lane

While the traffic signals along US 64 Business have been installed, those were not activated at the time of the traffic counts and therefore were only included in the future conditions.

**Recommended Improvements by Development**

The following improvements are recommended as part of the Jenks at Wimberly Residential development:

Wimberly Road at White Oak Pond Road/North Site Driveway:

- Construct the North Site Driveway with one ingress lane and one egress lane

Wimberly Road at Retreat at Preserve Driveway/South Site Driveway:

- Construct the South Site Driveway with one ingress lane and one egress lane
- Construct an exclusive northbound left-turn lane on Wimberly Road with 50 feet of storage and appropriate tapers

**Figures ES-1** shows the committed and recommended roadway laneage at project build-out.

**Conclusions**

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 with only relatively minimal impacts associated with the addition of project site traffic. Further, preliminary traffic signal warrant analyses indicate that projected traffic volumes are unlikely to meet MUTCD volume-based traffic signal warrant thresholds at the intersection of Jenks Road at Wimberly Road. Therefore, no additional improvements are recommended to be performed as part of this project.

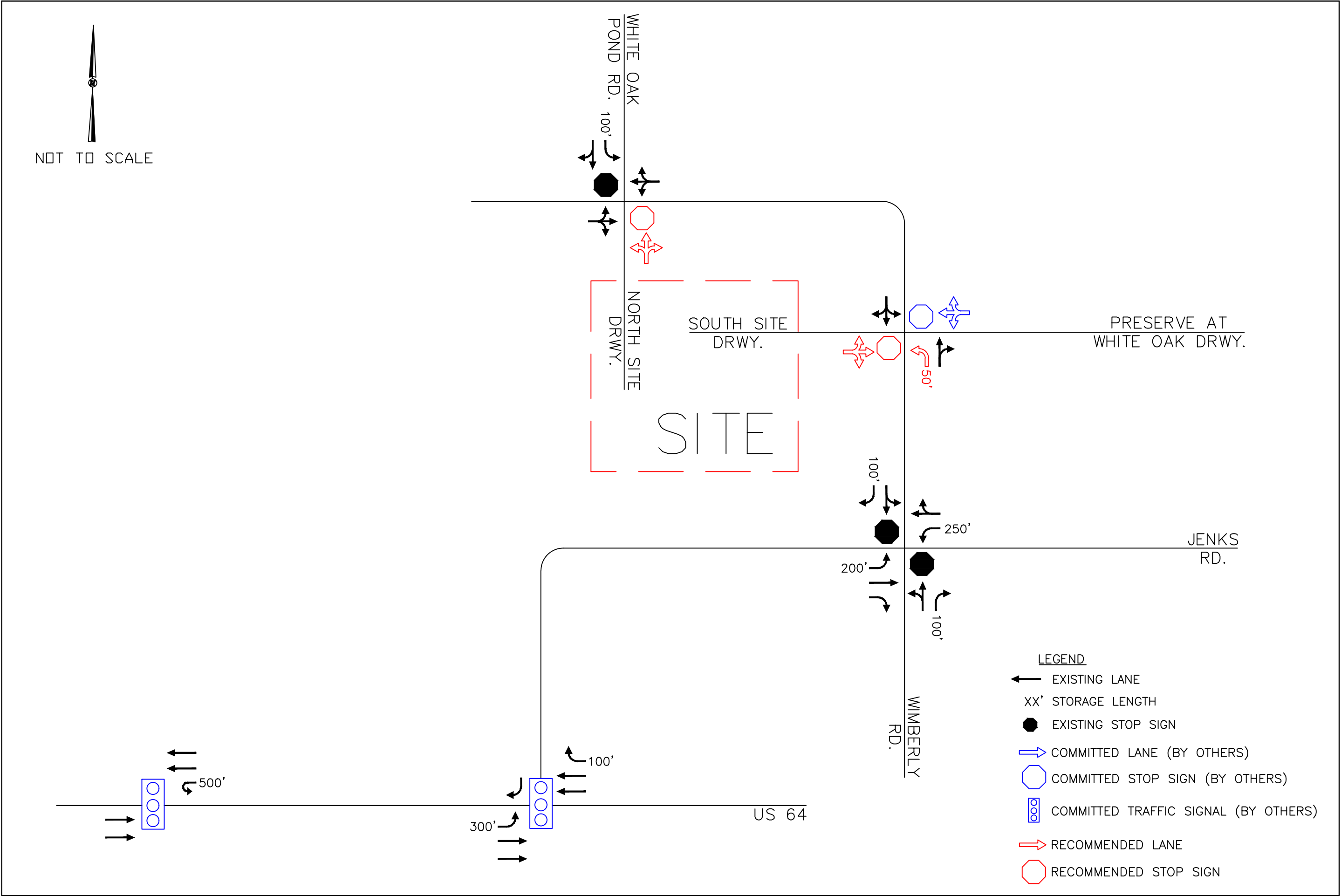


FIGURE  
ES-1

COMMITTED AND RECOMMENDED  
ROADWAY LANEAGE

JENKS AT WIMBERLY RESIDENTIAL  
APEX, NC  
TRAFFIC IMPACT ANALYSIS



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## **1.0 Introduction**

Kimley-Horn and Associates has prepared a Traffic Impact Analysis (TIA) for the proposed Jenks at Wimberly Residential development, which will be located generally northwest of the Jenks Road – Wimberly Road intersection in Apex, North Carolina. As currently envisioned the project is expected to include approximately 300 mid-rise multifamily dwelling units and accessed via driveways along Wimberly Road, and project build-out is anticipated in 2027.

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 (2024) traffic condition, the projected (2027) background traffic condition, and the projected (2027) build-out traffic condition.

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 approved 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:

- US 64 Business Westbound at Jenks Road
- US 64 Business Eastbound at U-Turn West of Jenks Road
- Jenks Road at Wimberly Road
- Wimberly Road at White Oak Pond Road/North Site Driveway
- Wimberly Road at Retreat at Preserve at White Oak Driveway/South Site Driveway

This site location is shown on **Figure 2.1**, and the conceptual site plan is shown on **Figure 2.2**.

### 2.2 Existing Conditions

The proposed development is located generally northwest of the Jenks Road – Wimberly Road intersection. Roadway network elements (speed limit, estimated average daily traffic volume, existing configuration, and Town of Apex Thoroughfare and Collector Street Plan designation) of study area roadways are summarized in Table 2.1.

<b>Table 2.1</b> <b>Roadway Network Summary</b>				
<b>Roadway</b>	<b>Speed Limit</b>	<b>Estimated ADT Volume</b>	<b>Typical Existing Configuration</b>	<b>Future Section per Thoroughfare &amp; Collector Street Plan</b>
US 64 Business	55 mph	15,500 vpd east of Jenks Road	4-Lane Divided	6-Lane Freeway
Jenks Road	45 mph	3,400 vpd north of US 64 Business	3-Lane Undivided	East of Wimberly: 3-Lane Undivided Thoroughfare West of Wimberly: 4-Lane Med. Divided Thoroughfare
Wimberly Road	45 mph	2,200 vpd north of Jenks Road	2-Lane Undivided	2-Lane Thoroughfare

**Figure 2.3** shows the existing study intersection laneage.







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# JENKS ROAD

APEX, NORTH CAROLINA



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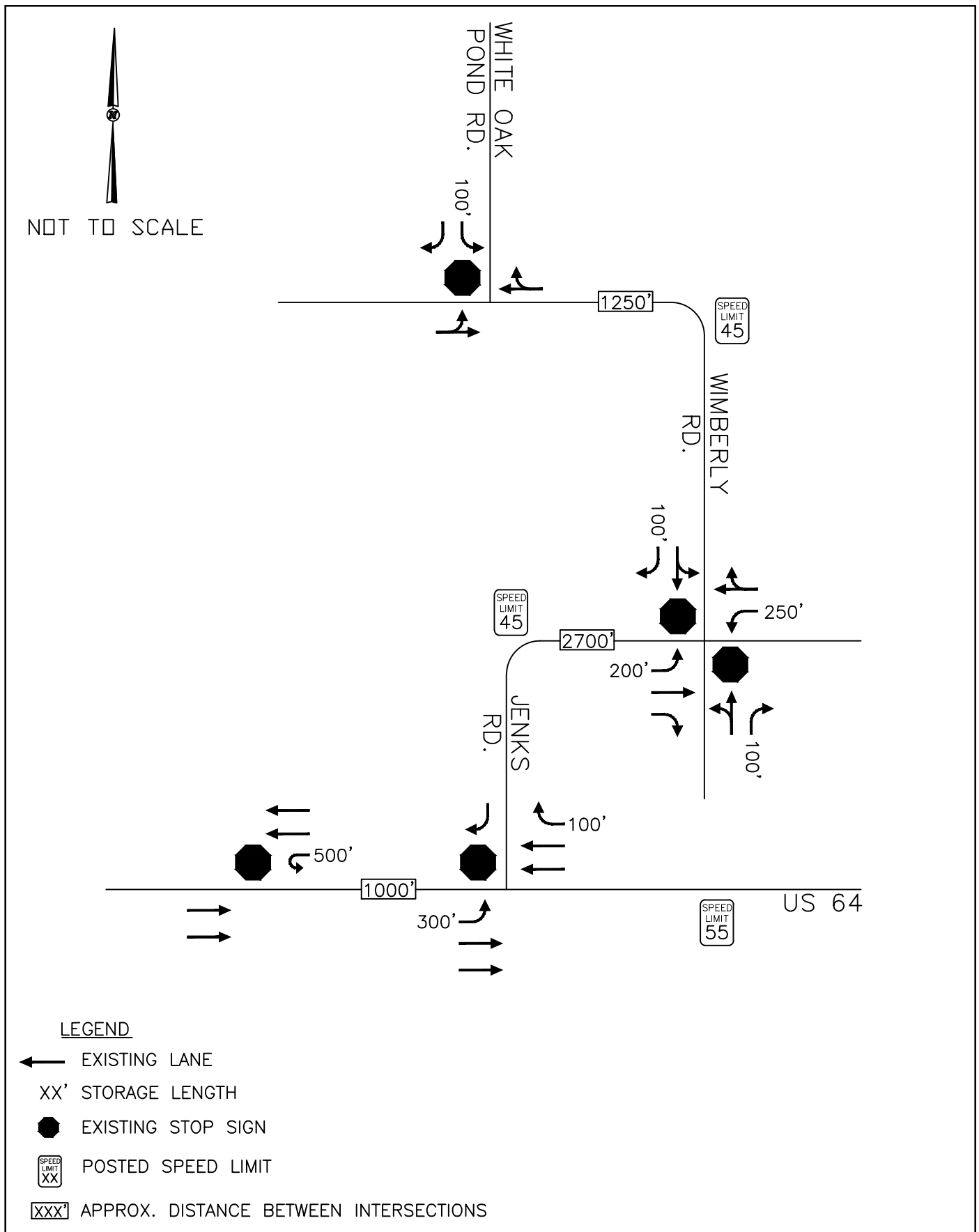
JENKS AT WIMBERLY RESIDENTIAL  
APEX, NC  
TRAFFIC IMPACT ANALYSIS

CONCEPTUAL SITE PLAN

FIGURE  
2.2

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### 3.0 Traffic Generation

The traffic generation potential of the proposed development was determined using the traffic generation data published in *Trip Generation* (Institute of Transportation Engineers, Eleventh Edition, 2021). As currently envisioned, the development is expected to include approximately 300 mid-rise multifamily dwelling units.

As shown in [Table 3.1](#), the development has the potential to generate 1,386 new trips on a typical weekday, with 120 new trips during the AM peak hour and 117 new trips during the PM peak hour.

Table 3.1 ITE Traffic Generation (Vehicles)							
Land Use Code	Land Use	Intensity		AM Peak Hour		PM Peak Hour	
				In	Out	In	Out
221	Multifamily Housing (Mid-Rise)	300	d.u.	28	92	71	46

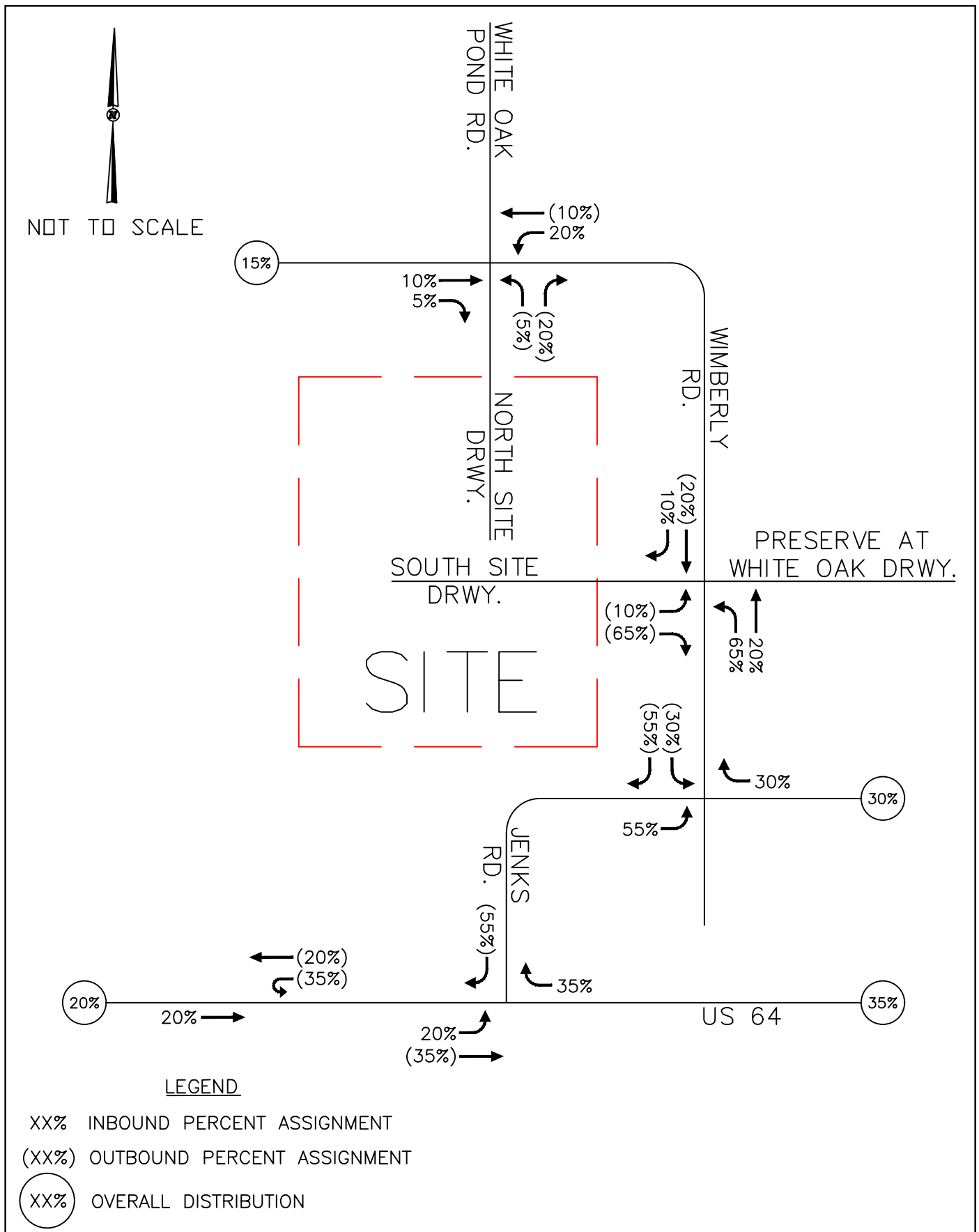
Detailed trip generation calculations are included in the Appendix of this report.



#### **4.0 Site Traffic Distribution**

The projected site-generated trips were assigned to the surrounding roadway network based on a review of surrounding land uses and discussions with NCDOT and the Town. The following overall distribution, depicted on **Figure 4.1**, was used for residential net new site trips:

- 35% to/from the east on US 64 Business
- 30% to/from the east on Jenks Road
- 20% to/from the west on US 64 Business
- 15% to/from the northwest on Wimberly Road





## 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 collected at the following intersections while Wake County Public Schools were in session:

- US 64 Business Westbound at Jenks Road/Richardson Road April 25, 2024
- US 64 Business Eastbound at U-Turn West of Jenks Road April 25, 2024
- Jenks Road & Wimberly Road April 25, 2024
- Wimberly Road at White Oak Pond Road April 25, 2024

The existing AM and PM peak-hour traffic volumes are shown on **Figures 5.1 and 5.2**, respectively. Traffic count data is 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 2% annual growth rate was applied to the existing traffic to calculate background traffic volumes expected in 2027, though no growth was applied into/out of the White Oak Pond Road or the southern leg of Wimberly Road (the Westford development driveway) since development on those roadways is either complete or generally accounted for in approved development traffic.

### 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 NCDOT and Town of Apex staff, site traffic from seven (7) approved developments were included in the analysis as background traffic. Table 5.1 below summarizes the proposed land uses and occupancy data of these approved developments. Note that site trips were based on data from the TIAs prepared for the respective properties even if actual development plans propose less traffic-intense developments.

<b>Table 5.1</b> <b>Area Approved Development Summary</b>			
<b>Project Name &amp; Location</b>	<b>Proposed Land Uses</b>	<b>Status at Time of Counts</b>	<b>Volume Data Source</b>
<b>Sweetwater Commercial:</b> South of US 64 along Richardson Road	50k SF office, 200k SF general retail, 7k SF sit-down restaurant space, 3k SF fast-food space, 4-lane bank	0% occupied	Sweetwater Development (RKA, 10/16)
<b>Park at Wimberly:</b> North of Wimberly Road along White Oak Pond Road	70 single-family homes and 50 townhomes	50% occupied	Wolfe Properties PUD TIA (Mott Macdonald, 11/19)
<b>Retreat at Preserve:</b> Northeast of Jenks Road at Wimberly Road.	80 low-rise multifamily, 14k SF daycare, 8k SF MOB	0% occupied	Retreat at Preserve at White Oak TIA (KH, 3/21)
<b>Westford Commercial:</b> South of Jenks Road between US 64 and Lowell Road	290 low-rise multifamily, 120-room hotel, 23.5k SF strip retail	0% occupied	Westford Mixed-Use TIA (KH, 4/22)
<b>Arden at Summit Pines:</b> North of Jenks Road at Lowell Road	163 senior-adult multifamily units and 10k SF strip retail	0% occupied	Arden at Apex TIA (RKA, 12/21)
<b>Apex Light Industrial:</b> North of US 64, West of Jenks Road	290k SF industrial, 160k SF flex, and 30.8k SF retail	0% occupied	US 64 Light Industrial TIA (VHB, 12/22); Scenario A
<b>Yellowbridge PUD:</b> South of US 64 and east of Acton Street	59 single-family homes, 83 townhomes, 25k SF retail	0% occupied	Yellow Bridge Res. TIA (Mott Macdonald, 2/22)

#### 5.4 Background Traffic

Background traffic volumes consisting of existing, historic growth, and approved development traffic are shown on **Figures 5.1 and 5.2** for the AM and PM peak hours, respectively.

#### 5.5 Site Traffic

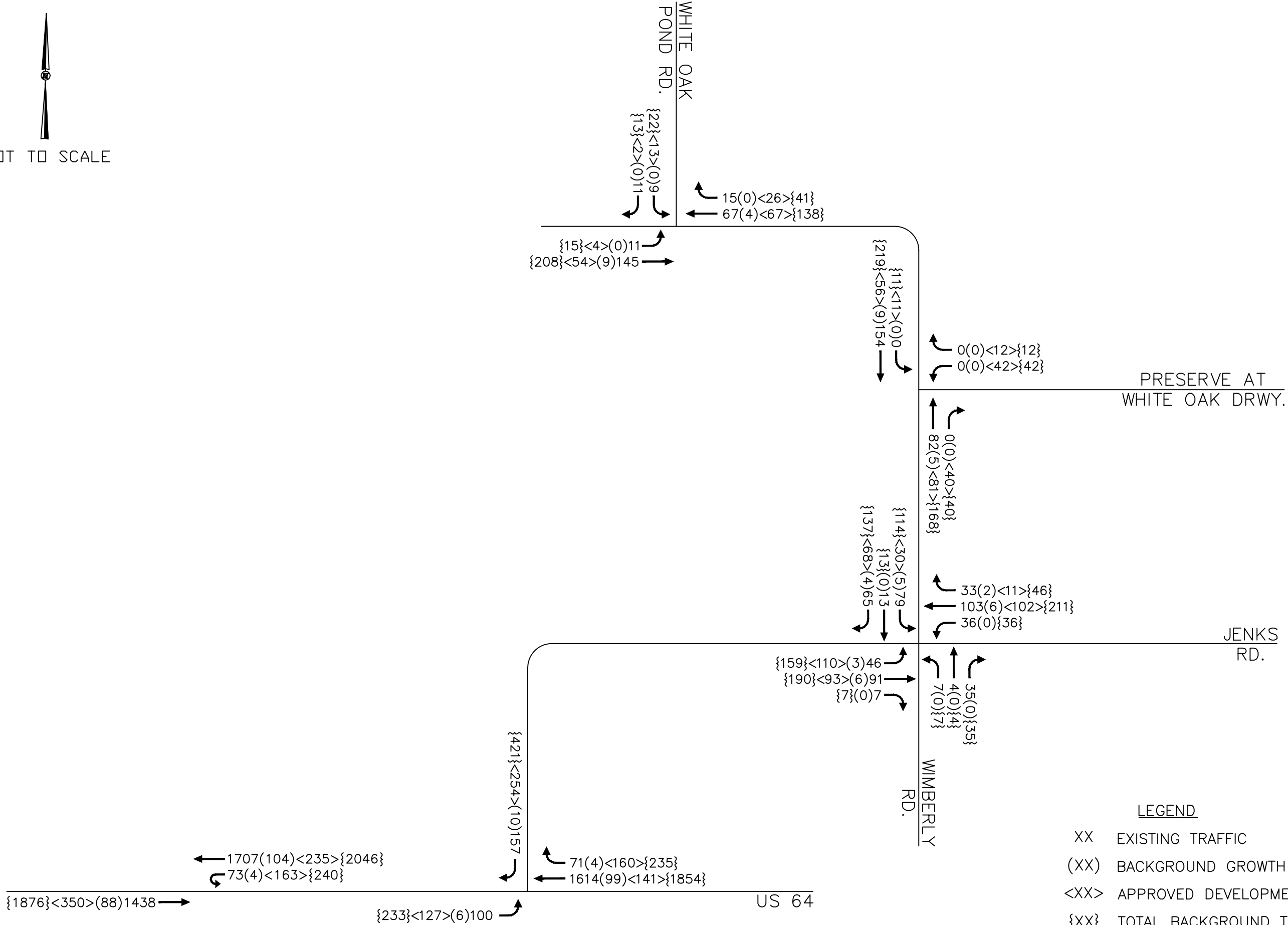
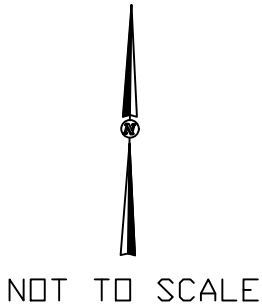
Traffic from the proposed development was generated and assigned to the adjacent roadway network per the distribution described in *Section 4.0*. AM and PM peak peak hour site traffic volumes are shown on **Figures 5.3 and 5.4**, respectively.

#### 5.6 Build-out Traffic

To obtain the 2027 build-out traffic volumes, the projected site traffic was added to the projected (2027) background traffic. Traffic volume calculations are detailed in intersection spreadsheets in the Appendix of this report. **Figures 5.3 and 5.4** show the peak hour build-out traffic volumes at the study intersections at project build-out in the AM and PM peak hours, respectively.







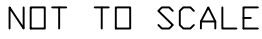


FIGURE 5.3

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.

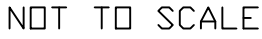


FIGURE 5.4

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.



## 6.0 Capacity Analysis

Capacity analyses (see Appendix) were performed for the AM and PM peak hours for the existing (2024) traffic condition and the projected (2027) background and build-out traffic conditions using Synchro/SimTraffic Version 12 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 12 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](#) lists the LOS control delay thresholds published in the *Highway Capacity Manual* for signalized and unsignalized intersections.

<b>Table 6.0</b>			
<b>Level-of-Service Control Delay Thresholds</b>			
<b>Level-of-Service</b>	<b>Signalized Intersections – Control Delay Per Vehicle [sec/veh]</b>	<b>Unsignalized Intersections – Average Control Delay [sec/veh] &amp; Qualitative Operational Description</b>	
A	≤ 10	≤ 10	Short Delays
B	> 10 – 20	> 10 – 15	
C	> 20 – 35	> 15 – 25	
D	> 35 – 55	> 25 – 35	Moderate Delays
E	> 55 – 80	> 35 – 50	
F	> 80	> 50	Long Delays

Where count or projected volumes were less than 4 vehicles, 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. A minimum peak hour factor (PHF) of 0.90 was used in each scenario, which was also used at all new intersections.

### 6.1 US 64 Business Westbound at Jenks Road

Analyses indicate that the intersection of US 64 Business Westbound at Jenks Road operated with short to moderate delays on the minor street approach (Jenks Road) in the existing condition.

The following improvement was committed as part of other projects in the study area:

- Install a traffic signal

Note that while this traffic signal has been installed, it was not activated at the time of the traffic counts and therefore was only included in the future conditions.

Analyses indicate that with the committed and recommended improvements in place, this intersection is expected to operate at an acceptable overall LOS in the study year 2027 with or without the proposed project in place. Based on the relatively minimal impacts associated with the addition of project site traffic, no improvements are recommended to be performed at this intersection as part of this project.

Table 6.1 summarizes the operation of the intersection for the existing (2024) and projected (2027) background and build-out traffic conditions. Note that minor-street approach delays were reported from SimTraffic per NCDOT guidance in the existing scenario, with the NB approach delays from SimTraffic representing the EBL delay based on the Synchro network development requirements at RCIs.

<b>Table 6.1</b> <b>Level-of-Service</b> <b>US 64 Business at Jenks Road/Richardson Road</b>		
<b>Condition</b>	<b>AM Peak Hour LOS (Delay)</b>	<b>PM Peak Hour LOS (Delay)</b>
Existing (2024) Traffic – Unsignalized	SB – B (12.4) EBL – C (16.0)	SB – D (32.5) EBL – C (21.3)
Projected (2027) Background Traffic – Signalized by Others	C (34.5)	D (36.1)
Projected (2027) Build-out Traffic – Signalized by Others	D (40.5)	D (39.2)

## 6.2 US 64 Business Eastbound at U-Turn West of Jenks Road

Analyses indicate that the intersection of US 64 Business Eastbound at the U-Turn West of Jenks Road operated with short delays on the minor street approach (U-Turn West of Jenks Road) in the existing condition.

The following improvement was committed as part of other projects in the study area:

- Install a traffic signal

Note that while this traffic signal has been installed, it was not activated at the time of the traffic counts and therefore was only included in the future conditions.

Analyses indicate that with the committed and recommended improvements in place, this intersection is expected to operate at an acceptable overall LOS in the study year 2027 with or without the proposed project in place. Based on the relatively minimal impacts associated with the addition of project site traffic, no improvements are recommended to be performed at this intersection as part of this project.

Table 6.2 summarizes the operation of the intersection for the existing (2024) and projected (2027) background and build-out traffic conditions. Note that minor-street approach delays in the existing, stop-controlled configuration were reported from SimTraffic.

<b>Table 6.2</b> <b>Level-of-Service</b> <b>US 64 Business Eastbound at U-Turn West of Jenks Road</b>		
<b>Condition</b>	<b>AM Peak Hour LOS (Delay)</b>	<b>PM Peak Hour LOS (Delay)</b>
Existing (2024) Traffic – Unsignalized	WBU – C (21.9)	WBU – C (16.6)
Projected (2027) Background Traffic – Signalized by Others	B (19.2)	B (17.5)
Projected (2027) Build-out Traffic – Signalized by Others	C (20.9)	B (18.5)



### 6.3 Jenks Road at Wimberly Road

Analyses indicate that the unsignalized intersection of Jenks Road at Wimberly Road currently operates with short delays on the minor street approaches (Wimberly Road) in both the AM and PM peak hours. The intersection is expected to continue to operate with short delays in the study year 2027 with or without the proposed project in place.

Further, preliminary traffic signal warrant analyses indicate that projected traffic volumes are unlikely to meet MUTCD volume-based traffic signal warrant thresholds at the intersection of Jenks Road at Wimberly Road.

As the addition of site traffic results in only minor increases in approach delays, no roadway improvements are recommended at this intersection to accommodate projected site traffic.

Table 6.3 summarizes the operation of the intersection for the existing (2024) and projected (2027) background and build-out traffic conditions. Note that minor-street approach delays were reported from SimTraffic.

<b>Table 6.3</b> <b>Level-of-Service</b> <b>Jenks Road at Wimberly Road (Unsignalized)</b>		
<b>Condition</b>	<b>AM Peak Hour LOS (Delay)</b>	<b>PM Peak Hour LOS (Delay)</b>
Existing (2024) Traffic	NB – A (3.6) SB – A (4.0)	NB – A (4.6) SB – A (5.1)
Projected (2027) Background Traffic	NB – A (5.3) SB – A (7.1)	NB – A (6.4) SB – A (9.5)
Projected (2027) Build-out Traffic	NB – A (6.2) SB – A (9.9)	NB – A (8.4) SB – C (15.6)

#### 6.4 Wimberly Road at White Oak Pond Road/North Site Driveway

Analyses indicate that the unsignalized intersection of Wimberly Road at White Oak Pond Road currently operates with short delays on the minor street approach (White Oak Pond Road) in both the AM and PM peak hours. The intersection is expected to operate with short delays in the projected (2027) background traffic condition.

A full-movement site driveway (North Site Driveway) with one ingress lane and one egress lane is proposed to align with White Oak Pond Road as part of this project. The intersection is expected to operate with short delays on both minor street approaches in the projected (2027) build-out traffic condition, and no improvements are recommended to be performed at this intersection to accommodate projected site traffic.

Table 6.4 summarizes the operation of the intersection for the existing (2024) and projected (2027) background and build-out traffic conditions. Note that minor-street approach delays were reported from SimTraffic.

<b>Table 6.4</b> <b>Level-of-Service</b> <b>Wimberly Road at White Oak Pond Road/North Site Driveway (Unsignalized)</b>		
<b>Condition</b>	<b>AM Peak Hour LOS (Delay)</b>	<b>PM Peak Hour LOS (Delay)</b>
Existing (2024) Traffic	SB – A (4.1)	SB – A (6.4)
Projected (2027) Background Traffic	SB – A (4.6)	SB – A (7.2)
Projected (2027) Build-out Traffic	NB – A (4.0) SB – A (5.0)	NB – A (7.3) SB – A (7.2)

### 6.5 Wimberly Road at Retreat at Preserve Driveway/South Site Driveway

The Retreat at Preserve at White Oak project proposes a full-movement site driveway along Wimberly Road approximately 550 feet north of Jenks Road. Analyses indicate that the intersection is expected to operate with short delays on the minor street approach (Retreat at Preserve Driveway) in both peak hours in the projected (2027) background condition.

A full-movement site driveway (South Site Driveway) with one ingress lane and one egress lane is proposed to align with the Retreat at Preserve driveway as part of this project. The following improvement is as part of the Jenks at Wimberly Residential development:

- Construct an exclusive northbound left-turn lane on Wimberly Road with 50 feet of storage and appropriate tapers

The intersection is expected to operate with short delays on both minor street approaches in the projected (2027) build-out traffic condition, and no additional improvements are recommended to be performed at this intersection to accommodate projected site traffic.

Table 6.5 summarizes the operation of the intersection for the projected (2027) background and build-out traffic conditions. Note that minor-street approach delays were reported from SimTraffic.

<b>Table 6.5</b> <b>Level-of-Service</b> <b>Wimberly Road at Retreat at Preserve Driveway/South Site Driveway (Unsignalized)*</b>		
<b>Condition</b>	<b>AM Peak Hour LOS (Delay)</b>	<b>PM Peak Hour LOS (Delay)</b>
Projected (2027) Background Traffic	WB – A (6.1)	WB – A (5.5)
Projected (2027) Build-out Traffic	EB – A (4.3) WB – A (6.6)	EB – A (7.1) WB – A (6.6)



## 7.0 Recommendations

### Background Improvements by Others

The following improvements are committed as part of other projects in the study area:

#### US 64 Business Westbound at Jenks Road (by Sweetwater Commercial):

- Install a traffic signal

#### US 64 Business at U-Turn West of Jenks Road (by Sweetwater Commercial):

- Install a traffic signal

#### Wimberly Road at Retreat at Preserve Driveway (by Retreat at Preserve at White Oak):

- Construct the Retreat at Preserve Driveway with one ingress lane and one egress lane

While the traffic signals along US 64 Business have been installed, those were not activated at the time of the traffic counts and therefore were only included in the future conditions.

### Recommended Improvements by Development

The following improvements are recommended as part of the Jenks at Wimberly Residential development:

#### Wimberly Road at White Oak Pond Road/North Site Driveway:

- Construct the North Site Driveway with one ingress lane and one egress lane

#### Wimberly Road at Retreat at Preserve Driveway/South Site Driveway:

- Construct the South Site Driveway with one ingress lane and one egress lane
- Construct an exclusive northbound left-turn lane on Wimberly Road with 50 feet of storage and appropriate tapers

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 with only relatively minimal impacts associated with the addition of project site traffic. Further, preliminary traffic signal warrant analyses indicate that projected traffic volumes are unlikely to meet MUTCD volume-based traffic signal warrant thresholds at the intersection of Jenks Road at Wimberly Road. Therefore, no additional improvements are recommended to be performed as part of this project.

**Figures 7.1** shows the committed and recommended roadway laneage for the study intersections.

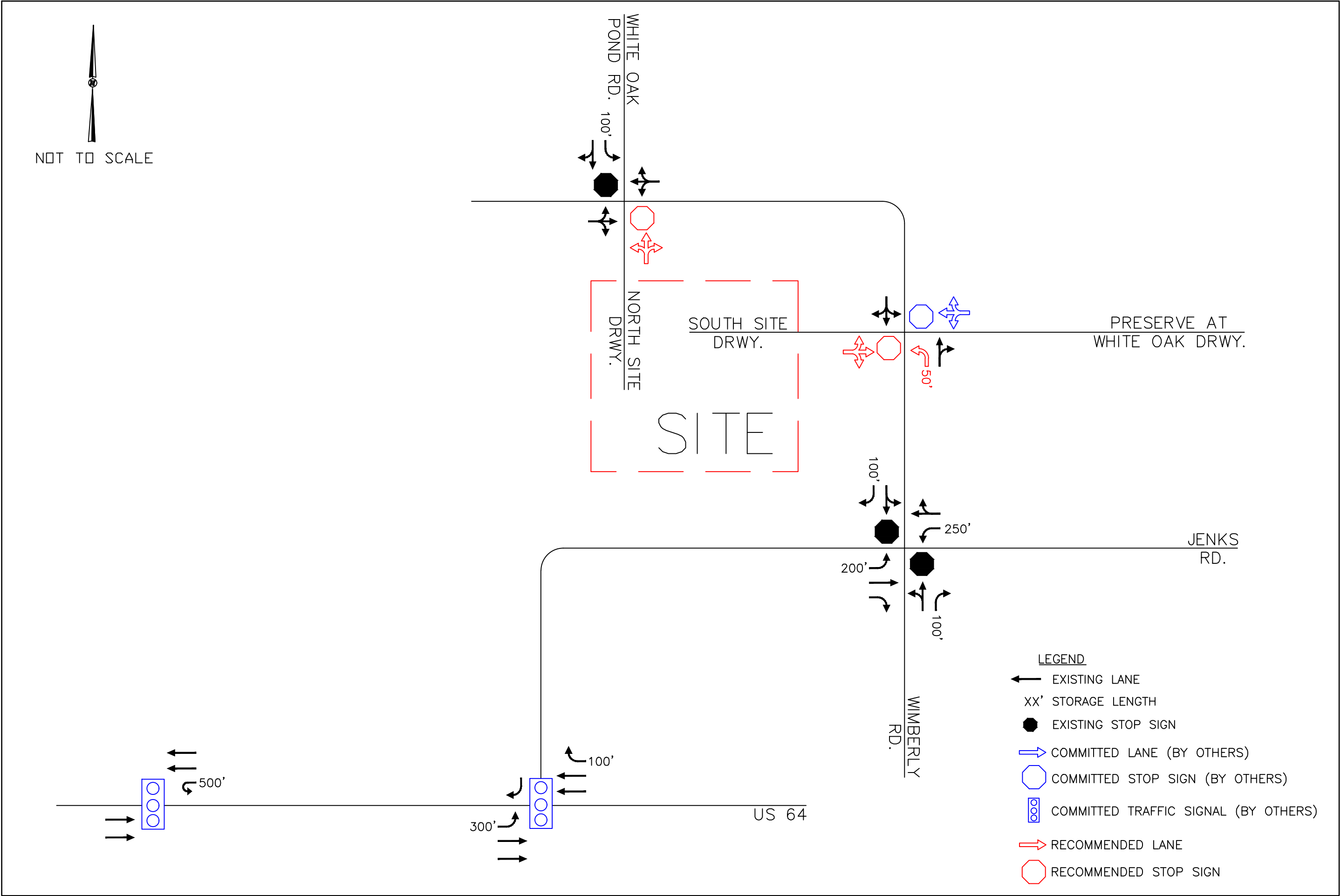


FIGURE  
7.1

COMMITTED AND RECOMMENDED  
ROADWAY LANEAGE

JENKS AT WIMBERLY RESIDENTIAL  
APEX, NC  
TRAFFIC IMPACT ANALYSIS



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.

## **Appendix**



**Appendix A:**  
**Approved Memorandum of Understanding**

**Preliminary Assumptions**  
**Jenks at Wimberly Residential - Traffic Impact Analysis**  
**Apex, North Carolina**

The Jenks at Wimberly residential development is proposed to be located on the northwest quadrant of the intersection of Jenks Road at Wimberly Road in Apex, North Carolina. As currently envisioned, the development will consist of approximately 300 apartments, with site access provided via three driveways along Wimberly Road. Project build-out is anticipated in 2027.

Based on preliminary scoping discussions with representatives from the Town of Apex and North Carolina Department of Transportation (NCDOT) on September 25, 2023 and subsequent discussions via email in March 2024, the following assumptions will be incorporated in this analysis:

**Analysis Scenarios**

Weekday AM (7-9AM) and PM (4-6PM) peak hour analyses will be performed for the following study scenarios:

- Existing (2024)
- Projected (2027) Background
- Projected (2027) Build-out

**Study Area**

The study area will consist of the following intersections:

<b>Included Study Intersections by Scenario</b>			
<b>Intersection</b>	<b>Existing</b>	<b>Background</b>	<b>Build-out</b>
US 64 Westbound at Jenks Road	✓	✓	✓
US 64 Eastbound at U-Turn West of Jenks Road	✓	✓	✓
Jenks Road at Wimberly Road	✓	✓	✓
Wimberly Road at White Oak Pond Road/North Site Drwy.	✓	✓	✓
Wimberly Road at Retreat at Preserve at White Oak Drwy./South Site Drwy.		✓	✓

**Existing Volume Development**

Weekday AM (7-9AM) and PM (4-6PM) peak hour turning movement counts will be collected when Wake County Public Schools are in session.

**Background Traffic Growth**

Based on a review of historic traffic volumes in the area, an 2% annual growth rate will be applied to existing traffic count volumes up to the study year 2027. However, no growth will be applied to volumes onto/off of White Oak Pond Road or the southern leg of Wimberly Road (Westford Access) as development along those roadways is generally built-out or otherwise accounted for in approved development traffic.

### **Approved Developments**

Based on preliminary scoping discussions with the Town and NCDOT, the following approved developments in the study area will be included in the analysis as background traffic. Based on discussions with the Town, The Park at Wimberly project is estimated to currently be at 50% occupancy while other projects are currently at 0% occupancy, and this analysis will account for full occupancy of each project in the study year 2027:

- Sweetwater Commercial (100%) – Site traffic to be obtained from *Sweetwater Development – Richardson Road Access Study* (RKA, October 2016)
- The Park at Wimberly (100%) – Site traffic to be obtained from *Wolfe Properties PUD TIA* (Mott MacDonald, November 2019)
- Retreat at Preserve at White Oak (100%) – Site traffic to be obtained from *The Retreat at the Preserve at White Oak TIA* (Kimley-Horn, March 2021)
- Westford Commercial – Site traffic to be obtained from *Westford Mixed-Use TIA Addendum* (Kimley-Horn, August 2022)
- Arden at Summit Pines PUD (100%) – Site traffic to be obtained from the *Arden at Apex TIA* (RKA, March 2022)
- Apex Light Industrial (100%) – Site traffic to be obtained from the *US 64 Light Industrial TIA* (VHB, December 2022)
- Yellowbridge PUD (100%) – Site traffic to be obtained from the *Yellow Bridge Residential TIA* (RKA, February 2022)

It is our understanding that the following improvements are currently being implemented and, while not included in the existing condition, will be completed as part of the approved developments listed above and will be included in the analysis in the future traffic conditions:

#### **US 64 Business at Jenks Road**

- Install a traffic signal

#### **US 64 Business at U-Turn West of Jenks Road**

- Install a traffic signal

### **Trip Generation**

Trip generation will be calculated using data from the 11<sup>th</sup> edition of the ITE *Trip Generation Manual*.

### **Trip Distribution**

The following distribution will be used for project site trips:

- 35% to/from the east on US 64
- 30% to/from the east on Jenks Road
- 20% to/from the west on US 64
- 15% to/from the northwest on Wimberly Road

### **Other Study Assumptions**

Existing peak hour factors will be used in the analysis for both existing and future year conditions where those exceed a minimum PHF of 0.90, which will also be used for all new intersections. Signal timings for future signals will be optimized in each condition.





SITE DATA	
PROPOSED UNITS:	288 UNITS
PROPOSED PARKING:	~440 STALLS
PARKING RATIO:	1.52/UNIT



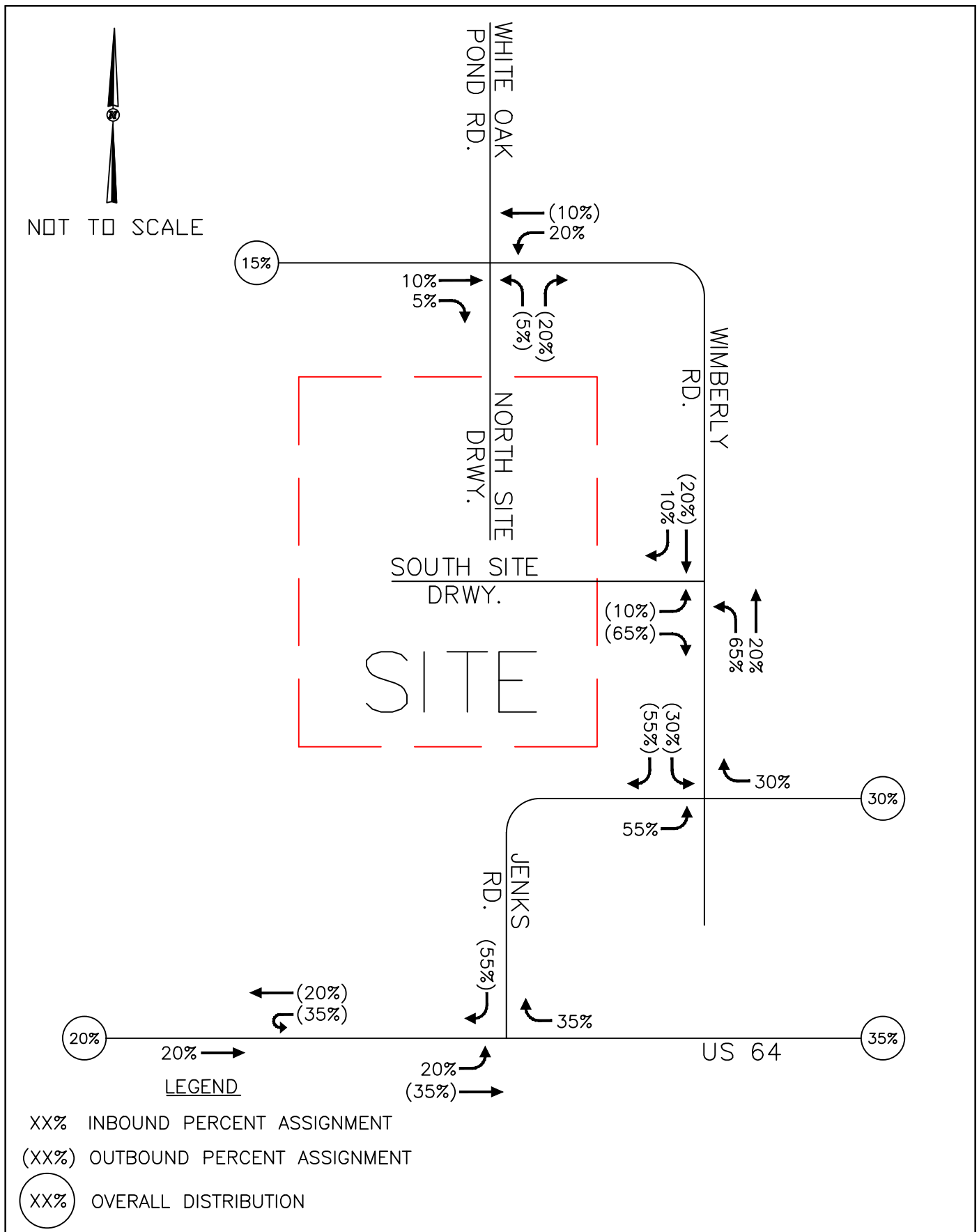
**Jenks @ Wimberly Residential**

**Table 1 - Trip Generation**

Land Use	Intensity	Daily			AM Peak Hour			PM Peak Hour		
		Total	In	Out	Total	In	Out	Total	In	Out
221 Multifamily Housing (Mid-Rise, Not Close to Rail)	300 d.u.	1,386	693	693	120	28	92	117	71	46
<b>Total Net New External Trips</b>		<b>1,386</b>	<b>693</b>	<b>693</b>	<b>120</b>	<b>28</b>	<b>92</b>	<b>117</b>	<b>71</b>	<b>46</b>





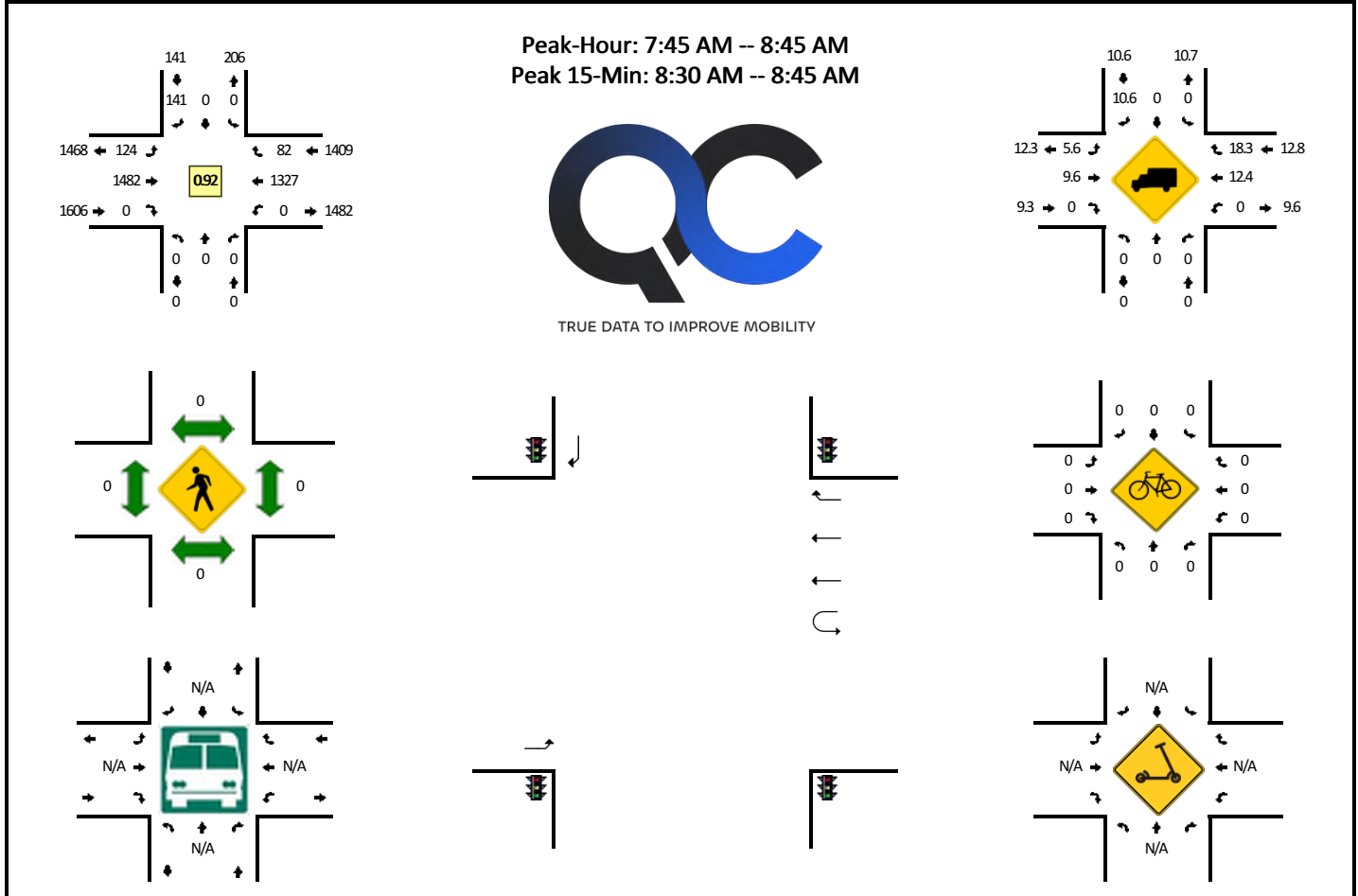


## **Appendix B:**

### **Traffic Count Data**

**LOCATION:** Jenks Rd -- US 64 Westbound  
**CITY/STATE:** Wake, NC

**QC JOB #:** 16348101  
**DATE:** Thu, Apr 25 2024



15-Min Count Period Beginning At	Jenks Rd (Northbound)				Jenks Rd (Southbound)				US 64 Westbound (Eastbound)				US 64 Westbound (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	22	0	17	271	0	0	0	267	12	0	589	
7:15 AM	0	0	0	0	0	0	32	0	20	401	0	0	0	286	15	0	754	
7:30 AM	0	0	0	0	0	0	38	0	17	431	0	0	0	332	17	0	835	
7:45 AM	0	0	0	0	0	0	42	0	26	387	0	0	0	319	20	0	794	2972
8:00 AM	0	0	0	0	0	0	19	0	20	316	0	0	0	330	23	0	708	3091
8:15 AM	0	0	0	0	0	0	54	0	41	335	0	0	0	350	21	0	801	3138
8:30 AM	0	0	0	0	0	0	26	0	37	444	0	0	0	328	18	0	853	3156
8:45 AM	0	0	0	0	0	0	32	0	32	380	0	0	0	297	18	0	759	3121
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	0	0	104	0	148	1776	0	0	0	1312	72	0	3412	
Heavy Trucks	0	0	0	0	0	0	12	0	12	168	0	0	0	152	20	0	364	
Buses																		
Pedestrians		0				0				0				0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

**Comments:**

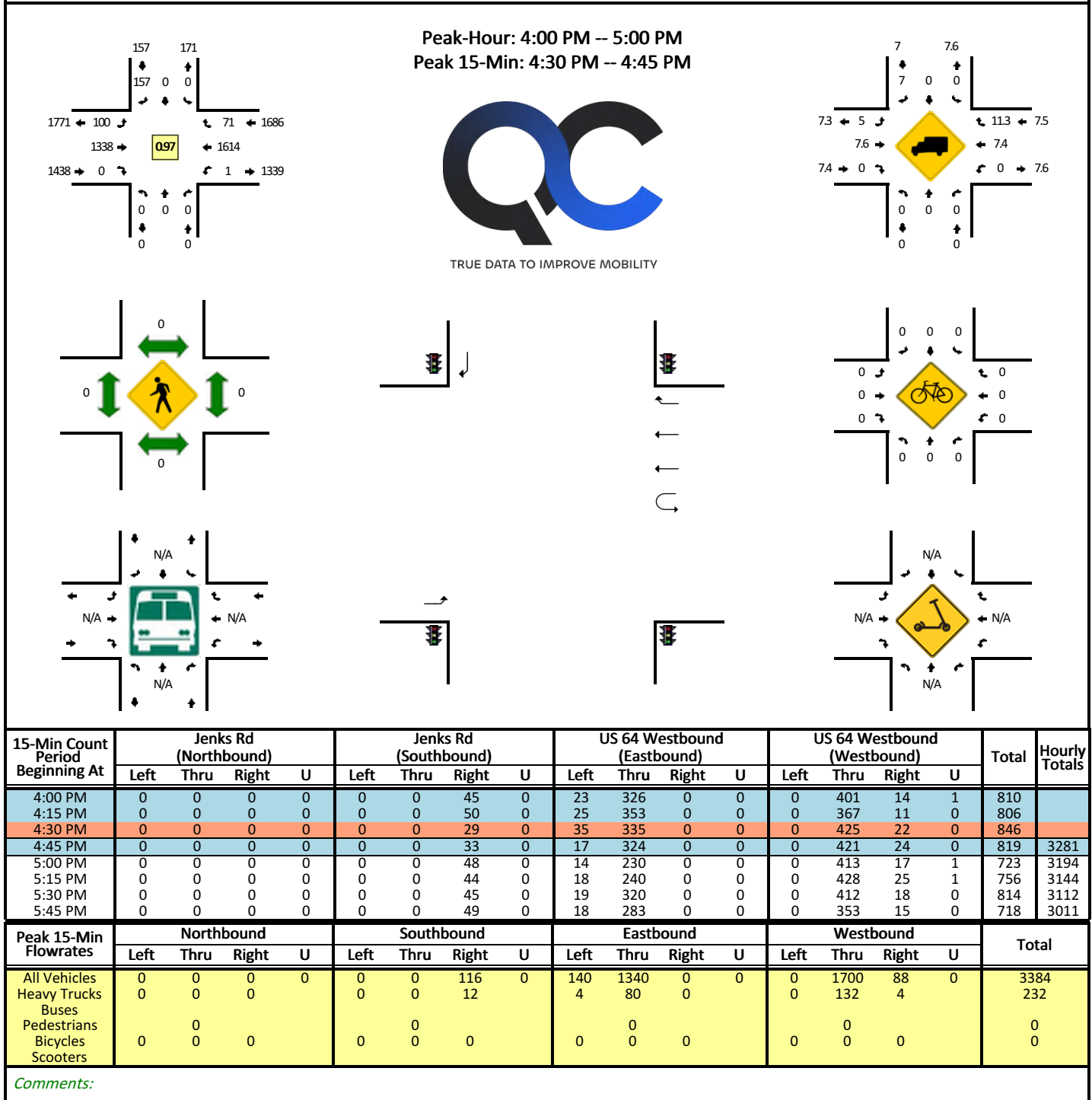
Report generated on 5/2/2024 1:25 PM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212



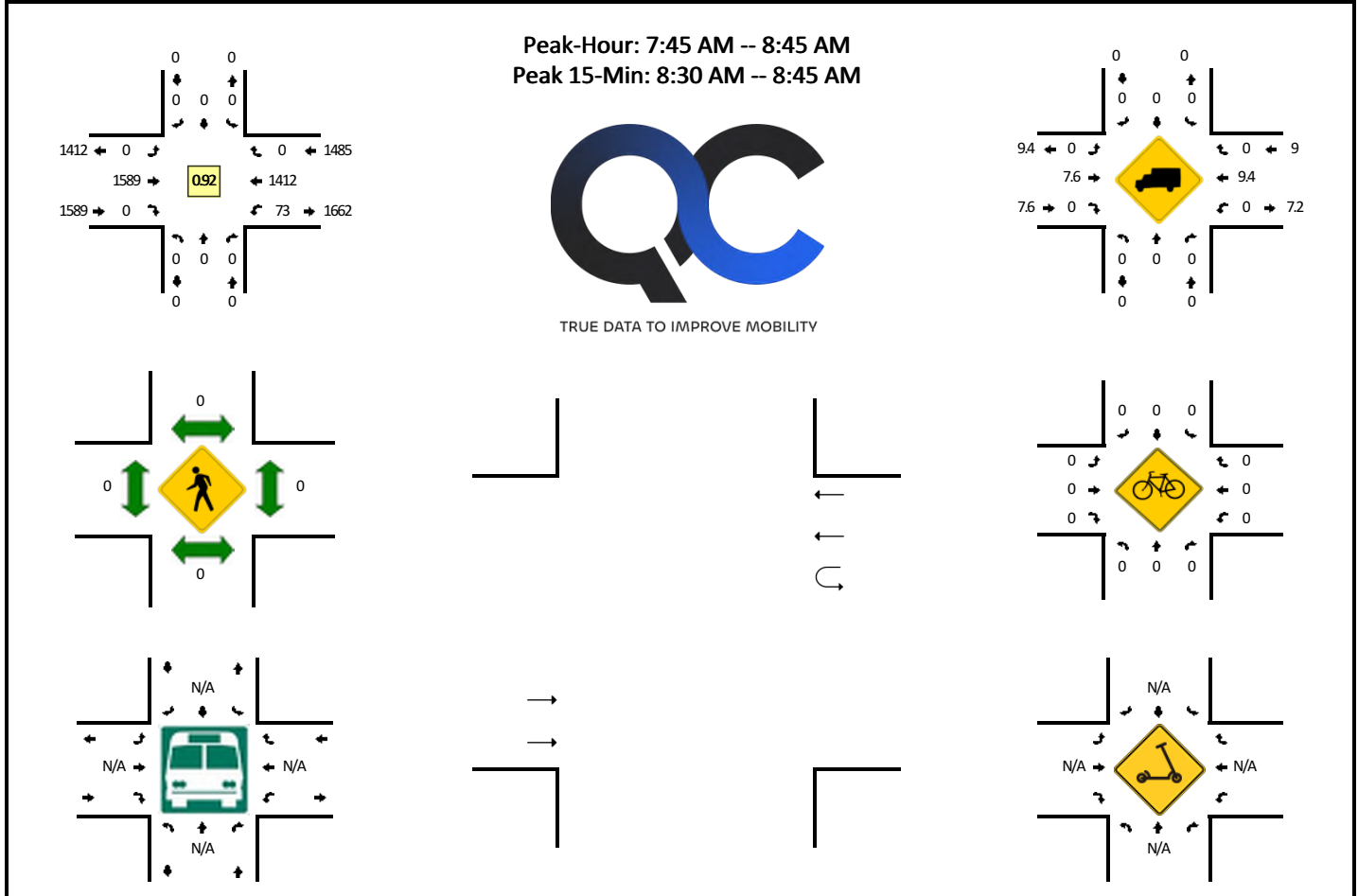
**LOCATION:** Jenks Rd -- US 64 Westbound  
**CITY/STATE:** Wake, NC

**QC JOB #:** 16348102  
**DATE:** Thu, Apr 25 2024



**LOCATION:** U-Turn W of Jenks Rd -- US 64  
**CITY/STATE:** Wake, NC

**QC JOB #:** 16348103  
**DATE:** Thu, Apr 25 2024



15-Min Count Period Beginning At	U-Turn W of Jenks Rd (Northbound)				U-Turn W of Jenks Rd (Southbound)				US 64 (Eastbound)				US 64 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	0	0	0	287	0	0	0	267	0	16	570	
7:15 AM	0	0	0	0	0	0	0	0	0	405	0	0	0	297	0	21	723	
7:30 AM	0	0	0	0	0	0	0	0	0	436	0	0	0	352	0	17	805	
7:45 AM	0	0	0	0	0	0	0	0	0	404	0	0	0	345	0	23	772	2870
8:00 AM	0	0	0	0	0	0	0	0	0	318	0	0	0	333	0	17	668	2968
8:15 AM	0	0	0	0	0	0	0	0	0	381	0	0	0	398	0	16	795	3040
8:30 AM	0	0	0	0	0	0	0	0	0	486	0	0	0	336	0	17	839	3074
8:45 AM	0	0	0	0	0	0	0	0	0	401	0	0	0	319	0	17	737	3039
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	0	0	0	0	0	1944	0	0	0	1344	0	68	3356	
Heavy Trucks	0	0	0	0	0	0	0	0	0	128	0	0	0	116	0	0	244	
Buses																		
Pedestrians		0				0				0				0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scooters																		

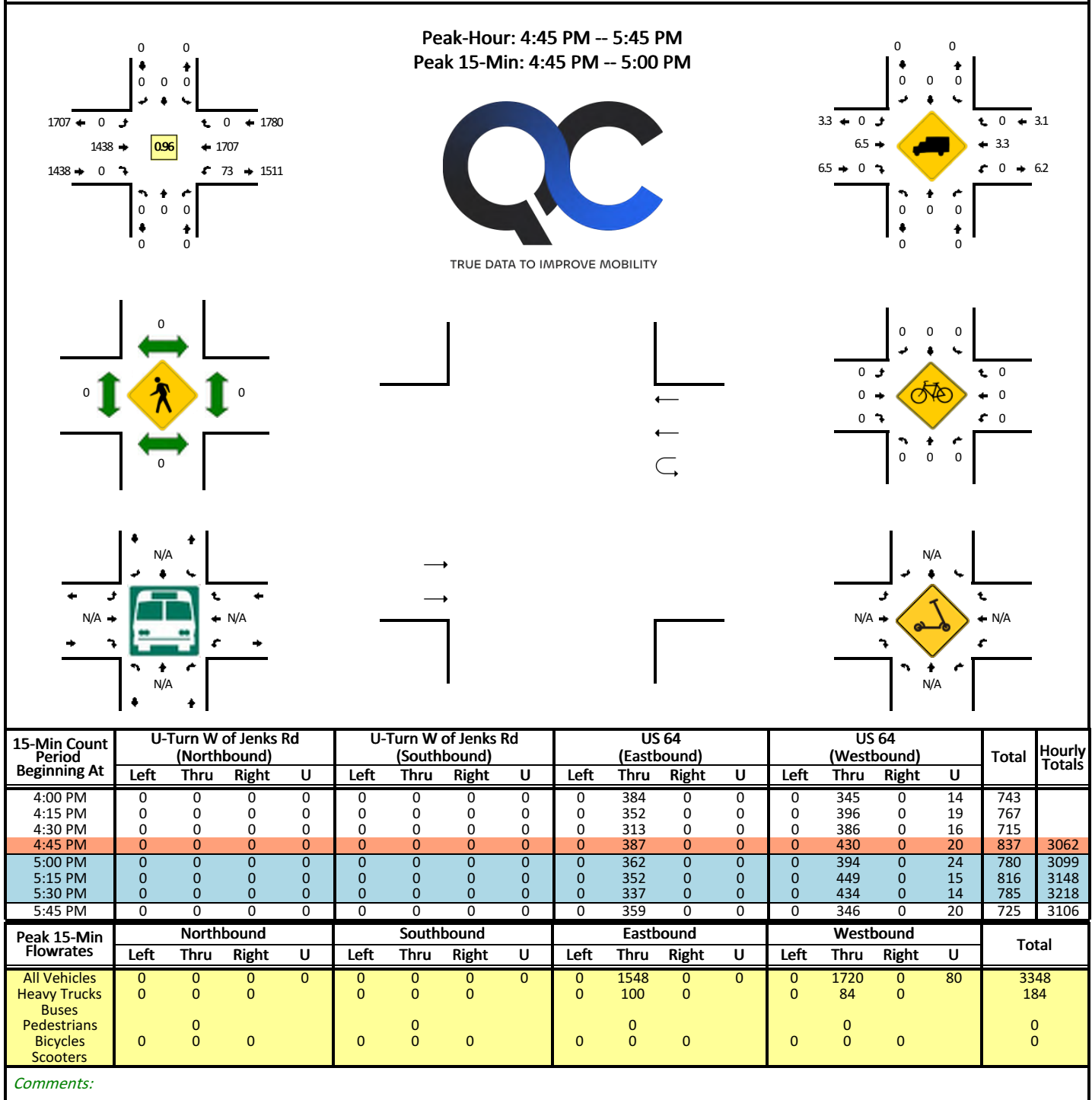
**Comments:**

Report generated on 5/2/2024 1:25 PM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

**LOCATION:** U-Turn W of Jenks Rd -- US 64  
**CITY/STATE:** Wake, NC

**QC JOB #:** 16348104  
**DATE:** Wed, Apr 24 2024





LOCATION: Wimberly Rd -- Jenks Rd

CITY/STATE: Apex, NC

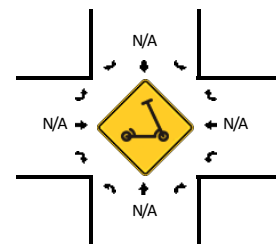
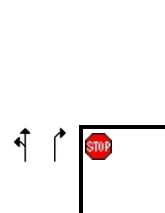
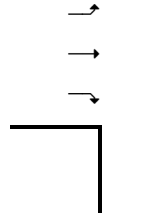
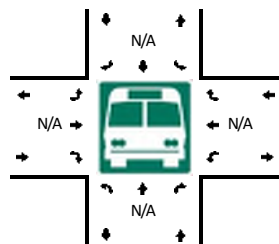
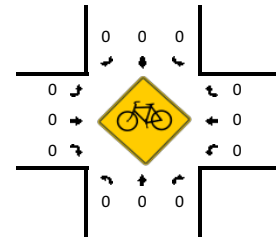
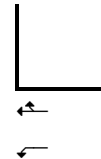
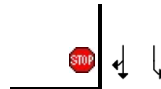
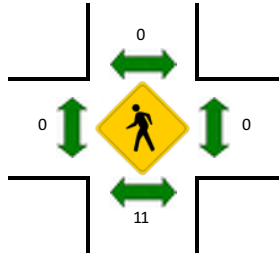
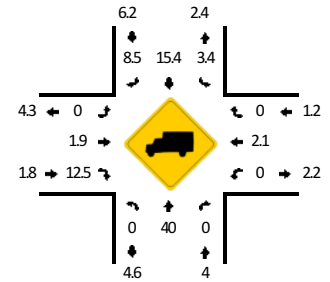
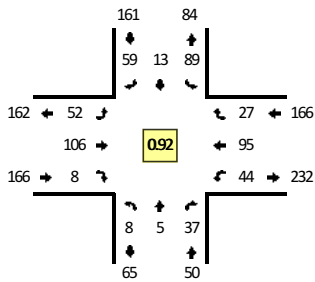
QC JOB #: 16348107

DATE: Thu, Apr 25 2024

Peak-Hour: 5:15 PM -- 6:15 PM  
Peak 15-Min: 6:00 PM -- 6:15 PM



TRUE DATA TO IMPROVE MOBILITY



15-Min Count Period Beginning At	Wimberly Rd (Northbound)				Wimberly Rd (Southbound)				Jenks Rd (Eastbound)				Jenks Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	1	1	0	4	0	1	0	5	8	0	0	0	5	1	0	26	
6:15 AM	2	1	5	0	2	0	2	0	14	16	0	0	1	3	2	0	48	
6:30 AM	1	0	5	0	5	0	5	0	18	18	0	0	0	9	0	0	61	
6:45 AM	2	1	6	0	7	1	4	0	21	24	2	0	1	8	8	0	85	220
7:00 AM	1	2	12	0	22	1	8	0	10	20	0	0	2	7	9	0	94	288
7:15 AM	2	0	12	0	18	1	13	0	23	29	0	0	3	5	5	0	111	351
7:30 AM	1	1	19	0	16	0	13	0	17	18	0	0	3	12	6	0	106	396
7:45 AM	2	1	7	0	8	0	16	0	14	30	1	0	2	22	7	0	110	421
8:00 AM	1	1	11	0	15	0	6	0	17	23	0	0	4	13	10	0	101	428
8:15 AM	3	0	13	0	8	2	12	0	17	50	2	0	3	29	5	0	144	461
8:30 AM	1	5	7	0	11	1	7	0	21	33	4	0	4	16	9	0	119	474
8:45 AM	4	2	11	0	11	0	10	0	19	29	1	0	3	23	7	0	120	484
9:00 AM	2	5	7	0	8	0	7	0	12	28	1	0	4	20	4	0	98	481
9:15 AM	1	0	4	0	10	0	6	0	21	22	0	0	3	10	10	0	87	424
9:30 AM	1	0	6	0	11	2	6	0	12	13	0	0	2	26	4	0	83	388
9:45 AM	4	0	6	0	12	1	6	0	12	22	1	0	7	15	9	0	95	363
10:00 AM	1	3	5	0	8	1	6	0	13	14	1	0	0	9	11	0	72	337
10:15 AM	2	1	6	0	7	0	8	0	17	18	0	0	0	15	5	0	79	329
10:30 AM	1	1	5	0	13	0	7	0	10	11	2	0	4	19	4	0	77	323
10:45 AM	1	0	3	0	9	1	8	0	7	25	1	0	3	23	10	0	91	319
11:00 AM	0	0	6	0	7	1	8	0	12	14	0	0	2	22	8	0	80	327
11:15 AM	0	0	6	0	9	0	7	0	7	8	0	0	2	13	7	0	59	307
11:30 AM	2	0	4	0	7	0	8	0	16	9	1	0	3	14	7	0	71	301
11:45 AM	0	0	3	0	12	1	13	0	17	12	0	0	3	17	7	0	85	295
12:00 PM	3	0	4	0	8	0	8	0	11	13	1	0	5	10	6	0	69	284
12:15 PM	2	0	5	0	12	1	7	0	15	12	0	0	4	11	10	0	79	304
12:30 PM	1	0	1	0	6	0	6	0	10	17	0	0	5	16	11	0	73	306
12:45 PM	1	2	8	0	15	2	15	0	9	21	0	0	2	11	5	0	91	312
1:00 PM	0	0	4	0	9	1	7	0	18	8	0	0	4	24	15	0	90	333
1:15 PM	1	0	6	0	10	1	6	0	12	9	0	0	3	18	10	0	76	330
1:30 PM	3	2	4	0	10	0	6	0	17	10	1	0	2	16	8	0	79	336
1:45 PM	1	1	3	0	11	0	10	0	13	12	0	0	4	20	4	0	79	324
2:00 PM	1	1	8	0	8	1	11	0	14	6	0	0	2	12	5	0	69	303
2:15 PM	0	0	7	0	21	0	18	0	7	10	0	0	7	18	6	0	94	321
2:30 PM	2	1	4	0	15	4	12	0	12	4	1	0	4	24	11	0	94	336
2:45 PM	2	2	9	0	9	0	8	0	17	21	2	0	5	15	8	0	98	355
3:00 PM	2	1	7	0	11	2	13	0	13	22	2	0	8	33	9	0	123	409
3:15 PM	1	1	12	0	15	1	15	0	16	24	1	0	8	24	9	0	127	442

15-Min Count Period Beginning At	Wimberly Rd (Northbound)				Wimberly Rd (Southbound)				Jenks Rd (Eastbound)				Jenks Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	3	1	3	0	7	1	5	0	22	33	0	0	9	15	4	0	103	451
3:45 PM	0	2	8	0	14	3	8	0	17	31	2	0	4	22	13	0	124	477
4:00 PM	3	0	2	0	11	5	18	0	18	25	0	0	4	27	13	0	126	480
4:15 PM	1	2	7	0	13	2	14	0	16	22	2	0	7	24	10	0	120	473
4:30 PM	1	2	11	0	13	3	8	0	19	32	2	0	11	18	5	0	125	495
4:45 PM	1	1	6	0	12	3	7	0	15	30	0	0	9	19	17	0	120	491
5:00 PM	1	1	8	0	14	4	18	0	7	24	1	0	3	30	12	0	123	488
5:15 PM	1	0	9	0	22	4	14	0	18	24	2	0	16	27	6	0	143	511
5:30 PM	3	2	7	0	17	1	13	0	11	22	4	0	10	21	5	0	116	502
5:45 PM	2	1	11	0	26	4	20	0	10	21	0	0	7	25	10	0	137	519
6:00 PM	2	2	10	0	24	4	12	0	13	39	2	0	11	22	6	0	147	543
6:15 PM	2	3	10	0	11	2	22	0	13	15	4	0	8	19	14	0	123	523
6:30 PM	2	2	8	0	10	2	10	0	17	22	0	0	6	27	12	0	118	525
6:45 PM	0	1	6	0	17	1	14	0	12	15	2	0	7	17	4	0	96	484
7:00 PM	2	1	5	0	12	1	8	0	12	16	0	0	10	19	8	0	94	431
7:15 PM	1	0	9	0	7	2	16	0	9	28	1	0	6	22	10	0	111	419
7:30 PM	1	0	9	0	8	2	8	0	3	19	3	0	8	19	3	0	83	384
7:45 PM	1	0	1	0	9	0	6	0	13	19	0	0	9	21	8	1	88	376
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	8	8	40	0	96	16	48	0	52	156	8	0	44	88	24	0	588	
Heavy Trucks	0	4	0		4	4	4		0	4	0		0	0	0		20	
Buses																		
Pedestrians		28				0				0				0			28	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scooters																		
Comments:																		

Report generated on 5/2/2024 1:25 PM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

# Wimberly Road and Jenks Road AM and PM Peak Hour Traffic Count

Count Performed:

Thursday, April 25, 2024

Start Time	Wimberly Road			Jenks Road			Wimberly Road			Jenks Road			Intersection Volume
	Southbound			Westbound			Northbound			Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00	22	1	8	2	7	9	1	2	12	10	20	0	94
7:15	18	1	13	3	5	5	2	0	12	23	29	0	111
7:30	16	0	13	3	12	6	1	1	19	17	18	0	106
7:45	8	0	16	2	22	7	2	1	7	14	30	1	110
8:00	15	0	6	4	13	10	1	1	11	17	23	0	101
8:15	8	2	12	3	29	5	3	0	13	17	50	2	144
8:30	11	1	7	4	16	9	1	5	7	21	33	4	119
8:45	11	0	10	3	23	7	4	2	11	19	29	1	120

16:00	11	5	18	4	27	13	3	0	2	18	25	0	126
16:15	13	2	14	7	24	10	1	2	7	16	22	2	120
16:30	13	3	8	11	18	5	1	2	11	19	32	2	125
16:45	12	3	7	9	19	17	1	1	6	15	30	0	120
17:00	14	4	18	3	30	12	1	1	8	7	24	1	123
17:15	22	4	14	16	27	6	1	0	9	18	24	2	143
17:30	17	1	13	10	21	5	3	2	7	11	22	4	116
17:45	26	4	20	7	25	10	2	1	11	10	21	0	137

Peak Hour	SBL	SBT	SBR	WBL	WBT	WBR	NBL	NBT	NBR	EBL	EBT	EBR	Volume
7:00 - 8:00	64	2	50	10	46	27	6	4	50	64	97	1	421
7:15 - 8:15	57	1	48	12	52	28	6	3	49	71	100	1	428
7:30 - 8:30	47	2	47	12	76	28	7	3	50	65	121	3	461
7:45 - 8:45	42	3	41	13	80	31	7	7	38	69	136	7	474
8:00 - 9:00	45	3	35	14	81	31	9	8	42	74	135	7	484

Peak Hour	SBL	SBT	SBR	WBL	WBT	WBR	NBL	NBT	NBR	EBL	EBT	EBR	Volume
16:00 - 17:00	49	13	47	31	88	45	6	5	26	68	109	4	491
16:15 - 17:15	52	12	47	30	91	44	4	6	32	57	108	5	488
16:30 - 17:30	61	14	47	39	94	40	4	4	34	59	110	5	511
16:45 - 17:45	65	12	52	38	97	40	6	4	30	51	100	7	502
17:00 - 18:00	79	13	65	36	103	33	7	4	35	46	91	7	519

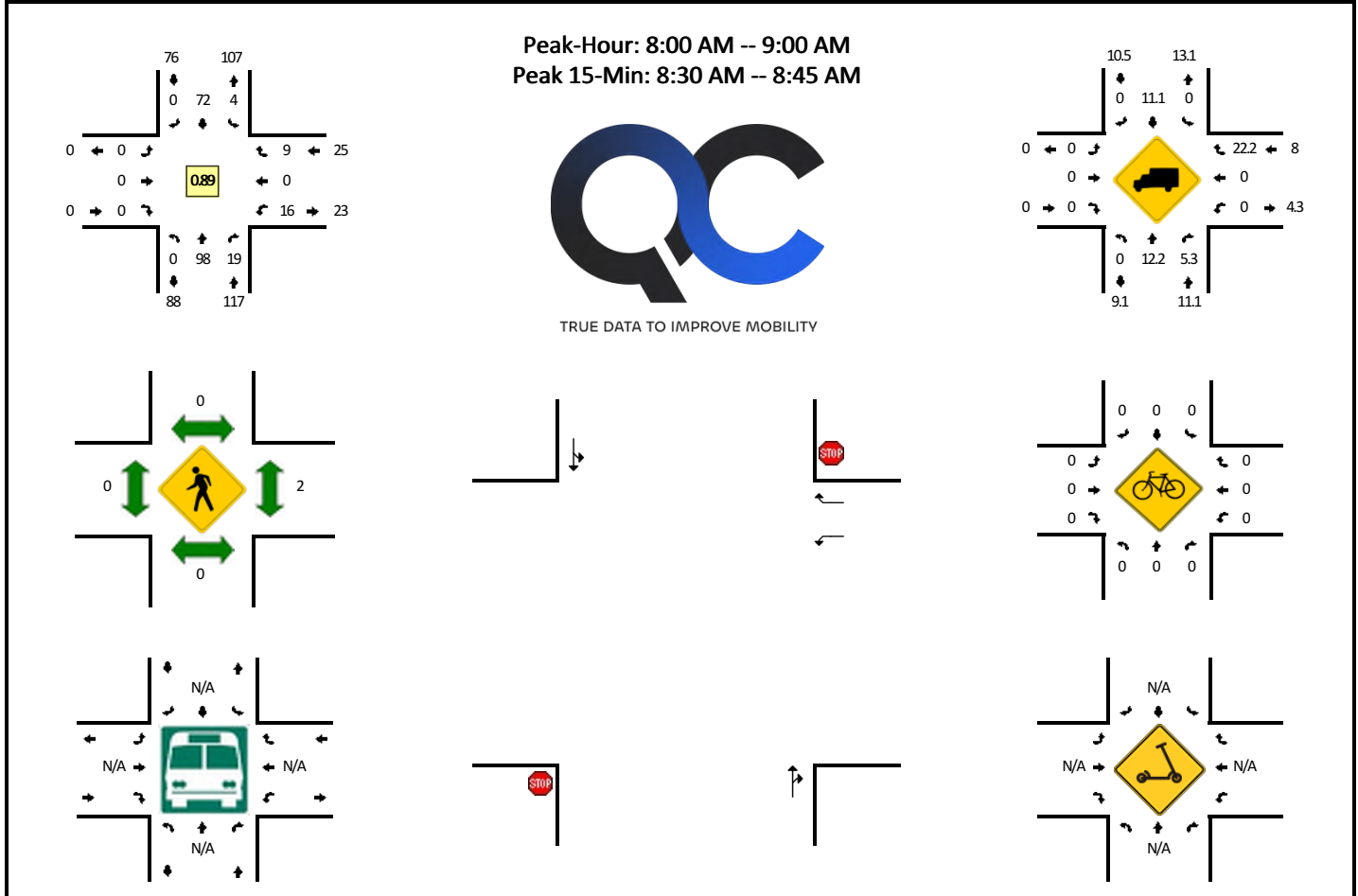
Peak-Hour Traffic Volumes													
Peak Hour	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Volume
8:00 - 9:00	9	8	42	45	3	35	74	135	7	14	81	31	484
17:00 - 18:00	7	4	35	79	13	65	46	91	7	36	103	33	519

Peak-Hour Factor by Approach					
Peak Hour	NB	SB	EB	WB	PHF
8:00 - 9:00	0.87	0.94	0.78	0.85	0.84
17:00 - 18:00	0.82	0.79	0.82	0.88	0.91



**LOCATION:** Wimberly Rd -- White Oak Pond Rd  
**CITY/STATE:** Wake, NC

**QC JOB #:** 16348105  
**DATE:** Thu, Apr 25 2024



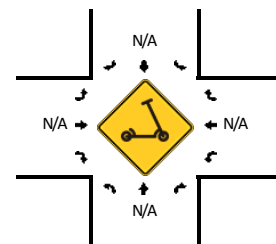
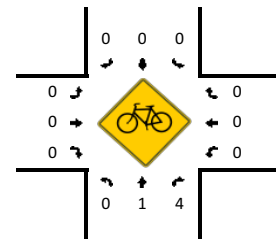
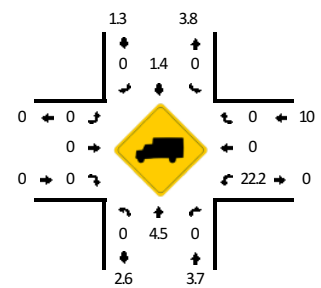
15-Min Count Period Beginning At	Wimberly Rd (Northbound)				Wimberly Rd (Southbound)				White Oak Pond Rd (Eastbound)				White Oak Pond Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	22	0	0	1	29	0	0	0	0	0	0	2	0	0	0	54	
7:15 AM	0	24	2	0	2	31	0	0	0	0	0	0	2	0	2	0	63	
7:30 AM	0	23	1	0	2	19	0	0	0	0	0	0	6	0	1	0	52	
7:45 AM	0	18	4	0	2	17	0	0	0	0	0	0	3	0	2	0	46	215
8:00 AM	0	21	6	0	2	21	0	0	0	0	0	0	3	0	2	0	55	216
8:15 AM	0	21	4	0	2	17	0	0	0	0	0	0	7	0	0	0	51	204
8:30 AM	0	32	5	0	0	16	0	0	0	0	0	0	4	0	4	0	61	213
8:45 AM	0	24	4	0	0	18	0	0	0	0	0	0	2	0	3	0	51	218
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	128	20	0	0	64	0	0	0	0	0	0	16	0	16	0	244	
Heavy Trucks	0	20	0	0	0	4	0	0	0	0	0	0	0	0	4	0	28	
Buses																		
Pedestrians		0				0				0				4			4	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scooters																		

**Comments:**

Report generated on 5/2/2024 1:25 PM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

QC JOB #: 16348106  
DATE: Thu, Apr 25 2024



Comments:

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

**Appendix C:**  
**Approved Development Data**



October 20, 2016

Gordon Paulsen  
Retail Strategies of NC, Inc  
3900 Merton Drive, Suite 160  
Raleigh, NC 27609

**Subject: Sweetwater Development – Richardson Road Access Study**  
Apex, North Carolina

Dear Mr. Paulsen:

This letter provides a summary of the updated capacity analysis for the proposed driveway locations along the Richardson Road Extension as part of the Sweetwater Development located south of the intersection of US 64 and Jenks Road in Apex, North Carolina. The purpose of this study is to update the Traffic Impact Analysis that was approved in 2015 with the current commercial area site plan.

### **Background**

The original TIA report was prepared for the Sweetwater Development in December 2014 and approved by the Town of Apex (Town) and the North Carolina Department of Transportation (NCDOT). Improvements were required of the development for the intersection of US 64 and Jenks Road / Richardson Road. The site plan evaluated in the TIA did not include apartments in the commercial area. The current plan for the commercial area includes a reduction in the original residential units, a reduction in retail space, and an addition of 230 apartment units within the commercial area. This study evaluates the transportation network based on the current proposed plan.

The following intersections were included in this study:

- US 64 and Jenks Road
- US 64 and Richardson Road
- West U-Turn on US 64
- East U-Turn on US 64
- Kelly Road and Beaver Creek Commons Drive
- US 64 and Kellyridge Road
- Richardson Road and Site Drive 1 (northern access)
- Richardson Road and Site Drive 2 (southern access)

It should be noted that a third access to each side of the commercial area is also proposed and these driveways are restricted to right-in / right-out (RIRO) movements. Although these site drives were not considered study intersections, a percentage of site trips were routed to these intersections.

### **Existing and Background Peak Hour Traffic**

The original TIA existing traffic counts, conducted in November 2014, were used in this study.

The original TIA existing (2014) peak hour traffic volumes were adjusted with a compounded annual growth rate of 3% to project the volumes to the year 2019. Two future developments, Deer Creek and The Preserve at White Oak Creek, were also included in the background traffic in the original TIA. The background (2019) traffic volumes from the original TIA were diverted for the improvements recommended at the intersection of US 64 and Jenks Road / Richardson Road. Refer to Figure 2 for an illustration of the diverted background (2019) traffic.

Since the approval of the original TIA, additional developments within the study area have been approved. The Smith Farm Assemblage is expected to complete the south portion of the Richardson Road Extension, connecting to Olive Chapel Road. The development is anticipated to be completed in 2021 and is expected to consist of 233 acres of residential and 38 acres of mixed-use development. The mixed-use development of the Smith Farm Assemblage is subject to change. Due to the potential variability of land uses, the mixed-use development was not included as an adjacent development in this study. A percentage of traffic was rerouted to use Richardson Road as a cut-through from Olive Chapel to US 64 in the Smith Farm Assemblage TIA. Because of the difference in build-out years and adjacent developments, the Smith Farm Assemblage methodology was used to create the rerouted projected (2019) Smith Farm Assemblage traffic for this study. The combined (2019) Smith Farm Assemblage peak hour traffic includes the site trips from the residential phase and the projected (2019) traffic from the Smith Farm Assemblage TIA. The Smith Farm Assemblage combined (2019) peak hour traffic is illustrated in Figure 3.

### **Future Roadway Improvements**

The original TIA recommended the following roadway improvements:

- Construct the north portion of the Richardson Road Extension.
- Convert the intersection of US 64 and Jenks Road / Richardson Road into a superstreet design and install traffic signals when warranted.
- Construct a U-turn opening on US 64 approximately 800-1,000 feet east of the US 64 and Jenks Road / Richardson Road intersection.
- Construct a U-turn opening on US 64 approximately 800-1,000 feet west of the US 64 and Jenks Road / Richardson Road intersection.
- Install a traffic signal at the U-turn locations when warranted.

Since the approval of the original TIA, several other developments in the surrounding area have been approved. These developments have committed to the following roadway improvements that will improve the overall flow of traffic in the area:

#### *Smith Farm Assemblage*

- Construct south portion of Richardson Road.
- Signalize Richardson Road and Olive Chapel Road.

*Locally Administered Projects Program (LAPP)*

- Lane configuration improvements at Olive Chapel Road and Kelly Road.

*The Reserve at Beaver Creek*

- Signalize Kelly Road and Wendhurst Court / Beaver Creek Commons Drive.

Refer to the attached Future Transportation Improvements Figure for an illustration of the committed roadway improvements in the study area. Each adjacent development has committed to constructing the necessary improvements at existing intersections and future driveways to mitigate the impact that they have on the adjacent roadway network. The most notable improvement will be the completion of the Richardson Road Extension by the Smith Farm Assemblage development. After the construction of the Smith Farm Assemblage, Richardson Road will extend from US 64 to Olive Chapel Road. This new roadway connection is expected to act as an alternative route for Kelly Road and in turn improve the overall delay along Kelly Road. Additionally, a signal will be installed at the intersection of Kelly Road and Wendhurst Court / Beaver Creek Commons Drive as part of the improvements for the Reserve at Beaver Creek development.

**Trip Generation**

The original TIA consisted of a mix of single-family homes, townhomes, general office space, retail space, and three outparcels (bank, sit-down restaurant, and fast food restaurant). The current plan is assumed to consist of approximately 347 single-family homes, 230 apartments, 63 townhomes, 40,000 square feet (s.f.) of general office, 183,000 s.f. of general retail, one drive-in bank with 4 lanes, a 7,000 s.f. high-turnover sit-down restaurant, and a 3,000 s.f. fast food restaurant with a drive through. Average weekday daily, AM peak hour, and PM peak hour trips for the proposed development were estimated using methodology contained within the *ITE Trip Generation Manual*, 9th Edition and based on NCDOT Congestion Management guidelines. Table 1 (attached) provides a summary of the updated trip generation potential for the site.

Based on the trip generation methodology, it is estimated that full build out will generate approximately 15,870 total site trips on the roadway network during a typical 24-hour weekday period. Of the daily traffic volume, it is anticipated that 832 trips (387 entering and 445 exiting) will occur during the weekday AM peak hour and 1,130 trips (587 entering and 543 exiting) will occur during the weekday PM peak hour after an internal capture rate of 15% and pass-by trips are applied.

The trip generation for the current site plan indicates an approximate 2% decrease of trips during the AM peak hour and an approximate 4% increase of trips during the PM peak hour in comparison to the original TIA. This is due to the slight differences in units between land uses and the addition of apartments within the mixed-use area. It is very beneficial for a roadway network to have a mixture of commercial and residential development. The traffic patterns of a residential area complement the traffic patterns of a commercial or retail development. For example, most drivers are exiting a residential area during the AM peak hour and entering during the PM peak hour, whereas most drivers are entering an office area during the AM peak hour and exiting during the PM peak hour. This creates a balance of movement along the roadway. Developments comprised of only one land use, such as residential, will experience long delays exiting the development during the AM peak hour and long delays entering the development during the PM peak hour.



### **Site Trip Distribution and Assignment**

The original TIA trip distribution percentages were used for this study for the intersections studied in the original TIA with the exception of routing trips to / from the south via the Richardson Road Extension. The trip distribution percentages for the commercial site driveways along Richardson Road were determined based on the TIA distribution and location of uses that would use the driveways. The regional site trip distributions are shown in Figure 4. Refer to the Figure 5 for the total peak hour site trips.

### **Combined Peak Hour Traffic**

To estimate traffic conditions with the current site plan, the total site trips were added to the background (2019) traffic volumes to determine the combined (2019) traffic volumes. Refer to Figure 6 for an illustration of the combined (2019) traffic volumes.

### **Capacity Analysis**

A summary of the capacity analysis results from the original TIA is shown in Table 2 (attached). In the original TIA all intersections operated with an acceptable level of service (LOS) with the exception of the minor-street approaches at the unsignalized intersections of Kelly Road and Beaver Creek Commons Drive and US 64 and Kellyridge Road. It should be noted that HCM 2000 was used to report the unsignalized intersections in the original TIA.

Intersection capacity analysis was performed utilizing the combined (2019) traffic volumes for this study. A summary of the capacity analysis results is shown in Table 3. Capacity analysis for the updated traffic study indicates that all of the study intersections will operate at an acceptable level of service during both the weekday AM and PM peak hours.

### **Conclusions**

This study evaluates the updated land uses and trip generation under future build out conditions of the Sweetwater development.

All of the study intersections from the original TIA are expected to operate at acceptable levels of service under combined (2019) conditions. The updated land uses and trip generation are expected to have a minimal impact on the adjacent roadway network in comparison to the original TIA.

Site trip generation with the current site plan has increased by less than 4% overall in comparison to the original TIA. The current plan for the commercial area includes a reduction in the original residential units, a reduction in retail space, and an addition of 230 apartment units within the commercial area. The adjacent roadway network will benefit from the proposed mixed-use development traffic patterns, as mixed-use development encourages balanced entering and exiting traffic during the weekday peak hours.

Despite the slight increase in trips from the current site plan, the number of trips generated from the Sweetwater development are expected to decrease along US 64. This is largely due to the completion of the Richardson Road Extension by the Smith Farm Assemblage development. The extension creates a direct route to Olive

Chapel Road and is expected to act as an alternative route for Kelly Road and in turn improve the overall delay along Kelly Road.

The signal at Beaver Creek Commons Drive will reduce delays for traffic exiting onto Kelly Road from Wendhurst Court / Beaver Commons Road. Signals on US 64 at Jenks Road / Richardson Road as part of the superstreet will provide gaps on US 64 that allow nearby unsignalized intersections to experience less delay than existing conditions.

### **Recommended Improvements by Developer**

Based on the findings of this traffic study, specific geometric improvements have been identified and are recommended to accommodate future traffic conditions. See a more detailed description of the recommended improvements below. Refer to Figure 7 for an illustration of the recommended lane configuration.

It is recommended that a direct internal connection be made within Site Area A between Site Drive 1 and Site Drive 2.

#### **Richardson Road and Site Drive 1**

- Construct the eastbound approach of Site Drive 1 with one ingress lane and two egress lanes (exclusive left turn lane and shared through-right lane).
- Provide an internal protected stem with a minimum of 150 feet at the eastbound approach.
- Construct the westbound approach of Site Drive 1 with one ingress lane and two egress lanes (exclusive left turn lane and shared through-right lane).
- Construct Richardson Road as a four-lane median divided roadway. Provide exclusive left turn lanes on the northbound and southbound approaches with a minimum of 100 feet of storage for each lane.

#### **Richardson Road and Site Drive 2**

- Construct the eastbound approach of Site Drive 2 with one ingress lane and one egress lane.
- Provide an internal protected stem with a minimum of 150 feet at the eastbound approach.
- Construct the westbound approach of Site Drive 2 with one ingress lane and one egress lane.
- Construct Richardson Road as a four-lane median divided roadway. Provide exclusive left turn lanes on the northbound and southbound approaches with a minimum of 100 feet of storage for each lane.
- Install a traffic signal if and when warranted. Coordinate timings with NC 64 and Richardson Road.

If you should have any questions, please feel free to contact me at (919) 872-5115.

Sincerely,

**RAMEY KEMP & ASSOCIATES, INC.**



10-20-16

Rynal Stephenson, P.E.  
Regional Manager  
NC Corporate License # C-0910

cc: Russell Dalton, Town of Apex Public Works

Attachments: Analysis Tables  
Figures  
Synchro Reports



**Table 1**  
**Updated Trip Generation Summary – Full Build Out**

Land Use (ITE Code)	Size	Unit	Weekday 24 Hour Volumes	Weekday AM Peak Hour Trips		Weekday PM Peak Hour Trips	
				Enter	Exit	Enter	Exit
Single-Family Detached Housing (210)	347	Dwelling Units	3,300	65	195	219	128
Mid-Rise Apartments (223)	230	Dwelling Units	1,520*	21	48	52	38
Townhomes (230)	63	Dwelling Units	370	5	23	22	11
General Office (710)	40,000	Square Feet	440	55	7	10	50
General Retail (820)	183,000	Square Feet	10,100	140	85	431	467
Drive-In Bank** (912)	4	lanes	560	22	15	65	68
High-Turnover Restaurant (932)	7,000	Square Feet	890	49	44	70	59
Fast Food w/ Drive Through (934)	3,000	Square Feet	1,490	69	67	51	47
Subtotal			18,670	426	484	920	868
<i>Internal Capture (15%)</i>			2,800	0	0	138	130
<i>Pass-By</i>			--	39	39	195	195
<b>Total Updated Trips</b>			<b>15,870</b>	<b>387</b>	<b>445</b>	<b>587</b>	<b>543</b>

\*Land use code 220 was used to calculate the Weekday Daily trips due to limitations in the ITE Trip Generation Manual.

\*\*Lanes instead of square footage were used to calculate trip generation for drive-in bank.

**LEGEND**

Signalized Intersection

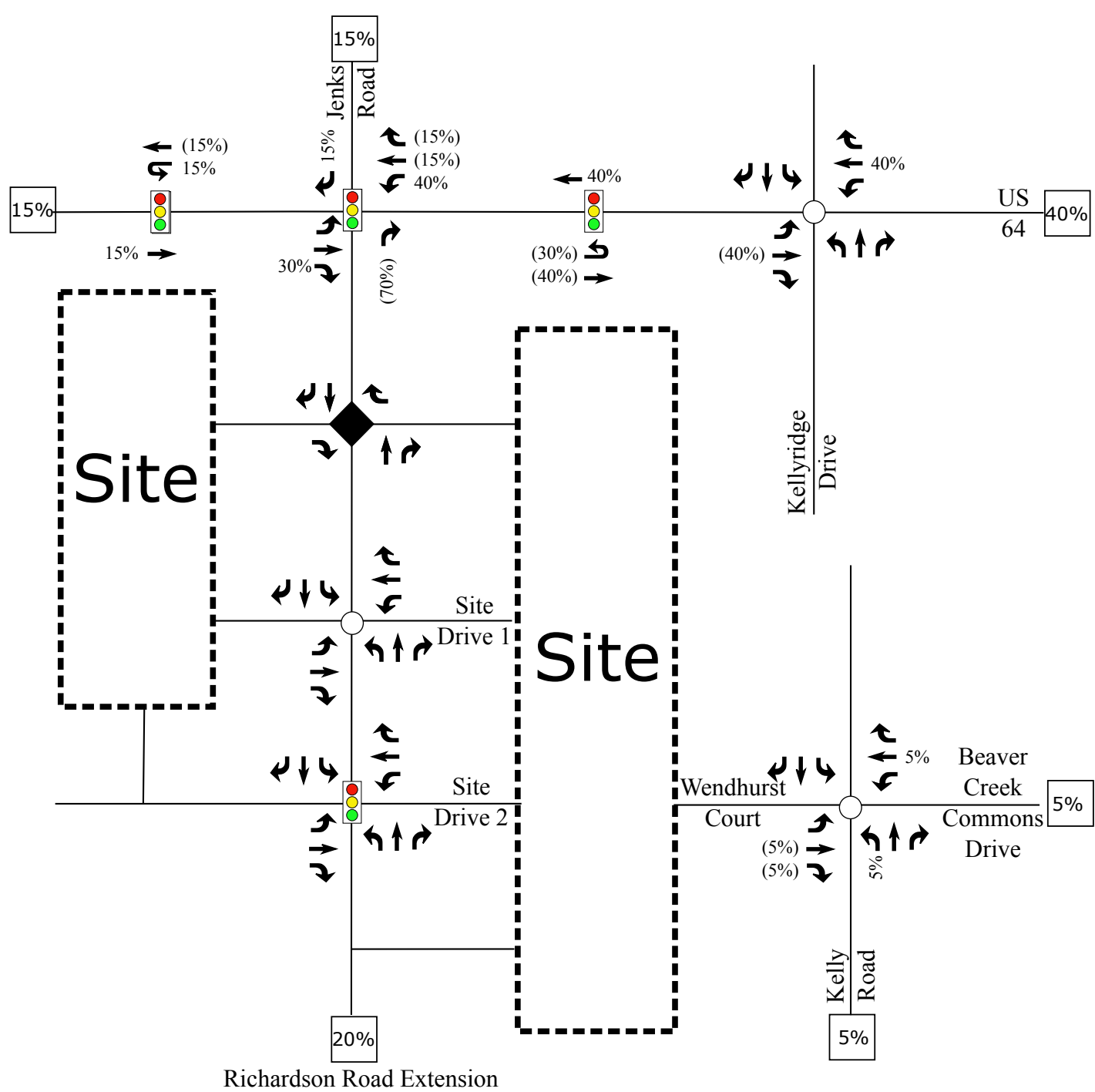
Unsignalized Intersection

Right-in / Right-out Intersection

X% → Entering Trip Distribution

(Y%) → Exiting Trip Distribution

XX% Regional Trip Distribution



## LEGEND



Unsignalized Intersection

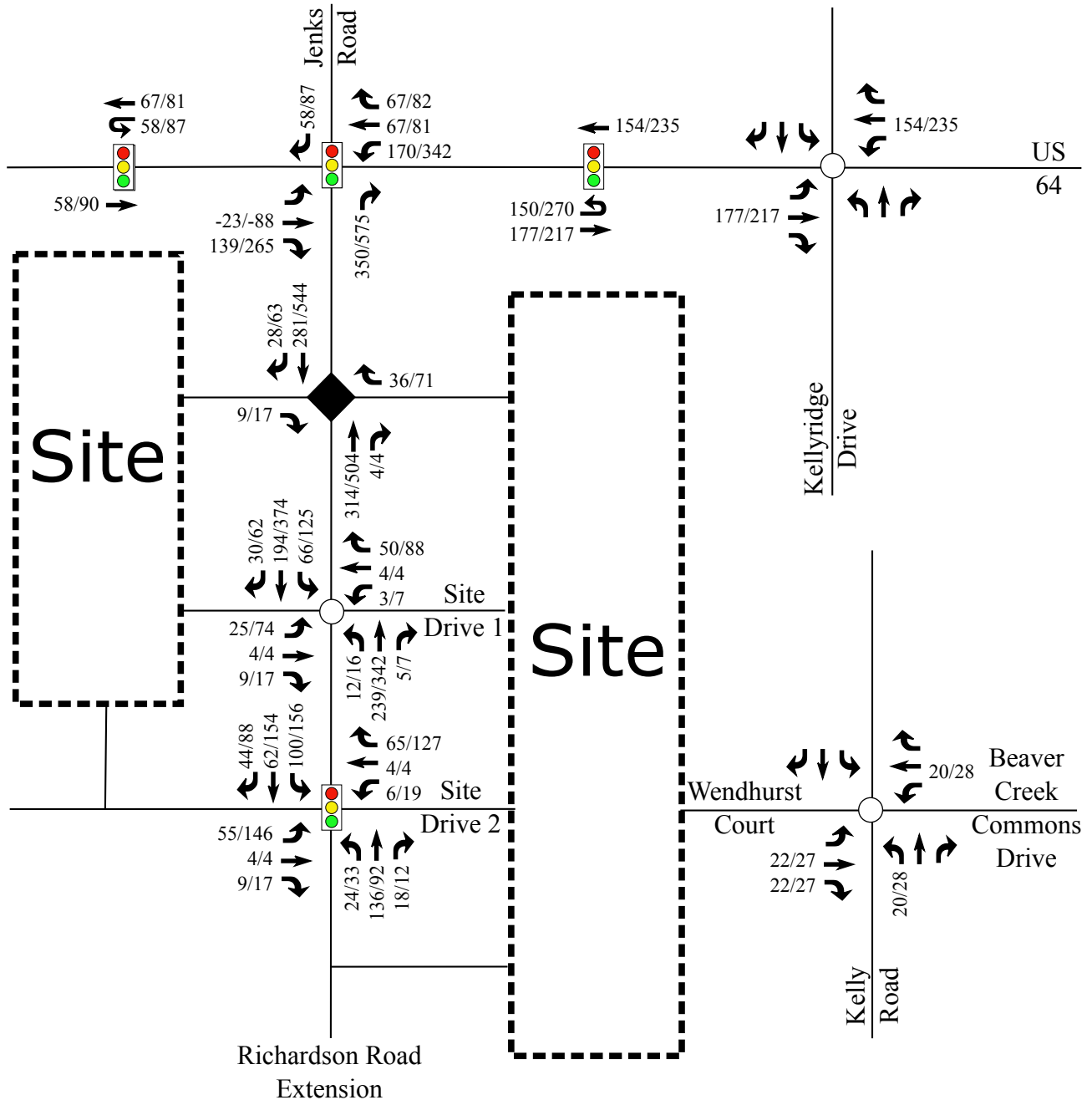


Right-in / Right-out Intersection



Signalized Intersection

X / Y → AM / PM Peak Hour Traffic



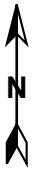
Sweetwater Development  
Update  
Apex, NC

Total Site Trip Assignment

Scale: Not to Scale

Figure 5





### LEGEND

○ Unsignalized Intersection



Signalized Intersection

➔ Existing Lane

X FT Storage (In Feet)



Original TIA  
Recommendations



Adjacent Development  
Improvements



Recommended Right-in /  
Right-out Intersection



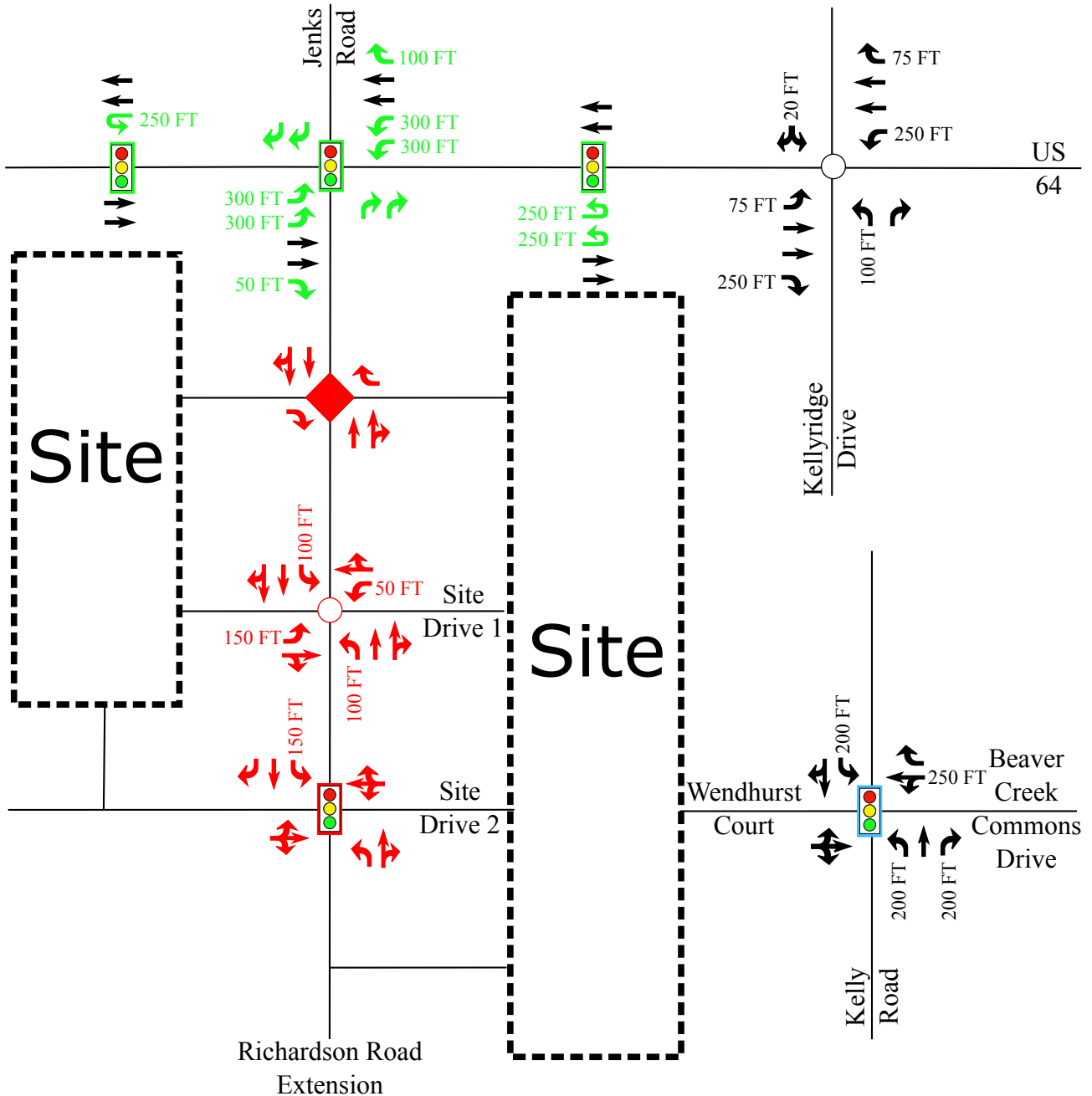
Recommended Unsignalized  
Intersection



Recommended Signalized  
Intersection



Updated TIA  
Recommendations



Sweetwater Development  
Update  
Apex, NC

Recommended  
Lane Configurations

Scale: Not to Scale

Figure 7

Mott MacDonald  
(License No. F-0669)  
7621 Purfoy Road  
Suite 115  
Fuquay-Varina NC 27526  
United States of America

T +1 (919) 552 2253  
F +1 (919) 552 2254  
mottmac.com

Curry Engineering  
205 S Fuquay Avenue  
Fuquay-Varina, NC 27526

# Wolfe Properties PUD

## Traffic Impact Analysis

November 2019



11/22/2019

Curry Engineering



**RESIDENTIAL LOT TYPE LEGEND**



**TOWN OF APEX  
WAKE COUNTY R-40W ZONING**

SITE AREA	43.39 ac
ZONING	R-40W
LAND USE	Low Density Residential (LDR)
REZONING REQUIRED (Y/N)	Y
REZONING DISTRICT	PUD-C2
MAXIMUM DENSITY	3 units/ac
MAXIMUM NUMBER OF UNITS	130 units
PROPOSED UNITS	120 units
SINGLE FAMILY DETACHED	70
TOWNHOMES	50
PARKS & RECREATION LAND DEDICATION REQUIRED	3.11 ac (100% SF & 145% TH)
PARKS & RECREATION LAND DEDICATION PROVIDED	3.74 ac
AREA GAINED FROM PROPERTY SWAP	0.15 ac
PROPERTY AREA AFTER LAND DEDICATION & SWAP	39.80 ac
NEW MAXIMUM DENSITY	30.80 ac
PROPOSED DENSITY	120 units
RESOURCE CONSERVATION AREA REQUIRED	9.95 ac (23%)
RESOURCE CONSERVATION AREA PROVIDED	10.23 ac (25.7%)

# WOLFE PROPERTIES PUD

APEX, NORTH CAROLINA  
SINGLE FAMILY DETACHED & TOWN HOME SITES

AUGUST 28, 2019



1"=160'-0"

0 80' 160' 320' 480'



## 4 Build (2025) Conditions

As previously described, a residential development consisting of 70 single-family homes and 50 townhomes is being proposed on the east side of Wimberly Road, between Green Level West Road and Jenks Road, in Apex, NC. Per the site plan, the proposed development will provide two full accesses along Wimberly Road. The northern driveway (Access #1) is approximately 0.9 miles south of Castleberry Road, while the southern driveway (Access #2) is approximately 0.4 miles north of Jenks Road. The development is anticipated to be fully constructed by 2025.

### 4.1 Trip Generation and Distribution

Trip generation was estimated based on the *ITE Trip Generation Manual, 10<sup>th</sup> Edition* and NCDOT Congestion Management guidelines. As shown in **Table 6**, the development is anticipated to generate 1,086 daily trips, 79 AM peak hour trips (19 entering, 60 exiting) and 104 PM peak hour trips (65 entering, 39 exiting).

**Table 6: Trip Generation Results**

Land Use (ITE Land Use Code)	Units	Daily	AM Peak		PM Peak	
			Enter	Exit	Enter	Exit
Single Family Detached (210)	70	749	13	41	45	27
Townhomes (220)	50	337	6	19	20	12
<b>Total</b>	<b>120</b>	<b>1,086</b>	<b>19</b>	<b>60</b>	<b>65</b>	<b>39</b>

Source: *ITE Trip Generation Manual, 10<sup>th</sup> Edition*

Most of the projected site trips are anticipated travel west along Jenks Road to US 64. The site trip distribution percentages for the proposed development are shown in **Figure 6**, with the resulting site trips shown in **Figure 7**.

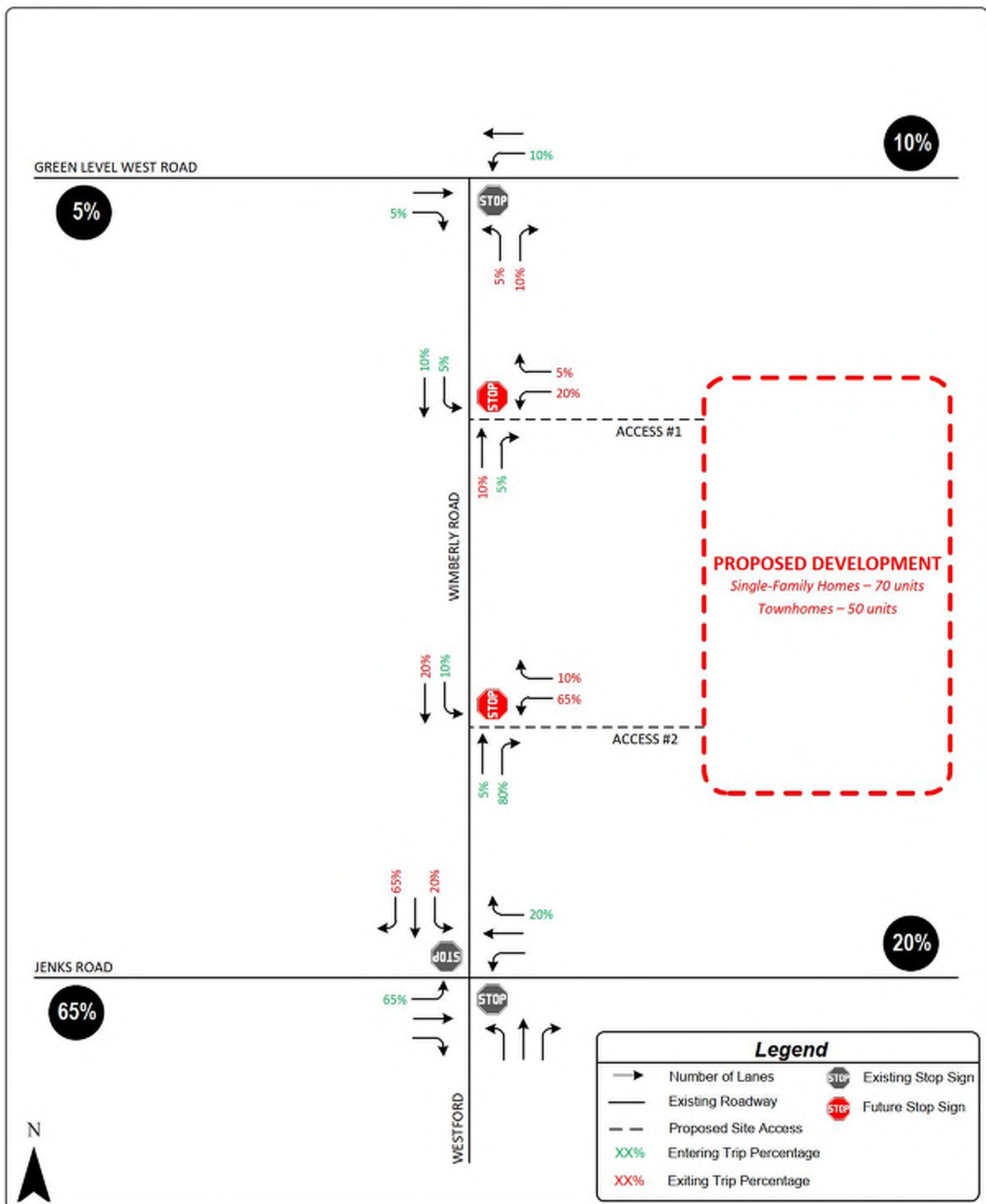
### 4.2 Level of Service Analysis

The Build (2025) scenario consists of the Background (2025) traffic as discussed previously with the addition of site generated trips from the proposed development. The volumes that are used in the Build (2025) analysis are shown in **Figure 8**. The laneage and traffic control used for the Build (2025) scenario is based on the existing conditions shown in **Figure 3**. The summary level of service results are shown in **Table 7**.

As shown in **Table 7**, the stop-controlled and yield movements at both study area intersections are currently operating at LOS C or better during the AM and PM peak hours.

The newly constructed accesses along Wimberly Road are projected to operate acceptably in both the AM and PM peak hours, with the access approaches operating at LOS B or better and the southbound left-turn movements operating at LOS A in both the AM and PM peak hours.

The Build (2025) analysis results are located in **Appendix F**.



GREEN LEVEL WEST ROAD

2 (7)

1 (3)



3 (2)  
6 (4)

2 (7)  
1 (3)

WIMBERLY ROAD

3 (2)  
12 (8)



6 (4)  
1 (3)

ACCESS #1

12 (8)  
2 (7)



6 (4)  
39 (25)

ACCESS #2

39 (25)

12 (8)

4 (13)



12 (42)

STOP

1 (3)  
15 (52)

JENKS ROAD

WESTFORD

**PROPOSED DEVELOPMENT**

Single-Family Homes – 70 units

Townhomes – 50 units

N



**Legend**

- Number of Lanes
- Existing Roadway
- - Proposed Site Access
- XX (XX) AM (PM) Volumes
- Existing Stop Sign
- Future Stop Sign



Traffic Impact Analysis for  
**The Retreat at the Preserve at White Oak**  
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

March 2021  
017270007



3/26/2021

### 3.0 Traffic Generation

The traffic generation potential of the proposed development was determined using the traffic generation data published in *Trip Generation* (Institute of Transportation Engineers, Tenth Edition, 2017). As currently envisioned, the redevelopment is expected to include 80 townhomes and 22,000 square feet (SF) of commercial space, which are anticipated to be completed as two separate projects: Scenario #1 (residential only) and Scenario #2 (commercial + residential). Specific commercial uses are not known at this time, but this analysis assumed the commercial space would include a 14,000 SF daycare center and 8,000 SF of medical office space.

As shown in Table 3.1, Scenario #1 has the potential to generate 39 net new external trips in the AM peak hour and 48 net new external trips in the PM peak hour on a typical weekday, which are well below the Town of Apex peak hour thresholds for requiring a TIA.

Table 3.1 ITE Traffic Generation (Vehicles) – Scenario #1 (Residential Only)							
Land Use Code	Land Use	Intensity		AM Peak Hour		PM Peak Hour	
				In	Out	In	Out
221	Multifamily Housing (Low-Rise)	80	d.u.	9	30	30	18

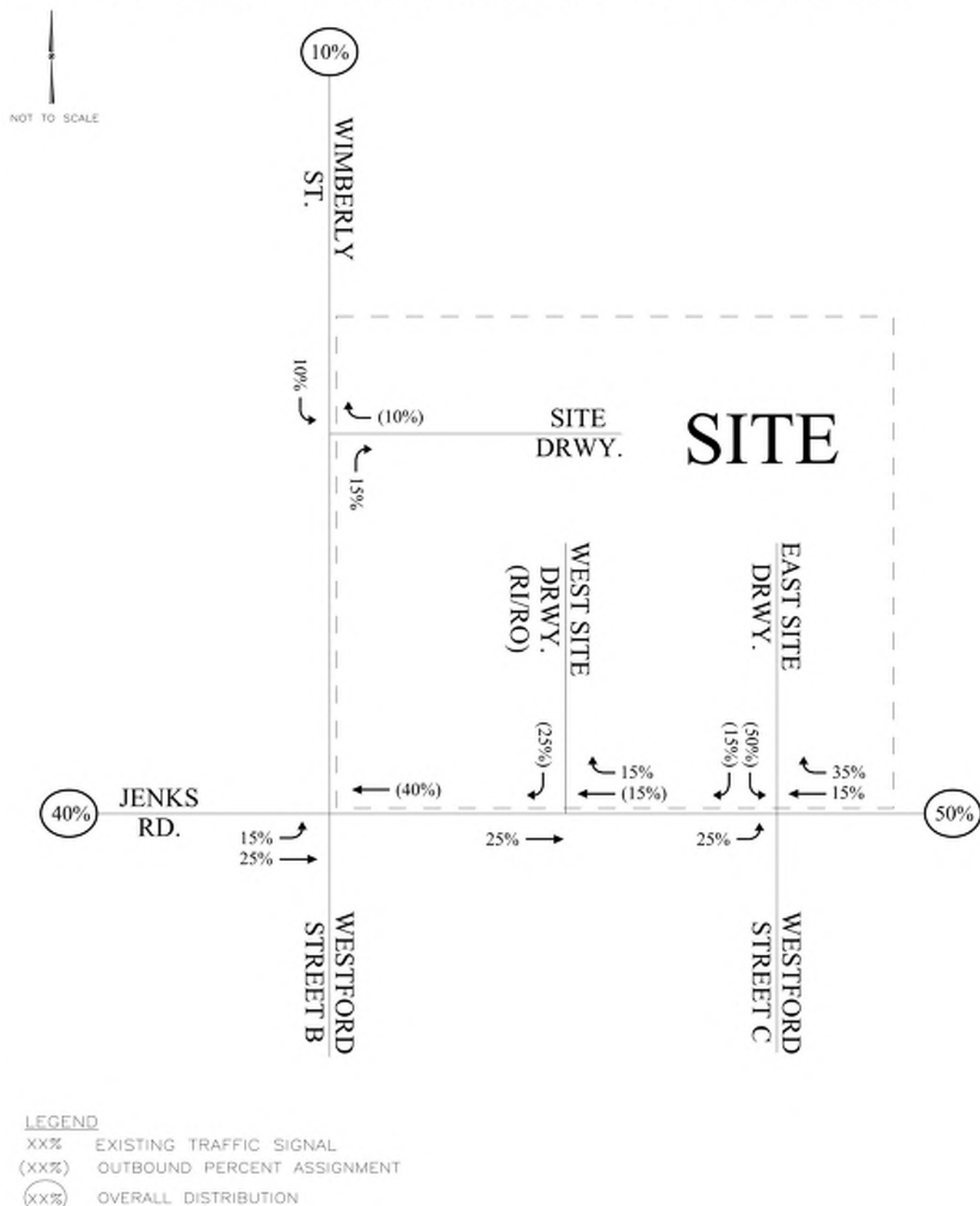
As shown in Table 3.2, Scenario #2 has the potential to generate 215 net new external trips in the AM peak hour and 231 net new external trips in the PM peak hour on a typical weekday.

Table 3.2 ITE Traffic Generation (Vehicles) – Scenario #2 (Commercial + Residential)							
Land Use Code	Land Use	Intensity		AM Peak Hour		PM Peak Hour	
				In	Out	In	Out
221	Multifamily Housing (Low-Rise)	80	d.u.	9	30	30	18
565	Daycare Center	14,000	s.f.	82	72	73	83
820	Medical Office	8,000	s.f.	19	5	8	21
Subtotal				110	107	111	122
Internal Capture				1	1	1	1
Total Net New External Trips				109	106	110	121

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 Scenario #2 land uses will be approximately 1% in both peak hours.

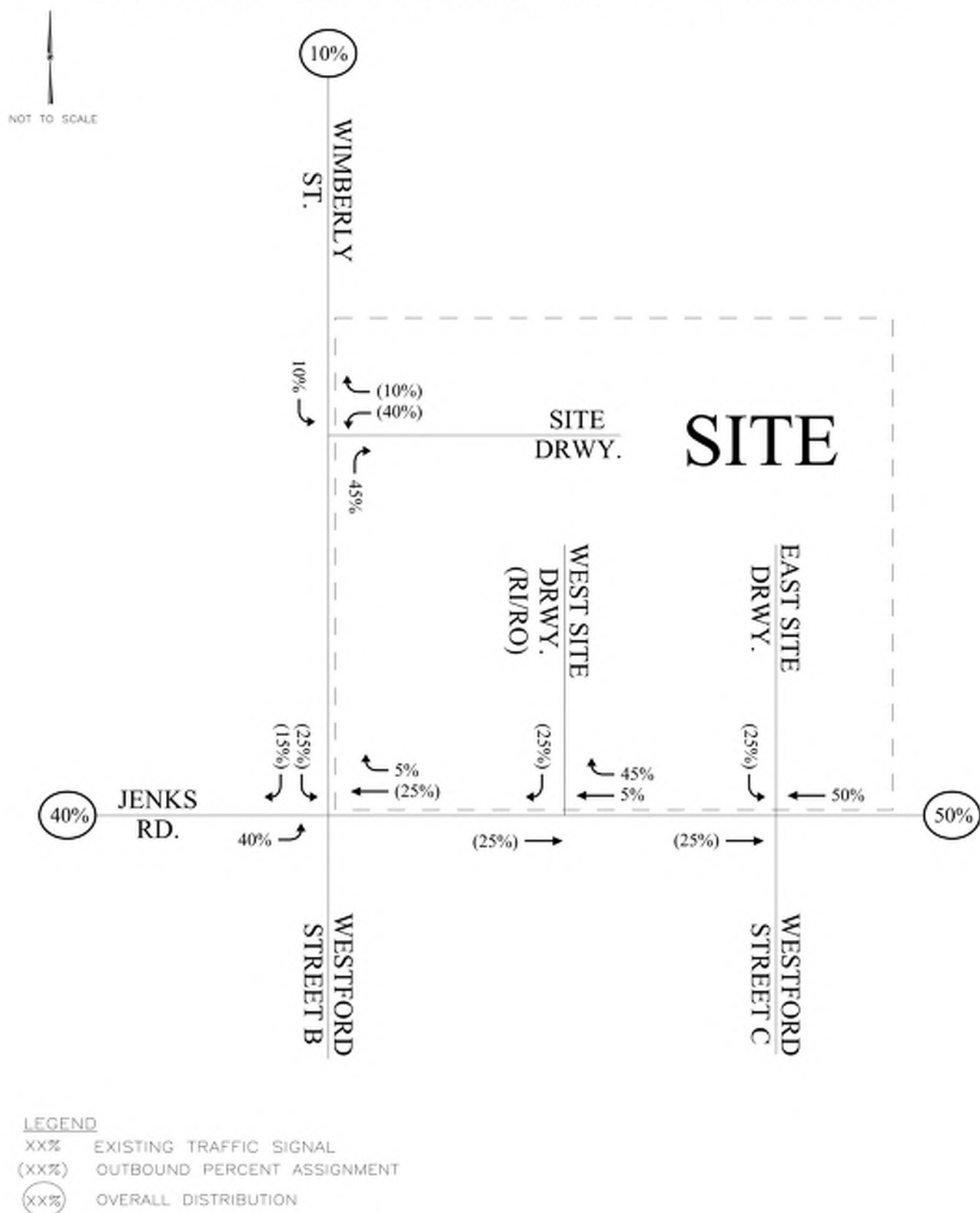
It should also be noted that while a significant portion of daycare trips (particularly in the PM peak hour) are anticipated to be diverted link trips per ITE, no such trip generation adjustments

# SCENARIO #2: COMMERCIAL + RESIDENTIAL



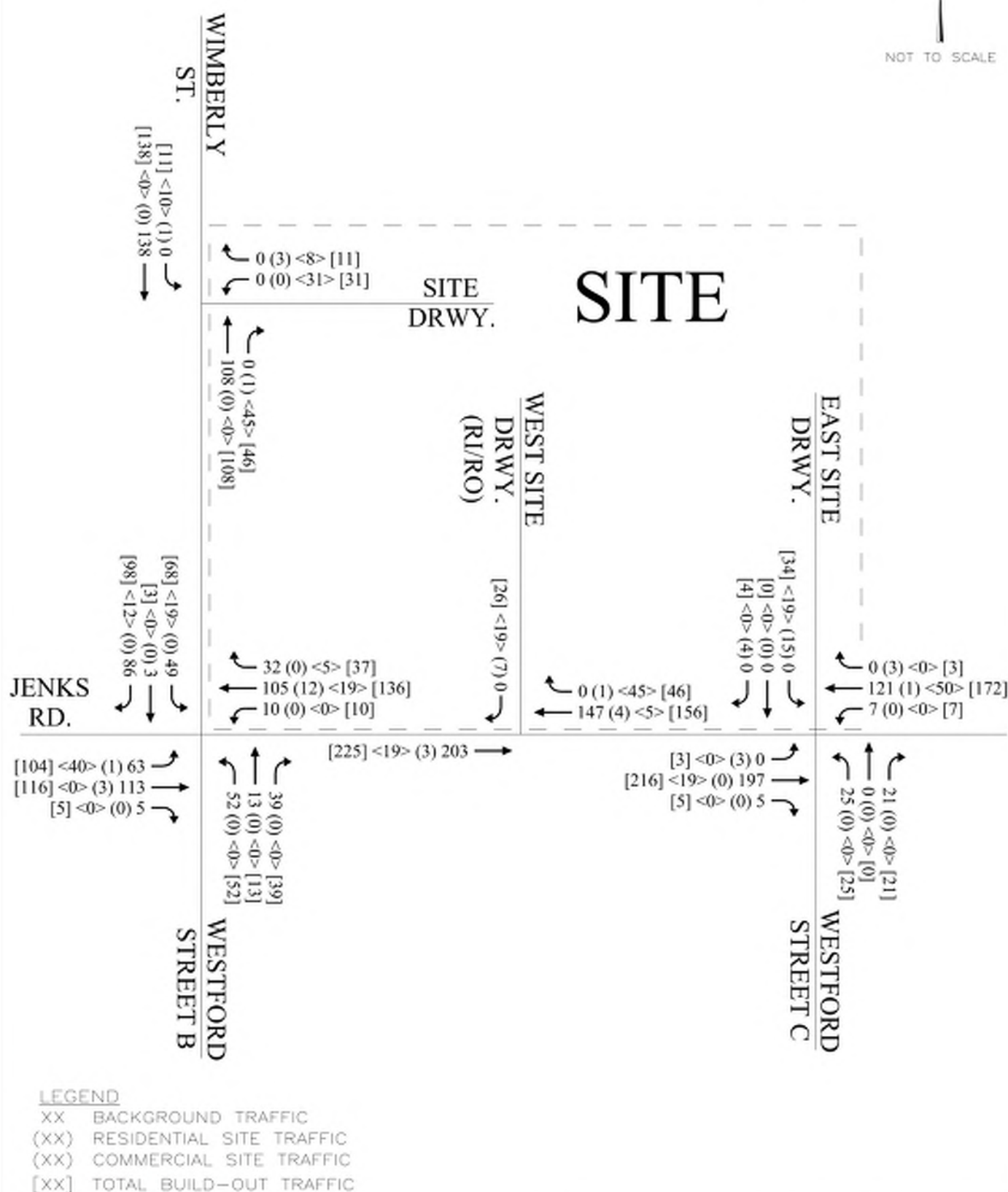


# SCENARIO #2: COMMERCIAL + RESIDENTIAL



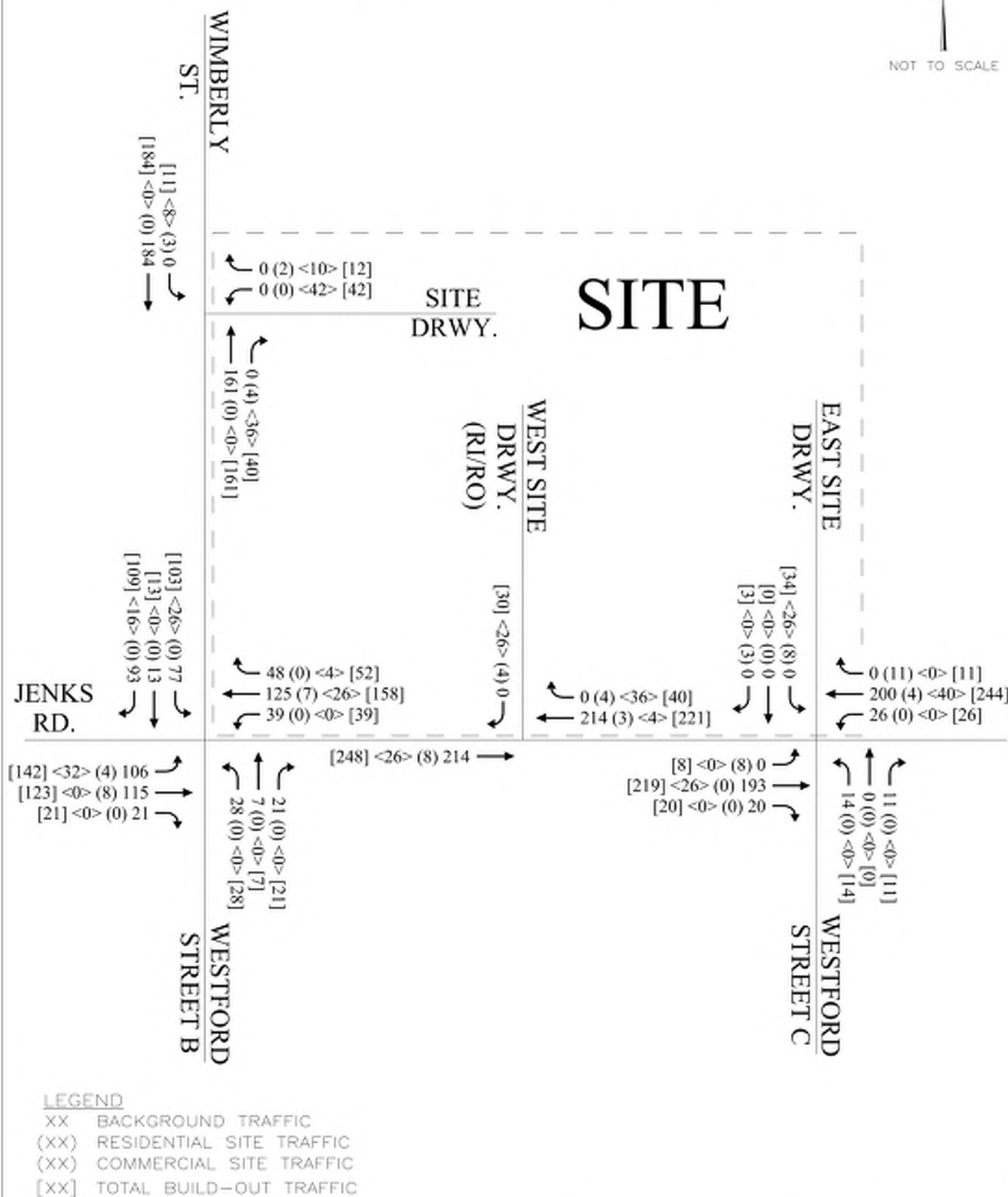
# SCENARIO #2: COMMERCIAL + RESIDENTIAL

NOT TO SCALE



# SCENARIO #2: COMMERCIAL + RESIDENTIAL

NOT TO SCALE





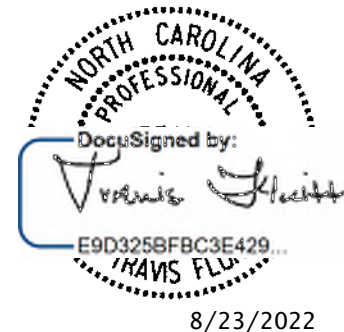
## MEMORANDUM

To: Russell Dalton, PE, Town of Apex  
Jeremy Warren, PE, NCDOT

From: Travis Fluitt, PE, Kimley-Horn and Associates

Date: August 23, 2022

Subject: **Westford Mixed-Use – Apex, NC – TIA Addendum**



Kimley-Horn has prepared an addendum to the *Westford Mixed-Use TIA* (Kimley-Horn, April 2022) to evaluate the impacts of potential revisions to the access configuration of "Site Driveway 2" on Jenks Road southwest of Lowell Road. The original TIA assumed that Site Driveway 2 would be constructed as a full-movement driveway, but based on comments from the Town of Apex the driveway may be constructed as a right-in/right-out access instead.

### Volume Development

Existing AM and PM peak hour volumes were obtained from the original TIA and not modified for this analysis. Based on discussions with the Town of Apex, in addition to the background growth and approved development traffic included in the original TIA, site traffic from the Arden at Summit Pines development was included as background traffic in this addendum along with roadway improvements committed as part of zoning conditions with that project. Per the *Arden at Apex TIA* (RKA, March 2022) that project proposes the construction of 163 multifamily senior adult dwelling units and 10,000 square feet (SF) of strip retail space, and build-out is anticipated in 2024. The revised projected (2025) AM and PM peak hour background traffic volumes are shown on **Figures 1 and 2**, respectively.

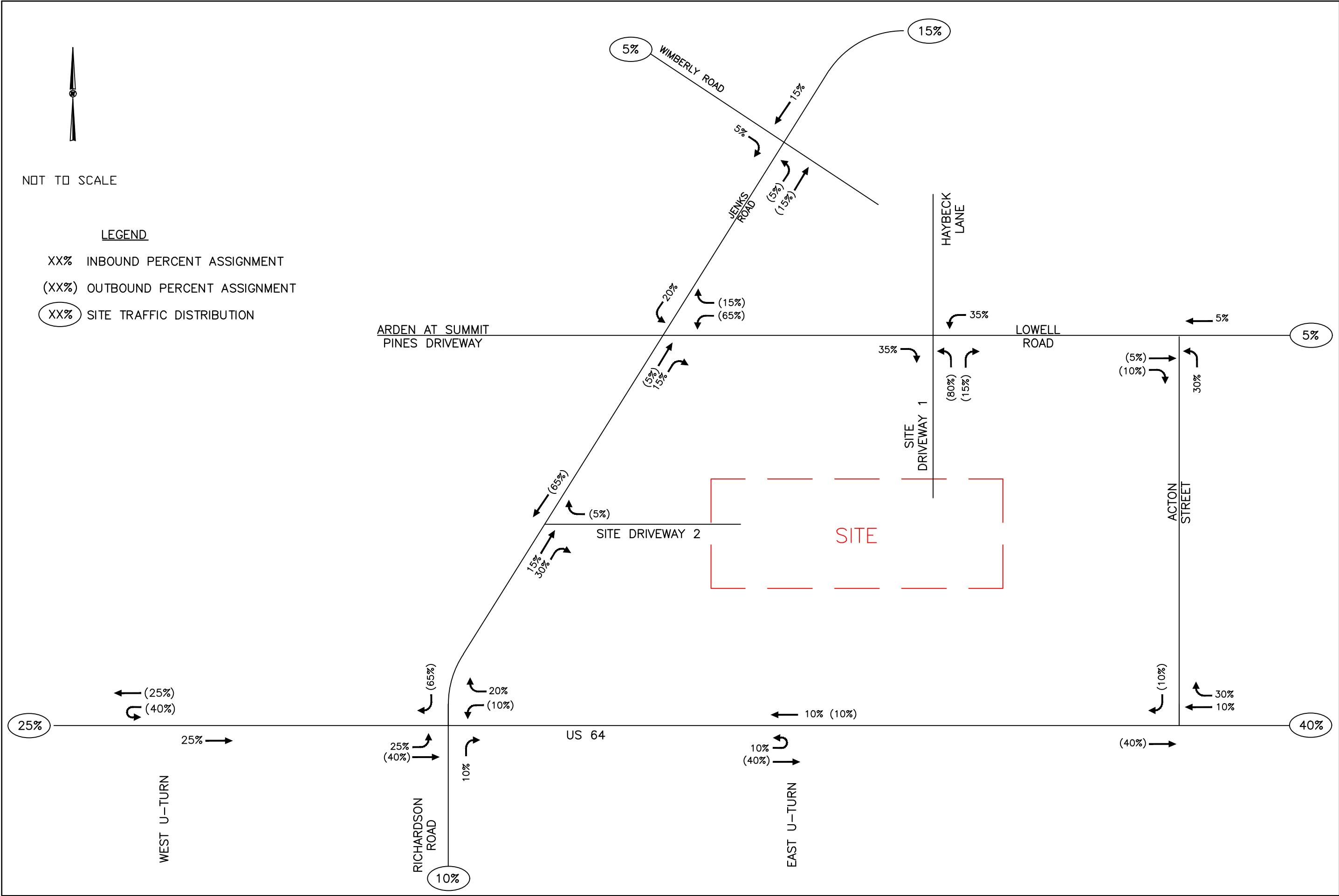
No changes were made to the overall site traffic distribution from the original *Westford Mixed-Use TIA* as part of this addendum, though the primary and pass-by traffic assignments were updated to reflect the change in access configuration of Site Driveway 2. The revised overall site traffic distribution and assignment is shown on **Figure 3**.

The updated AM and PM peak hour build-out traffic volumes are shown on **Figures 4 and 5**, respectively.

### Capacity Analysis

Capacity analyses were performed using Synchro Version 11 software. [Table 1](#) summarizes the LOS and delay at the study intersections, and Synchro LOS reports are attached. As no changes were made to the existing traffic condition analyses, those findings were not included in the LOS summary.

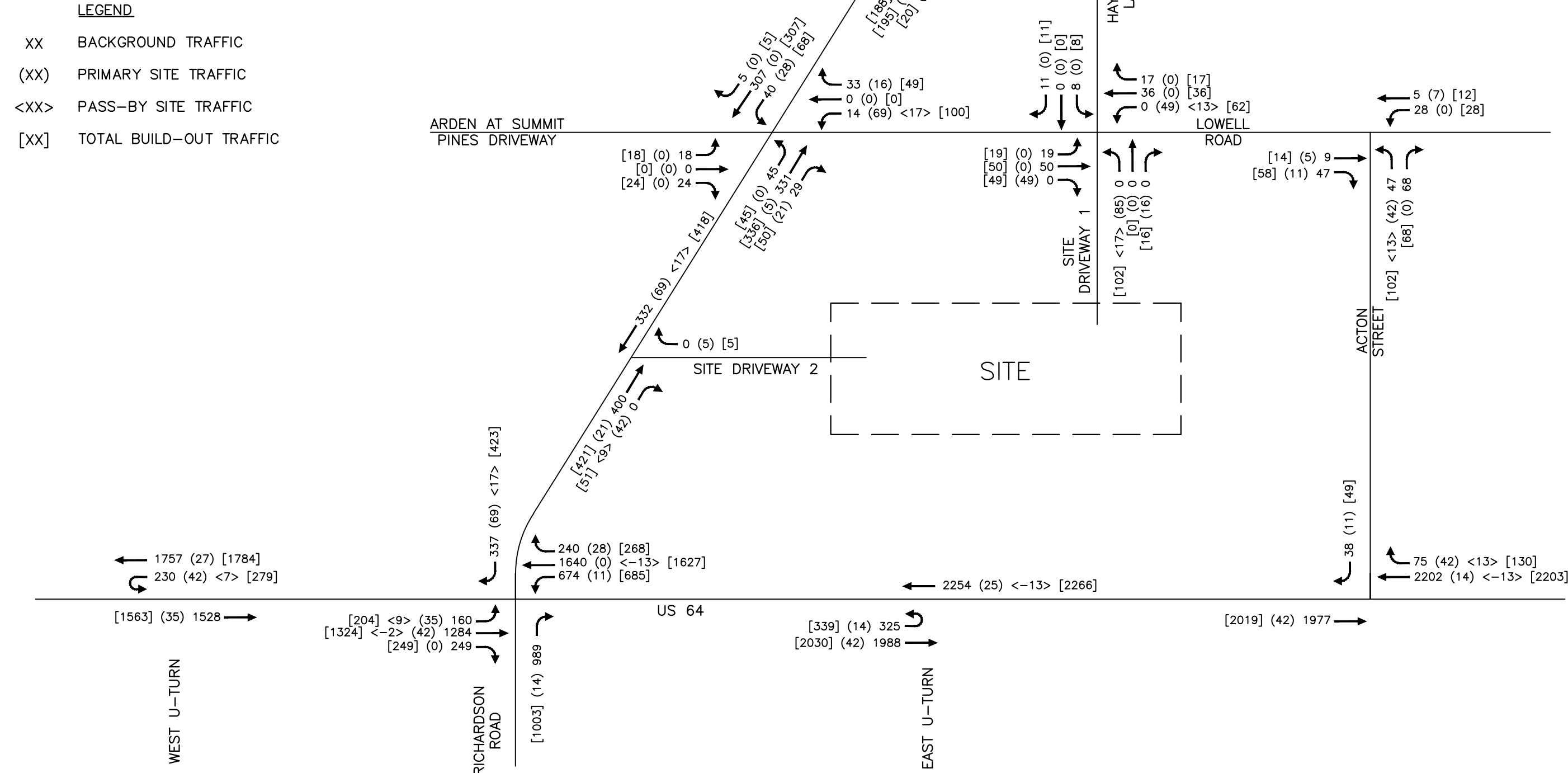
K:\RAL\_TPTO\Traffic\018995010 Westford Mixed-Use\T5 - Report-Submittals\Addendum-RIRO SD2\Figures\TIA\_Figures\_Updated.dwg



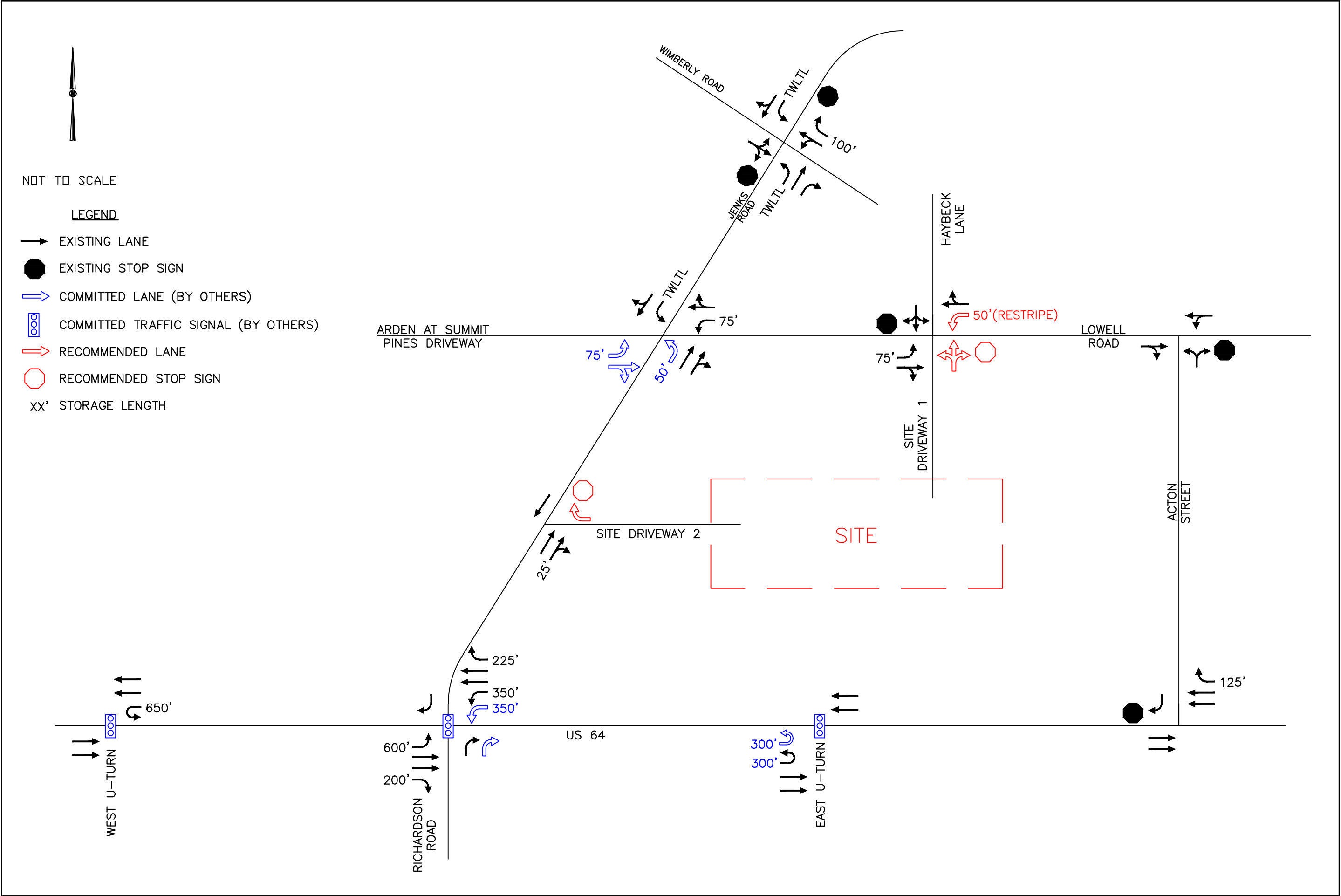
THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY KIMLEY-HORN AND ASSOCIATES, INC.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







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TRAFFIC IMPACT ANALYSIS

# US 64 Light Industrial

Apex, North Carolina

---

PREPARED FOR

Drew Thigpen  
Greenberg Gibbons Properties  
4929 Monroe Road  
Charlotte, NC 28205  
843.469.2517

---

PREPARED BY



**VHB Engineering NC, P.C. (C-3075)**

940 Main Campus Drive, Suite 500  
Raleigh, NC 27606  
919.829.0328

12/20/2022



12/20/2022

DocuSigned by:

*Nathaniel J Rhomberg*

E419EBDD28E14F0...





## Executive Summary

Greenberg Gibbons Properties has plans to develop the US 64 Light Industrial development in Apex, North Carolina (Figure 1). The development is currently proposed to consist of 290,000 square feet (sf) of light industrial, 160,000-sf of flex space and 30,800-sf of retail. The is estimated year of opening for the site is 2027.

## Project Background

Based on the conceptual site plan (Figure 2), access to the development is proposed via one (1) vehicular driveway on US 64 and two (2) vehicular driveways on Goodwin Road:

- › Future Access #1, right-in/right-out (RI/RO) access on US 64, approximately 1,100 feet east of Goodwin Road and 1,200 feet west of Jenks Road.
- › Future Access #2, full movement access driveway on Goodwin Road, approximately 400 feet north of US 64.
- › Future Access #3, full movement access on Goodwin Road, approximately 800 feet north of US 64.

In addition, an extension of Lowell Road via adjacent parcels to the east is planned to provide a connection from Goodwin Road to Jenks Road at the Lowell Road intersection. Due to the uncertainties regarding this extension, two (2) access scenarios (Scenario A and Scenario B) are included in the TIA to analyze traffic conditions without and with the Lowell Road Extension to Jenks Road.

As determined through the project scoping process with the North Carolina Department of Transportation (NCDOT) and the Town of Apex, the following intersections were included in the study area and analyzed for existing and future conditions, as applicable:

- › US Highway 64 WB and Jenks Road (SR 1601) (unsignalized, future signalized RCI)
- › US Highway 64 EB and Richardson Road (unsignalized, future signalized RCI)
- › US Highway 64 EB and U-turn west of Jenks Road (SR 1601) (unsignalized, future signalized RCI)
- › US Highway 64 WB and U-turn east of Richardson Road (unsignalized, future signalized RCI)
- › US Highway 64 and Goodwin Road (SR 1602) (unsignalized, future RCI)
- › Jenks Road (SR 1601) and Lowell Road/ Future Lowell Road Extension (unsignalized)
- › Jenks Road (SR 1601) and Wimberly Road (SR 1603) (unsignalized)
- › US Highway 64 WB and Future Access #1 (future RI/RO)
- › Goodwin Road (SR 1602) and Future Access #2 (future unsignalized)
- › Goodwin Road (SR 1602) and Future Access #3 (future unsignalized)

The following scenarios were analyzed for existing and future conditions to evaluate the impacts that the proposed development may have on the surrounding roadway network:

- › Existing (2022) Conditions
- › No-Build (2027) Conditions
- › Build Scenario A (2027) Conditions – without Lowell Road Extension to Jenks Road
- › Build Scenario B (2027) Conditions – with Lowell Road Extension to Jenks Road
- › Build Scenario A (2027) with Improvements Conditions
- › Build Scenario B (2027) with Improvements Conditions

The Existing (2022) scenario includes typical weekday AM and PM peak hour analysis based on turning movement count data collected in April and June 2022. The No-Build (2027) scenario includes existing traffic with an annual projected background growth rate in addition to site trips from eight (8) nearby background developments. The Build (2027) scenarios include No-Build (2027) volumes with the addition of site trips generated by the full build-out of the proposed development under Scenario A and Scenario B Conditions. Recommended lane configuration and traffic control improvements for each Build (2027) scenario are analyzed within the Build (2027) with Improvements scenarios.

## Existing (2022) Conditions

Existing analyses were conducted based on current roadway geometrics and intersection turning movement counts collected in April and June 2022. No adjustments were applied to the collected turning counts since traffic volumes were consistent with historical annual average daily traffic (AADT) data.

As reported in the Summary Level of Service (LOS) table on page vii, multiple stop-controlled approaches along US 64 are operating at failing levels (LOS E or F) during at least one peak hour. Northbound Richardson Road at US 64 EB is operating at LOS F during the AM peak hour and LOS E

during the PM peak hour, and southbound Goodwin Road at US 64 is operating at LOS D during the AM peak hour and LOS F during the PM peak hour. The left-turn from US 64 EB to Jenks Road is operating at LOS E during the AM peak hour and LOS F during the PM peak hour, and the left-turn from US 64 WB on to Richardson Road is operating at LOS F during both peak hours. All other stop-controlled approaches are operating acceptably (LOS D or better) during both peak hours.

## No-Build (2027) Conditions

Based on instructions from the Town of Apex, an annual growth rate of two percent (2%) was utilized to calculate ambient growth between the existing year (2022) and the build-out year (2027). Eight (8) background developments were identified within the study area, and the projected peak hour trips from these developments were included in the No-Build (2027) volume calculations:

- › Sweetwater Commercial
- › Kiddie Academy
- › Westford Mixed-Use
- › Arden at Apex
- › Alderwood (The Retreat at the Preserve at White Oak Creek)
- › Park at Wimberly (Wolfe Properties)
- › Legacy PUD (US 64 Residential)
- › Triangle Math and Science Academy (Lower + Upper Schools)

The NCDOT and the Town of Apex developed a master plan to preserve and enhance mobility and safety while balancing community access and interests along the US Highway 64 corridor. As indicated in the US 64 Corridor Study, a short-term solution for US 64 in the study area is to construct Reduced Conflict Intersections (RCIs) before the US 64 corridor will eventually be upgraded to a controlled access freeway. Therefore, the RCI design was incorporated in this study to be consistent with NCDOT's and the Town's vision for US Highway 64.

Among the committed improvements by background developments, signalization and turn lane improvements are planned at the US 64 and Jenks Road/ Richardson Road RCI intersections by Sweetwater Commercial. A new signal is committed to be installed at US 64 and Goodwin Road by Legacy PUD once it is warranted. In addition, turn lane improvements are planned on the eastbound approach of Wimberly Road at Jenks Road by Park at Wimberly, and a fourth leg is to be constructed at Jenks Road and Lowell Road by Arden at Apex.

As shown on the Summary LOS table on page vii, the signalized RCI intersections along US 64 at Jenks Road/ Richardson Road and the two U-turn locations are expected to operate at LOS C or better during both the AM and PM peak hours, and the intersection of US 64 at Goodwin Road is expected to operate at LOS A during both peak hours after a traffic signal is installed. The stop-controlled approaches along Jenks Road are all expected to operate acceptably (LOS D or better) during both peak hours.



## Trip Generation and Assignment

Trip generation was conducted based on the most appropriate corresponding trip generation codes included in the *ITE Trip Generation Manual, 11<sup>th</sup> Edition* and the suggested method of calculation in the NCDOT's *"Rate vs. Equation" Spreadsheet*. Based on the proposed land uses at the site, ITE Land Use Code (LUC) 110 (General Light Industrial), LUC 770 (Business Park), and LUC 822 (Strip Retail Plaza (<40k-sf)) were used in the TIA. Internal capture between mixed uses were calculated based on the NCHRP 684 methods with the NCDOT Internal Capture worksheet.

As a result, the proposed development is projected to generate 4,806 daily external weekday site trips, with 441 external trips (378 entering, 63 exiting) occurring in the AM peak hour and 468 external trips (148 entering, 320 exiting) occurring in the PM peak hour. The generated site trips were distributed in accordance with the existing turning movement counts and land uses.

## Build (2027) Conditions

The Build (2027) conditions account for both the No-Build traffic and site traffic generated by the proposed development after the completion. The surrounding roadway network without the proposed cross-connection to Arden at Apex is analyzed in Scenario A, and the proposed cross-connection from the development to Arden at Apex is analyzed in Scenario B.

As shown on the Summary LOS table on page vii, with the addition of site trips, the signalized RCI intersections along US 64 at Jenks Road and Richardson Road are expected to continue to operate acceptably during both peak hours with some delay increases. Under Scenario A, the U-turn movement along US 64 west of Goodwin Road is expected to operate at LOS F during the PM peak hour, and the U-turn movement along US 64 at Goodwin Road is expected to operate at LOS E during the PM peak hour. Both U-turn movements are projected to operate at acceptable levels of services under Scenario B. Stop-controlled eastbound Wimberly Road at Jenks Road is projected to operate at LOS E during the PM peak hour under both scenarios. Stop-controlled Future Access #1 along US 64 is expected to operate at LOS E during the PM peak hour under Scenario A conditions only. All stop-controlled future driveways along Goodwin Road are expected to operate at LOS B or better during both peak hours under either scenario.

## Roadway Improvement Recommendations

As indicated in the traffic capacity analyses, the proposed development is not projected to have a significant impact on the traffic operations at the study area intersections. However, improvements at some locations are recommended with either Scenario A or Scenario B in place.

### US 64 Eastbound at U-Turn West of Goodwin Road (future unsignalized)

With the construction of the US 64 Light Industrial development, the existing full movement intersection at US 64 and Goodwin Road is proposed to be converted to a RCI configuration to be consistent with the NCDOT and Town of Apex plans for the US 64 corridor. To complete this reconfiguration, left-turns will be restricted off of Goodwin Road, and a new U-turn bulb will be constructed to accommodate the left-turns exiting Goodwin Road. It is assumed that the left-turn

onto Goodwin Road from US 64 Eastbound and the right-turn off of Goodwin Road will remain signalized since a traffic signal is committed to be installed by others once it is warranted under the No-Build (2027) condition.

Under Build (2027) Scenario A conditions, this proposed U-turn movement is projected to operate at LOS F during the PM peak hour. The U-turn movement will likely not warrant the installation of a traffic signal after the build-out of the development, but if the cross-connection to Arden at Apex is not made, this U-turn movement could provide a primary choice for vehicles heading eastbound on US 64. As a result, this U-turn location should be monitored for signalization to assist site traffic exiting and heading eastbound on US 64.

- › Construct a U-turn lane with at least 450 feet of storage and appropriate taper (both access scenarios).
- › Monitor intersection for signalization (Scenario A only)

*US 64 Westbound at Jenks Road (SR 1601) (future signalized)*

The future signalized intersection is expected to operate LOS B during the AM peak hour and LOS D during the PM peak hour under Scenario B conditions. With Scenario B in place, more site traffic is expected to utilize Jenks Road to access US 64 through signalized RCI intersections. To facilitate such movement and alleviate queuing concerns, the following lane improvement is recommended under Scenario B assuming the Lowell Road Extension is in place.

- › Construct a second exclusive right-turn lane along Jenks Road with at least 250 feet of storage and appropriate taper (Scenario B only).

*Jenks Road (SR 1601) at Wimberly Road (SR 1603) (unsignalized)*

Eastbound stop-controlled Wimberly Road is expected to operate at LOS E during the PM peak hour under both Build (2027) scenarios. A traffic signal is not expected to be warranted, and dedicated turn lanes are already in place or planned by others at this intersection. Since the development is not expected to contribute a significant amount of site traffic to this approach, and the approach can operate at LOS E in the PM peak hour only without significant queueing and delays expected, no improvements are recommended for this intersection.

*Jenks Road (SR 1601) at Lowell Road/ Arden at Apex Driveway (unsignalized)*

Arden at Apex is planning to construct a fourth leg at this intersection with two approach lanes. Under either Build (2027) scenario, both stop-controlled eastbound and westbound approaches are expected to operate at LOS B or LOS C during both peak hours. Since the eastbound approach is not expected to experience significant delay or queueing increases with the additional site traffic along the approach under Scenario B, no additional roadway improvements are recommended along the Arden at Apex driveway to accommodate the future cross-connection.

As indicated in the access scenario analysis, the proposed cross-connection to Arden at Apex is not expected to impact operations at any of the proposed site access driveways along Goodwin Road and US 64. Therefore, the following lane configurations are recommended for each site access driveway under both access scenarios.

*US Highway 64 and Future Access #1 (unsignalized)*

Stop-controlled Future Access #1 is expected to operate at LOS C during the AM peak hour and LOS E during the PM peak hour under Build (2027) Scenario A, while it is expected to operate at LOS C in the AM and LOS D in the PM peak hour under Scenario B. Future traffic volumes at this location warrant a dedicated right-turn lane along westbound US 64. Therefore, the following lane configurations are recommended for the driveway connection:

- › Construct Future Access #1 with a single ingress lane and single egress lane while restricting access to right-in/right-out only.
- › Provide an exclusive right-turn lane along westbound US 64 with at least 150 feet of storage and appropriate taper.

*Goodwin Road (SR 1603) at Future Access #2 (unsignalized)*

Stop-controlled Future Access #2 is expected to operate at LOS A during both peak hours under both Build (2027) scenarios. Goodwin Road is a low volume road that doesn't require turn lane considerations. The following lane configurations are recommended for the driveway connection:

- › Construct Future Access #2 as a full movement driveway with one ingress lane and one egress lane.

*Goodwin Road (SR 1603) at Future Access #3 (unsignalized)*

Stop-controlled Future Access #3 is expected to operate at LOS A during both peak hours under both Build (2027) scenarios. As Access #3 may connect to Lowell Road Extension in the future, the following lane configurations are recommended for planning considerations:

- › Construct Future Access #3 as a full movement driveway with one ingress lane and two egress lanes. Provide at least 75 feet of storage for the exclusive left-turn lane along Future Access #3.

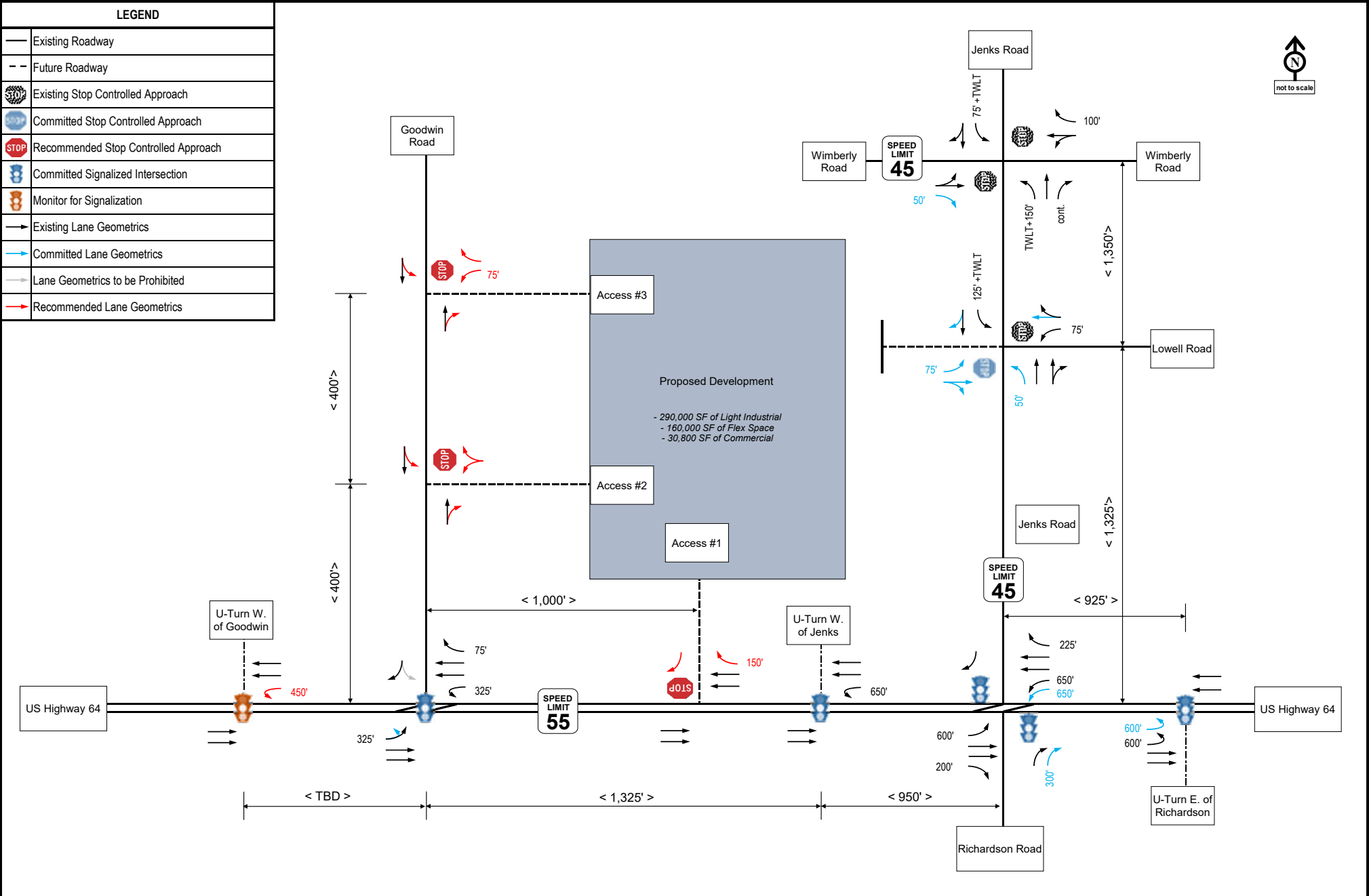
The summary of LOS results is shown in Table ES, and the future lane configurations and traffic control at the study area intersections, with the development in place, are presented in Figure ES-1 and Figure ES-2.




**Table ES Summary Level of Service Table**

Intersection and Approach	Traffic Control	Existing (2022)		No-Build (2027)		Full Build Scenario A (2027)		Full Build Scenario A (2027) with Improvements		Full Build Scenario B (2027)		Full Build Scenario B (2027) with Improvements	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
<b>US 64 WB at Jenks Road (SR 1601)</b>	Unsignalized/ Signalized	N/A	N/A	B (18.9)	C (26.7)	C (24.4)	C (33.3)	C (24.4)	C (33.3)	B (19.5)	D (39.6)	B (10.6)	B (18.9)
Westbound		---	---	B-13.8	B-18.9	B-18.6	C-24.1	B-18.6	C-24.1	B-14.8	C-28.3	A-6.0	A-9.8
Northbound (EB Left-over)		E-44.7	F-153.4	B-19.3	C-21.3	C-21.3	C-29.7	C-21.3	C-29.7	B-19.5	C-26.7	C-25.0	D-36.7
Southbound		C-15.6	C-24.9	D-43.8	E-67.0	D-52.7	E-79.0	D-52.7	E-79.0	D-44.3	F-94.1	C-28.1	D-50.8
<b>US 64 EB at Richardson Road</b>	Unsignalized/ Signalized	N/A	N/A	C (28.9)	C (24.9)	C (33.4)	C (28.3)	C (33.4)	C (28.2)	C (33.2)	C (28.9)	C (33.2)	C (28.9)
Eastbound		---	---	B-19.0	B-17.7	C-20.5	C-23.7	C-20.5	C-23.6	C-20.3	C-24.7	C-20.3	C-24.7
Northbound		F-129.9	E-48.3	E-60.9	D-43.2	E-74.5	D-43.3	E-74.5	D-43.3	E-74.5	D-43.3	E-74.5	D-43.3
Southbound (WB Left-Over)		F-440.1	F-612.5	C-26.7	C-21.7	C-28.5	C-22.7	C-28.5	C-22.7	C-28.5	C-22.7	C-28.5	C-22.7
<b>US 64 EB at U-Turn W of Jenks Road</b>	Unsignalized/ Signalized	N/A	N/A	B (18.2)	B (16.2)	C (21.4)	C (22.9)	B (17.2)	B (17.2)	C (22.1)	C (23.7)	C (22.1)	C (23.7)
Eastbound		---	---	B-13.8	B-12.6	B-17.1	C-20.0	B-12.4	B-13.6	B-17.9	B-18.6	B-17.9	B-18.6
Southbound		C-19.5	C-17.3	D-54.1	D-40.0	E-56.8	D-43.8	E-56.8	D-43.8	E-55.1	D-52.5	E-55.1	D-52.5
<b>US 64 WB at U-Turn E of Richardson Road</b>	Unsignalized/ Signalized	N/A	N/A	A (9.9)	C (20.8)	B (14.2)	C (25.7)	B (14.2)	C (25.7)	B (18.8)	C (25.7)	B (18.8)	C (25.7)
Westbound		---	---	A-7.6	B-16.6	B-12.6	B-19.9	B-12.6	B-19.9	B-18.2	B-19.9	B-18.2	B-19.9
Northbound		C-15.6	C-22.0	D-40.1	E-57.6	C-31.9	E-75.1	C-31.9	E-75.1	C-25.6	E-75.1	C-25.6	E-75.1
<b>US 64 at Goodwin Road (SR 1602)</b>	Unsignalized/ Signalized	N/A	N/A	A (1.8)	A (2.7)	A (8.5)	B (16.2)	A (8.5)	B (16.3)	A (8.6)	A (9.4)	A (9.7)	B (12.0)
Eastbound		---	---	A-2.8	A-4.4	---	---	---	---	---	---	---	---
Westbound		---	---	A-0.7	A-0.8	A-3.7	B-11.6	A-3.7	A-4.2	A-3.2	A-4.0	A-4.4	A-7.0
Northbound		---	---	---	---	D-42.7	C-33.5	D-42.7	D-43.4	D-49.8	D-44.4	D-49.8	D-44.4
Southbound		D-33.2	F-169.3	D-37.0	D-37.7	C-26.5	D-48.8	C-26.5	F-110.7	C-23.6	D-54.5	C-23.6	D-54.5
<b>US 64 EB at U-Turn at Goodwin Road</b>	Unsignalized	-	-	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Southbound		---	---	---	---	C-22.1	E-35.5	C-22.1	E-35.5	C-21.3	D-26.7	C-21.3	D-26.7
<b>US 64 EB at U-Turn W of Goodwin Road</b>	Unsignalized/ Signalized	-	-	-	-	N/A	N/A	A (6.4)	B (13.7)	N/A	N/A	N/A	N/A
Eastbound		---	---	---	---	---	---	A-5.9	B-10.3	---	---	---	---
Southbound		---	---	---	---	D-26.7	F-73.0	D-39.8	E-61.1	C-24.7	D-33.3	C-24.7	D-33.3
<b>Jenks Road (SR 1601) at Lowell Road/ Arden at Apex Driveway</b>	Unsignalized	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eastbound		---	---	B-11.4	B-14.4	B-11.9	C-15.1	B-11.9	C-15.1	B-12.5	C-17.2	B-12.5	C-17.2
Westbound		A-9.5	B-10.3	B-14.0	C-19.4	C-15.7	C-22.4	C-15.7	C-22.4	C-15.8	C-24.5	C-15.8	C-24.5
<b>Jenks Road (SR 1601) at Wimberly Road (SR 1603)</b>	Unsignalized	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eastbound		B-10.4	B-11.6	C-15.1	D-27.7	C-15.6	E-43.2	C-15.6	E-43.2	C-15.6	E-43.2	C-15.6	E-43.2
Westbound		A-9.4	B-10.1	B-12.8	C-18.7	B-13.3	C-19.6	B-13.3	C-19.6	B-13.3	C-19.6	B-13.3	C-19.6
<b>US 64 WB at Future Access #1</b>	Unsignalized	-	-	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Southbound		---	---	---	---	C-19.1	E-38.6	C-19.1	E-38.6	C-18.7	D-30.7	C-18.7	D-30.7
<b>Goodwin Road (SR 1603) at Future Access #2</b>	Unsignalized	-	-	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Westbound		---	---	---	---	A-9.5	B-10.4	A-9.5	B-10.4	A-9.4	A-9.7	A-9.4	A-9.7
<b>Goodwin Road (SR 1602) at Future Access #3</b>	Unsignalized	-	-	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Westbound		---	---	---	---	A-9.0	A-9.6	A-9.0	A-9.6	A-8.9	A-9.1	A-8.9	A-9.1

X (XX.X) = Overall intersection LOS (average delay), X-XX = Approach LOS and average delay





**Figure ES-1**

**Build (2027) Scenario A Recommended Lane Geometrics and Traffic Control**

**US 64 Light Industrial**

**Apex, NC**



# 4

## Build (2027) Conditions

Greenberg Gibbons Properties has plans to develop the US 64 Light Industrial development in Apex, North Carolina (Figure 1). The development is currently proposed to consist of 290,000 square feet (sf) of light industrial, 160,000-sf of flex space and 30,800-sf of retail. The is estimated year of opening for the site is 2027.

### Trip Generation

Trip generation was conducted based on the most appropriate corresponding trip generation codes included in the *ITE Trip Generation Manual, 11<sup>th</sup> Edition* and the suggested method of calculation in the NCDOT's *"Rate vs. Equation" Spreadsheet*. Based on the proposed land uses at the site, ITE Land Use Code (LUC) 110 (General Light Industrial), LUC 770 (Business Park), and LUC 822 (Strip Retail Plaza (<40k-sf)) were used in the TIA. Internal capture between mixed uses were calculated based on the NCHRP 684 methods with the NCDOT Internal Capture worksheet. Table 5 summarizes the assumed trip generation for the proposed development for typical weekday AM and PM peak hours.



**Table 5 Trip Generation Rates (Vehicle Trips)**

Land Use Code <sup>1</sup>	Land Use	Unit	ADT	AM Peak Hour			PM Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total
Total Site Trips (including Internal Trips between Mixed Uses and Pass-By Trips for Commercial Uses) <sup>2</sup>									
110	General Light Industrial	290,000 sf	1,141	177	24	201	12	75	87
770	Business Park (Tech/Flex)	160,000 sf	2,415	181	32	213	57	164	221
822	Strip Retail Plaza (<40k)	30,800 sf	1,529	36	24	60	85	88	173
Development Total		480,800 sf	5,085	394	80	474	154	327	481
Trip Reduction Due to Internal Capture <sup>3</sup>									
110	General Light Industrial	290,000 sf	0	0	0	0	0	0	0
770	Business Park (Tech/Flex)	160,000 sf	128	7	9	16	2	5	7
822	Strip Retail Plaza (<40k)	30,800 sf	151	9	8	17	4	2	6
Development Total			279	16	17	33	6	7	13
Total External Site Trips									
110	General Light Industrial	290,000 sf	1,141	177	24	201	12	75	87
770	Business Park (Tech/Flex)	160,000 sf	2,287	174	23	197	55	159	214
822	Strip Retail Plaza (<40k)	30,800 sf	1,378	27	16	43	81	86	167
Development Total			4,806	378	63	441	148	320	468

Notes:

1. Land Use Code and trip generation rates are based on *ITE Trip Generation, 11th Edition*.

2. Total site trips are determined based on the suggested method in the NCDOT Rate Vs Equation Spreadsheet.

3. Internal capture is calculated based on NCHRP 684 method and NCDOT IC calculation spreadsheet, with distances between OD pairs measured on site plan.

As a result, the proposed development is projected to generate 4,806 daily external weekday site trips, with 441 external trips (378 entering, 63 exiting) occurring in the AM peak hour and 468 external trips (148 entering, 320 exiting) occurring in the PM peak hour.

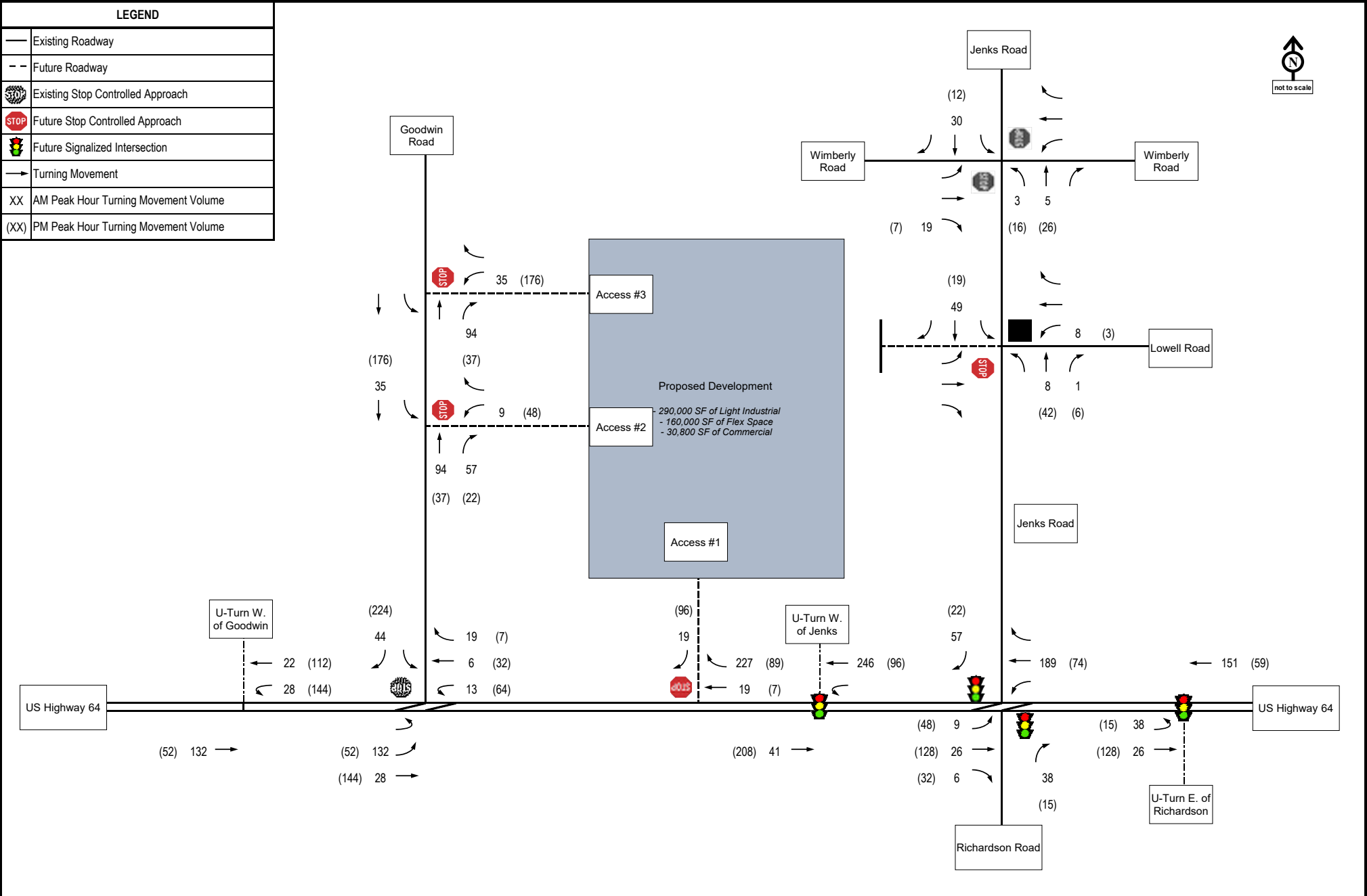
## Trip Distribution and Assignment

The proposed development will be able to be accessed via one (1) new driveway along US 64 and three (3) new driveways along Goodwin Road. 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:

- › US 64 from/to the east – 40%
- › US 64 from/to the west – 35%
- › Richardson Road from/to the south – 10%
- › Lowell Road from/to the east – 2%
- › Wimberly Road (SR 1603) from/to the west – 5%
- › Jenks Road (SR 1602) from/to the north – 8%

The site trip assignment percentages for both Scenario A and Scenario B are shown in Figure 7 and Figure 8, respectively. The total peak hour site trips for Scenario A are shown in Figure 9, and the total peak hour site trips for Scenario B are shown within Figure 10.









Yellow Bridge Residential  
**Traffic Impact Analysis**  
**Apex, North Carolina**

**TRAFFIC IMPACT  
ANALYSIS**

**FOR**

**YELLOW BRIDGE RESIDENTIAL**

**LOCATED**

**IN**

**APEX, NORTH CAROLINA**

Prepared For:  
Lennar Corporation – Raleigh Division  
1100 Perimeter Park Drive, Suite 112  
Morrisville, NC 27560

Prepared By:  
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5808 Faringdon Place, Suite 100  
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License #C-0910

FEBRUARY 2022



A handwritten signature in blue ink, appearing to read "Nathaniel Bouquin", written over the bottom right portion of the professional seal.

**TRAFFIC IMPACT ANALYSIS**  
**YELLOW BRIDGE**  
**APEX, NORTH CAROLINA**

**EXECUTIVE SUMMARY**

**1. Development Overview**

A Traffic Impact Analysis (TIA) was conducted for the proposed Yellow Bridge Residential development in accordance with the Town of Apex (Town) Unified Development Ordinance (UDO) and North Carolina Department of Transportation (NCDOT) capacity analysis guidelines. The proposed development is to be located south of US 64 and west of the Abbington subdivision in Apex, North Carolina. The proposed development is expected to consist of 59 single-family homes, 83 townhomes, and 25,000 square feet (sq. ft.) of retail space to be built out in 2026. Site access is proposed via one (1) left-over driveway along US 64 at the existing median break, and one (1) internal connection to Chantclair Drive.

**2. Existing Traffic Conditions**

The study area for the TIA was determined through coordination with the Town and NCDOT and consists of the following existing intersections:

- US 64 and Median Break

Existing peak hour traffic volumes were determined based on a combination of previously collected traffic counts at the intersection of US 64 and Jenks Road / Richardson Road, and new turning movement counts conducted at the existing median break. Previously conducted traffic counts at the intersection of US 64 and Jenks Road / Richardson Road were collected in October 2021 during typical weekday AM (7:00 AM – 9:00 AM) and PM (4:00 PM – 6:00 PM) peak periods, while schools were in session for in person learning. These previously conducted counts were utilized to determine through volume traffic at the median break. Turning movement volumes at the median break were determined based on traffic counts conducted at the existing median break, in January 2022, during a typical weekday AM (7:00 AM – 9:00 AM) and PM (4:00 PM – 6:00 PM) peak periods, while schools were in session for in person learning. Weekday AM and PM traffic volumes were balanced between study intersections, where appropriate.



### 3. Site Trip Generation

The proposed development is assumed to consist of a maximum of 59 single-family homes, 83 townhomes, and 25,000 square feet (sq. ft.) of retail space. Average weekday daily, AM peak hour, and PM peak hour trips for the proposed development were estimated using methodology contained within the ITE Trip Generation Manual, 10<sup>th</sup> Edition. Table E-1 provides a summary of the trip generation potential for the site.

**Table E-1: Site Trip Generation**

Land Use (ITE Code)	Intensity	Daily Traffic (vpd)	Weekday AM Peak Hour Trips (vph)		Weekday PM Peak Hour Trips (vph)	
			Enter	Exit	Enter	Exit
Single-Family Homes (210)	59 DU	640	12	35	38	23
Multi-Family Homes (Low-Rise) (220)	83 DU	588	9	31	31	19
Shopping Center (820)	25 KSF	944	15	9	45	50
<b>Total Trips</b>		<b>2,172</b>	<b>36</b>	<b>75</b>	<b>114</b>	<b>92</b>
<i>Internal Capture (2% AM &amp; 1% PM)*</i>			0	-2	-11	-12
<b>Total External Trips</b>			<b>36</b>	<b>73</b>	<b>103</b>	<b>80</b>
<i>Pass-By Trips: Shopping Center (34% PM)</i>			-	-	-14	-14
<b>Total Primary Trips</b>			<b>36</b>	<b>73</b>	<b>89</b>	<b>66</b>

\*Utilizing methodology contained in the NCHRP Report 684.

### 4. Future Traffic Conditions

Through coordination with the Town and NCDOT, it was determined that an annual growth rate of 3% would be used to generate 2026 projected weekday AM and PM peak hour traffic volumes. The following adjacent developments were identified to be considered under future conditions:

- Westford Residential (currently 75% built-out)
- Legacy PUD (US 64 Residential)
- Sweetwater Development

The study analyzes traffic conditions during the weekday AM and PM peak hours for the following scenarios:

- 2022 Existing Traffic Conditions
- 2026 No-Build Traffic Conditions
- 2026 Build Traffic Conditions

## 5. Capacity Analysis Summary

The analysis considered weekday AM and PM peak hour traffic for 2018 existing, 2022 no-build, and 2022 build conditions. Refer to Section 7 of the TIA for the capacity analysis summary performed at each study intersection.

## 6. Recommendations

Based on the findings of this study, specific geometric and traffic control improvements have been identified at study intersections. The improvements are summarized below and are illustrated in Figure E-1.

### Recommended Improvements by Developer

#### US 64 and Median Break / Site Access

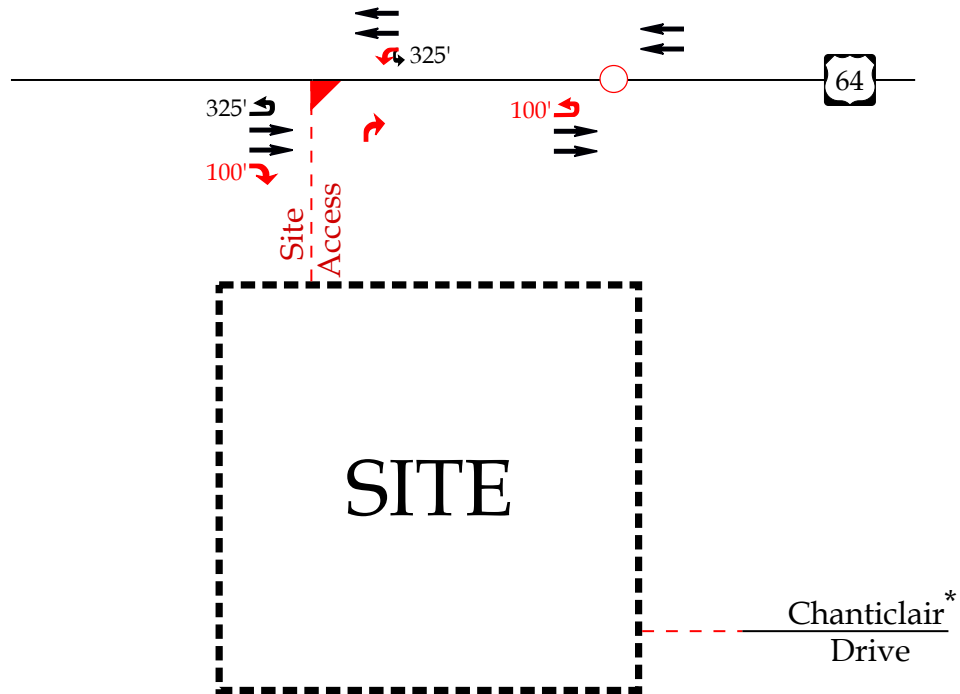
- Construct the northbound approach (Site Access) with one ingress and one egress lane striped as an exclusive right-turn lane.
- Provide stop-control for the northbound approach (Site Access). The proposed intersection will be configured as a left-over.
- Construct an exclusive eastbound (US 64) right-turn lane with a minimum of 100 feet of storage and appropriate decel and taper.
- Restripe the existing westbound (US 64) u-turn lane to provide for a westbound left-turn movement.

#### US 64 and Eastern U-Turn Location

- Construct an exclusive eastbound (US 64) u-turn lane with a minimum of 100 feet of storage and appropriate decel and taper to be located east of the existing median break and proposed site driveway location.

### LEGEND

- Unsignalized Intersection
- ▀ Signalized Intersection
- Existing Lane
- X' Storage (In Feet)
- Improvement by Developer



\*Note: Roadway included for informational purposes only



Yellow Bridge Residential  
Apex, NC

Recommended Lane  
Configurations

Scale: Not to Scale Figure E-1



#### 4. SITE TRIP GENERATION AND DISTRIBUTION

##### 4.1. Trip Generation

The proposed development is assumed to consist of 59 single-family homes, 86 townhomes, and 25,000 sq. ft. of retail space. Average weekday daily, AM peak hour, and PM peak hour trips for the proposed development were estimated using methodology contained within the *ITE Trip Generation Manual*, 10th Edition. Table 3 provides a summary of the trip generation potential for the site. It should be noted that several trip generation scenarios were considered and that the most conservative scenario was considered in the analysis. Refer to Appendix I for a summary of the proposed densities considered and a comparison of the expected trip generations.

**Table 3: Trip Generation Summary**

Land Use (ITE Code)	Intensity	Daily Traffic (vpd)	Weekday AM Peak Hour Trips (vph)		Weekday PM Peak Hour Trips (vph)	
			Enter	Exit	Enter	Exit
Single-Family Homes (210)	59 DU	640	12	35	38	23
Multi-Family Homes (Low-Rise) (220)	83 DU	588	9	31	31	19
Shopping Center (820)	25 KSF	944	15	9	45	50
<b>Total Trips</b>		<b>2,172</b>	<b>36</b>	<b>75</b>	<b>114</b>	<b>92</b>
<i>Internal Capture (2% AM &amp; 1% PM)*</i>			0	-2	-11	-12
<b>Total External Trips</b>			<b>36</b>	<b>73</b>	<b>103</b>	<b>80</b>
<i>Pass-By Trips: Shopping Center (34% PM)</i>			-	-	-14	-14
<b>Total Primary Trips</b>			<b>36</b>	<b>73</b>	<b>89</b>	<b>66</b>

\*Utilizing methodology contained in the NCHRP Report 684.

It is estimated that the proposed development will generate approximately 2,172 total site trips on the roadway network during a typical 24-hour weekday period. Of the daily traffic volume, it is anticipated that 111 trips (36 entering and 75 exiting) will occur during the

weekday AM peak hour and 206 trips (114 entering and 92 exiting) will occur during the weekday PM peak hour.

Internal capture of trips between the residential and retail uses was considered in this study. Internal capture is the consideration for trips that will be made within the site between different land uses, so the vehicle technically never leaves the internal site but can still be considered as a trip to that specific land use. Internal capture typically only considers trips between residential, office, and retail/restaurant land uses. Based on NCHRP Report 684 methodology, a weekday AM peak hour internal capture of 2% and a weekday PM peak hour internal capture rate of 11% was applied to the total trips. The internal capture reductions are expected to account for approximately 2 trips (0 entering and 2 exiting) during the weekday AM peak hour and 23 trips (11 entering and 12 exiting) during the weekday PM peak hour.

Pass-by trips were also taken into consideration in this study. Pass-by trips are made by the traffic already using the adjacent roadway, entering the site as an intermediate stop on their way to another destination. Pass-by percentages are applied to site trips after adjustments for internal capture. Pass-by trips are expected to account for approximately 28 trips (14 entering and 14 exiting) during the weekday PM peak hour. It should be noted that the pass-by trips were balanced, as it is likely that these trips would enter and exit in the same hour.

The total primary site trips are the calculated site trips after the reduction for internal capture and pass-by trips. Primary site trips are expected to generate approximately 109 trips (33 entering and 73 exiting) during the weekday AM peak hour and 155 trips (89 entering and 66 exiting) during the weekday PM peak hour.

#### **4.2. Site Trip Distribution and Assignment**

Trip distribution percentages used in assigning site traffic for this development were estimated based on a combination of existing traffic patterns, population centers adjacent to the study area, and engineering judgment.

It is estimated that the residential site trips will be regionally distributed as follows:

- 75% to/from the east via US 64
- 20% to/from the west via US 64
- 5% to/from the east via Chanticleir Drive

It is estimated that the commercial site trips will be regionally distributed as follows:

- 65% to/from the east via US 64
- 30% to/from the west via US 64
- 5% to/from the east via Chanticleir Drive

The residential site trip distribution is shown in Figure 8A, the commercial site trip distribution is shown in Figure 8B. Refer to Figure 9A and Figure 9B for the residential and commercial site trip assignment, respectively.

The pass-by site trips were distributed based on existing traffic patterns with consideration given to the proposed driveway access and site layout. Refer to Figure 10 for the pass-by site trip distribution. Pass-by site trips are shown in Figure 11.

The total site trips were determined by adding the primary site trips and the pass-by site trips. Refer to Figure 12 for the total peak hour site trips at the study intersections.



**LEGEND**

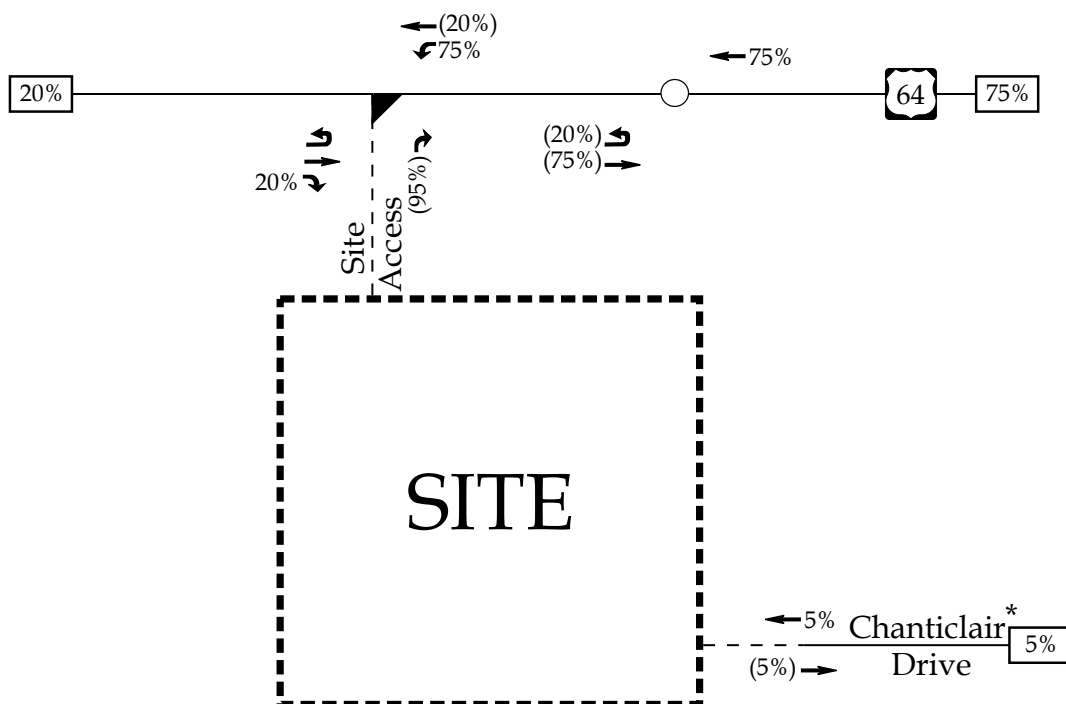
○ Unsignalized Intersection

▴ Left-Over Intersection

X% → Entering Trip Distribution

(Y%) → Exiting Trip Distribution

XX% Regional Trip Distribution



Yellow Bridge Residential  
Apex, NC

Residential Site Trip  
Distribution

Scale: Not to Scale Figure 8A

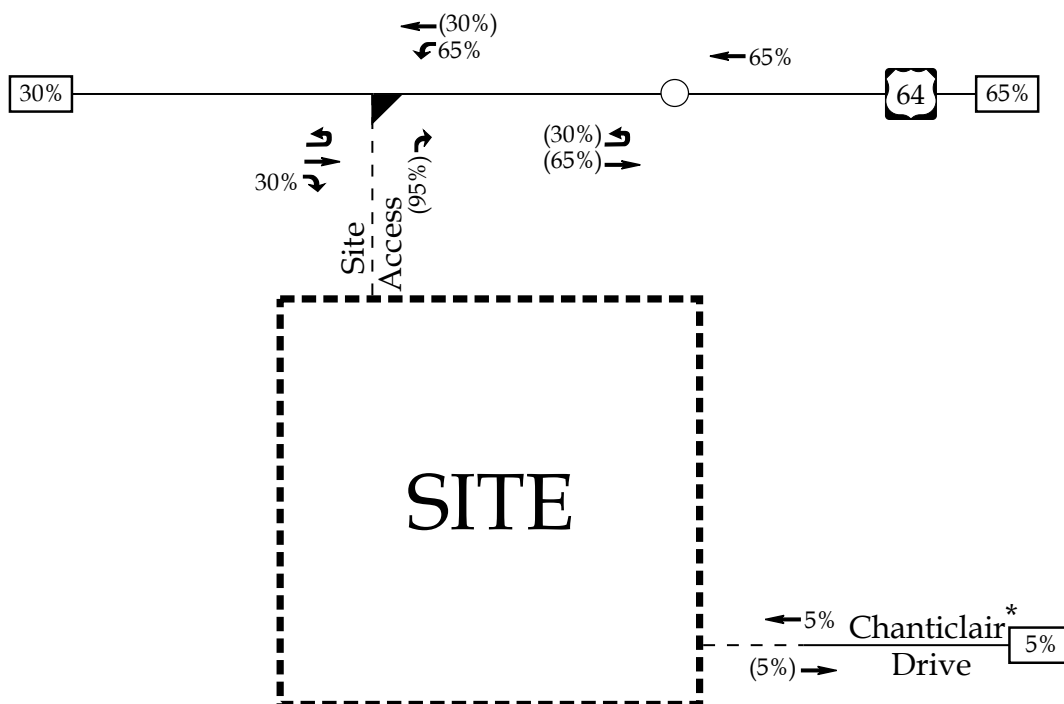
○ Unsignalized Intersection

### Left-Over Intersection

X% ➔ Entering Trip Distribution

(Y%)  $\rightarrow$  Exiting Trip Distribution

## XX% Regional Trip Distribution



\*Note: Roadway included for informational purposes only



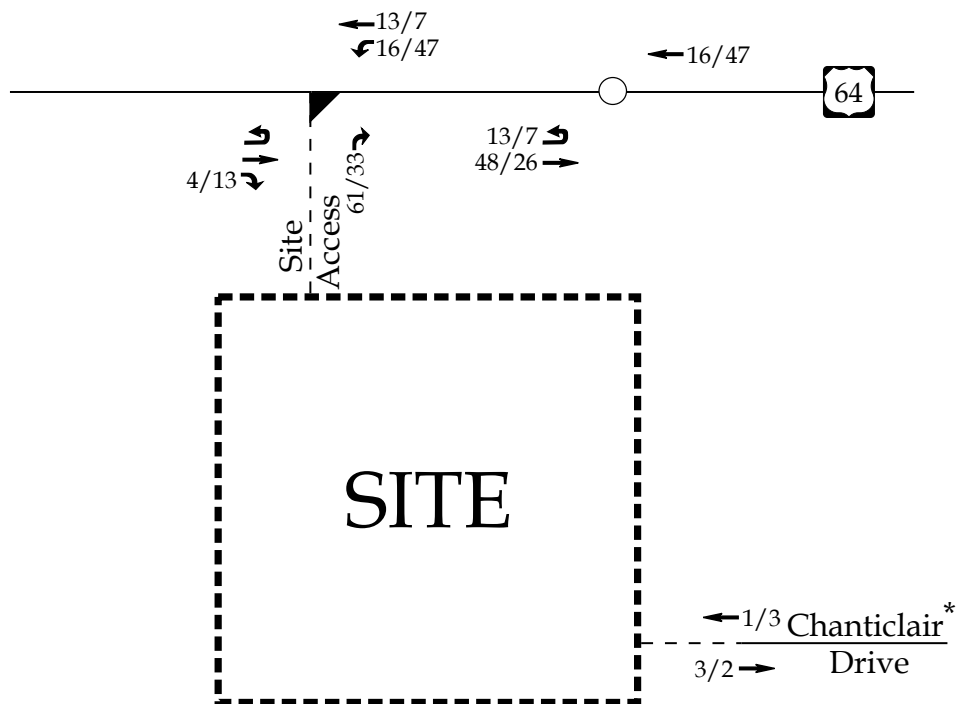
Yellow Bridge Residential  
Apex, NC

## Commercial Site Trip Distribution

Scale: Not to Scale | Figure 8B

# **LEGEND**

- Unsignalized Intersection
- ▴ Left-Over Intersection
- X / Y → Weekday AM / PM Peak Hour Site Trips



\*Note: Roadway included for informational purposes only



Yellow Bridge Residential  
Apex, NC

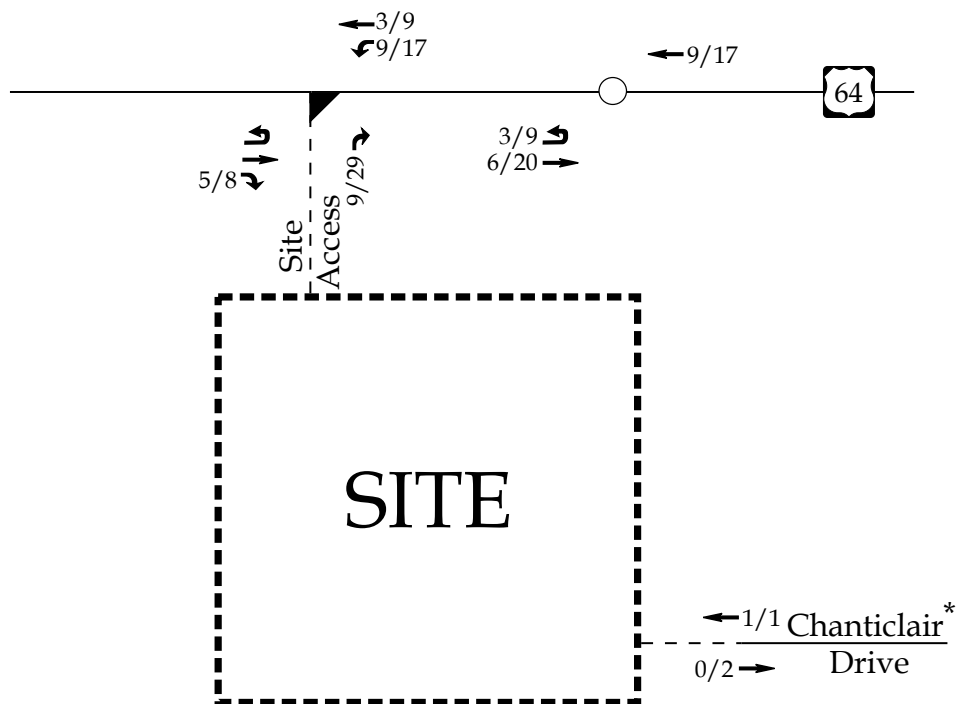
Residential Site Trip  
Assignment

Scale: Not to Scale Figure 9A



# **LEGEND**

- Unsignalized Intersection
- ▴ Left-Over Intersection
- X / Y → Weekday AM / PM Peak Hour Site Trips



\*Note: Roadway included for informational purposes only



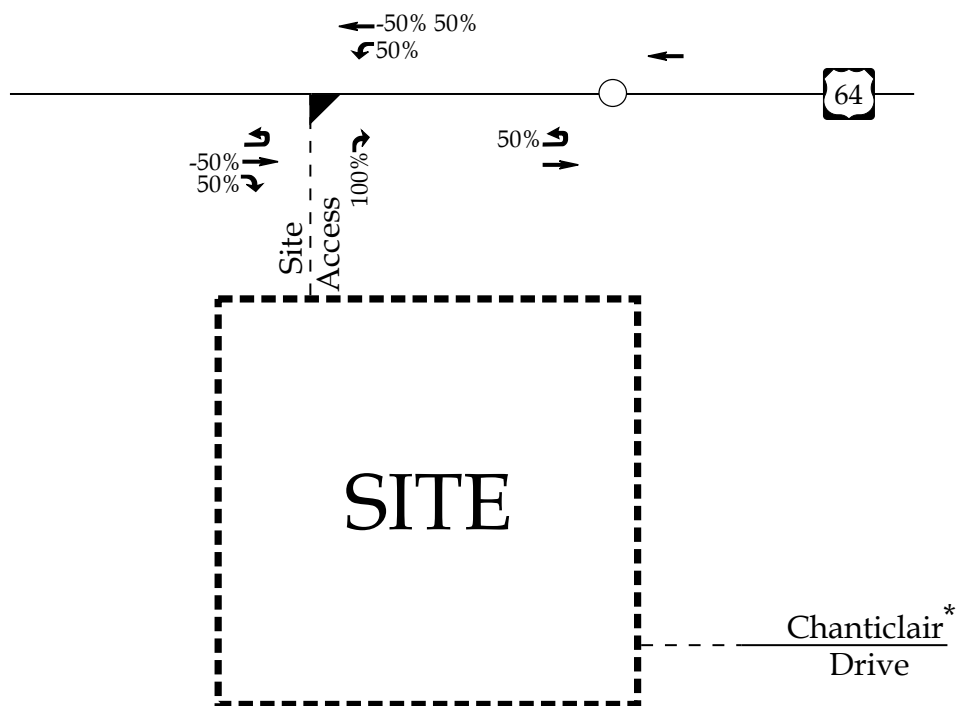
Yellow Bridge Residential  
Apex, NC

Commercial Site Trip  
Assignment

Scale: Not to Scale Figure 9B

**LEGEND**

- Unsignalized Intersection
- ▴ Left-Over Intersection
- X% → Weekday PM Pass-By Trip Distribution



\*Note: Roadway included for informational purposes only



Yellow Bridge Residential  
Apex, NC

Pass-By Site  
Trip Distribution

Scale: Not to Scale Figure 10

LEGEND

○

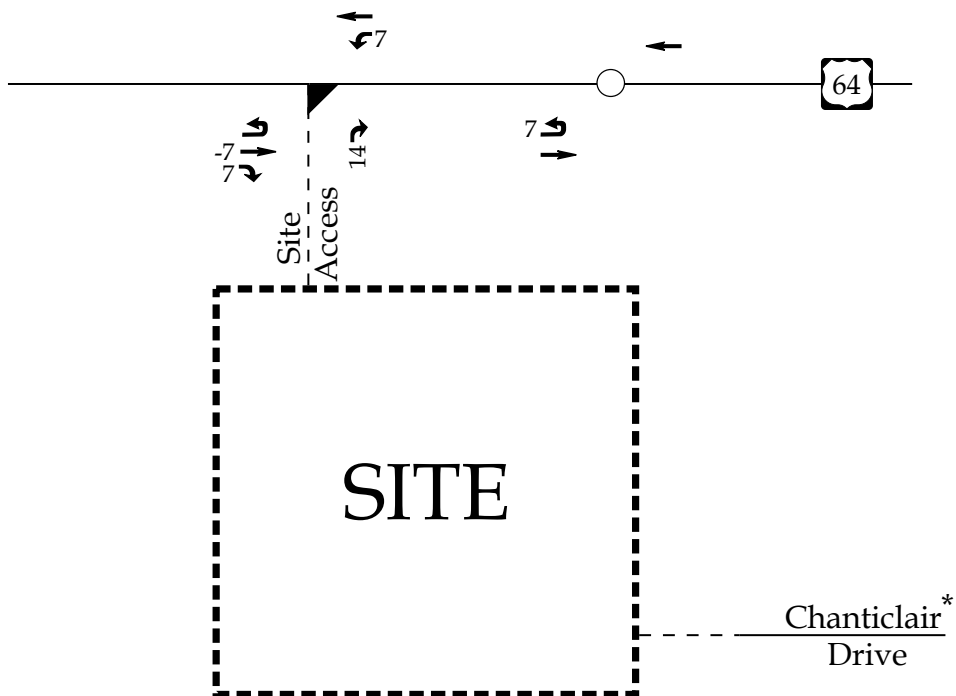
Unsignalized Intersection

◼

Left-Over Intersection

x →

Weekday PM Peak  
Hour Pass-By Trips



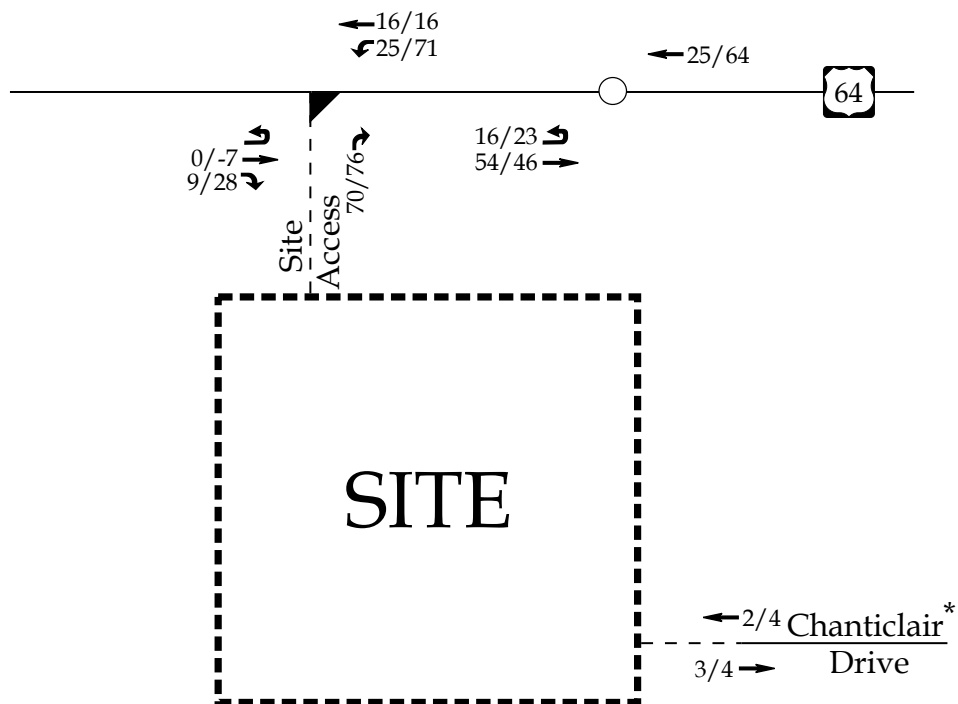
\*Note: Roadway included for informational purposes only

<div> <div>RKA</div> <div>RAMEY KEMP ASSOCIATES</div> </div>	<div>Yellow Bridge Residential</div> <div>Apex, NC</div>	<div>Pass-By Site</div> <div>Trip Assignment</div>	
		<div>Scale: Not to Scale</div>	<div>Figure 11</div>



# **LEGEND**

- Unsignalized Intersection
- ▴ Left-Over Intersection
- X / Y → Weekday AM / PM Peak Hour Site Trips



\*Note: Roadway included for informational purposes only



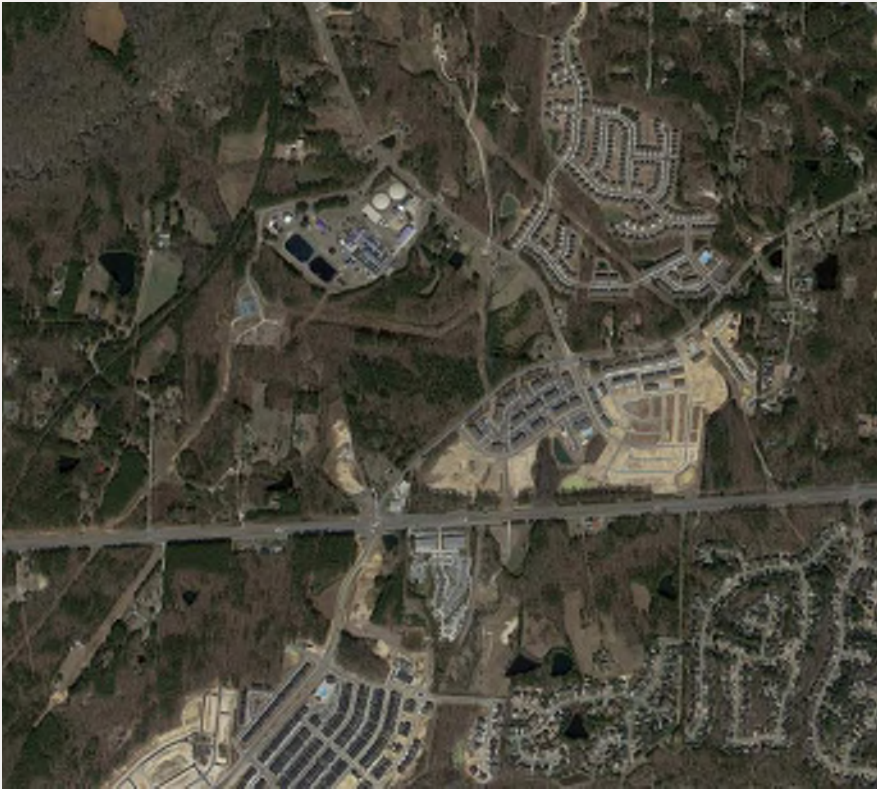
Yellow Bridge Residential  
Apex, NC

Total Site Trip  
Assignment

Scale: Not to Scale Figure 12

**RAMEY KEMP ASSOCIATES**

*TOGETHER WE ARE LIMITLESS*



Arden at Apex

**Traffic Impact Analysis**

**Apex, North Carolina**

# **TRAFFIC IMPACT ANALYSIS**

**FOR**

## **ARDEN AT APEX**

**LOCATED**

**IN**

## **APEX, NORTH CAROLINA**

Prepared For:  
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MARCH 2022



*Caroline Cheeves* 3-7-2022

RKA Project No. 21605

Prepared By: MR

Reviewed By: CC





### LEGEND

- Proposed Site Location
- Study Intersection
- Study Area

Moving forward.

**RKA**  
RAMEY KEMP ASSOCIATES

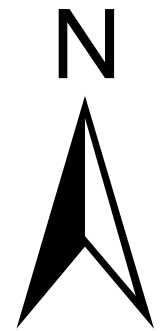
Arden at Apex  
Apex, NC

Site Location Map

Scale: Not to Scale

Figure 1





1 inch = 50 feet

**Disclaimer**  
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#### 4. SITE TRIP GENERATION AND DISTRIBUTION

##### 4.1. Trip Generation

The proposed development is assumed to consist of 163 adult senior homes (multifamily) and a 10,000 sq. ft. shopping center. Average weekday daily, AM peak hour, and PM peak hour trips for the proposed development were estimated using methodology contained within the *ITE Trip Generation Manual*, 11th Edition. It should be noted that the Strip Retail Plaza land use was used to generate site trips as the proposed development is expected to have less than 40,000 sq. ft. of retail. Table 3 provides a summary of the trip generation potential for the site.

**Table 3: Trip Generation Summary**

Land Use (ITE Code)	Intensity	Daily Traffic (vpd)	Weekday AM Peak Hour Trips (vph)		Weekday PM Peak Hour Trips (vph)	
			Enter	Exit	Enter	Exit
Adult Senior Housing – Multifamily (252)	163 units	496	11	21	23	18
Strip Retail Plaza (822)	10,000 sq. ft.	652	17	12	39	39
<b>Total Trips</b>		<b>1,148</b>	<b>18</b>	<b>33</b>	<b>62</b>	<b>57</b>
<i>Pass-By Trips: Strip Retail Plaza*</i> (34% PM)			--	--	-13	-13
<b>Total Primary Trips</b>			<b>18</b>	<b>33</b>	<b>49</b>	<b>44</b>

\*Pass-by percentages from LUC 820 were used for the Strip Retail Plaza land use.

It is estimated that the proposed development will generate approximately 1,148 total site trips on the roadway network during a typical 24-hour weekday period. Of the daily traffic volume, it is anticipated that 51 trips (18 entering and 33 exiting) will occur during the weekday AM peak hour and 119 trips (62 entering and 57 exiting) will occur during the weekday PM peak hour.

Pass-by trips were also taken into consideration in this study. Pass-by trips are made by the traffic already using the adjacent roadway, entering the site as an intermediate stop on their way to another destination. Pass-by trips are expected to account for approximately 26 trips



# **LEGEND**



Signalized Intersection



Unsignalized Intersection

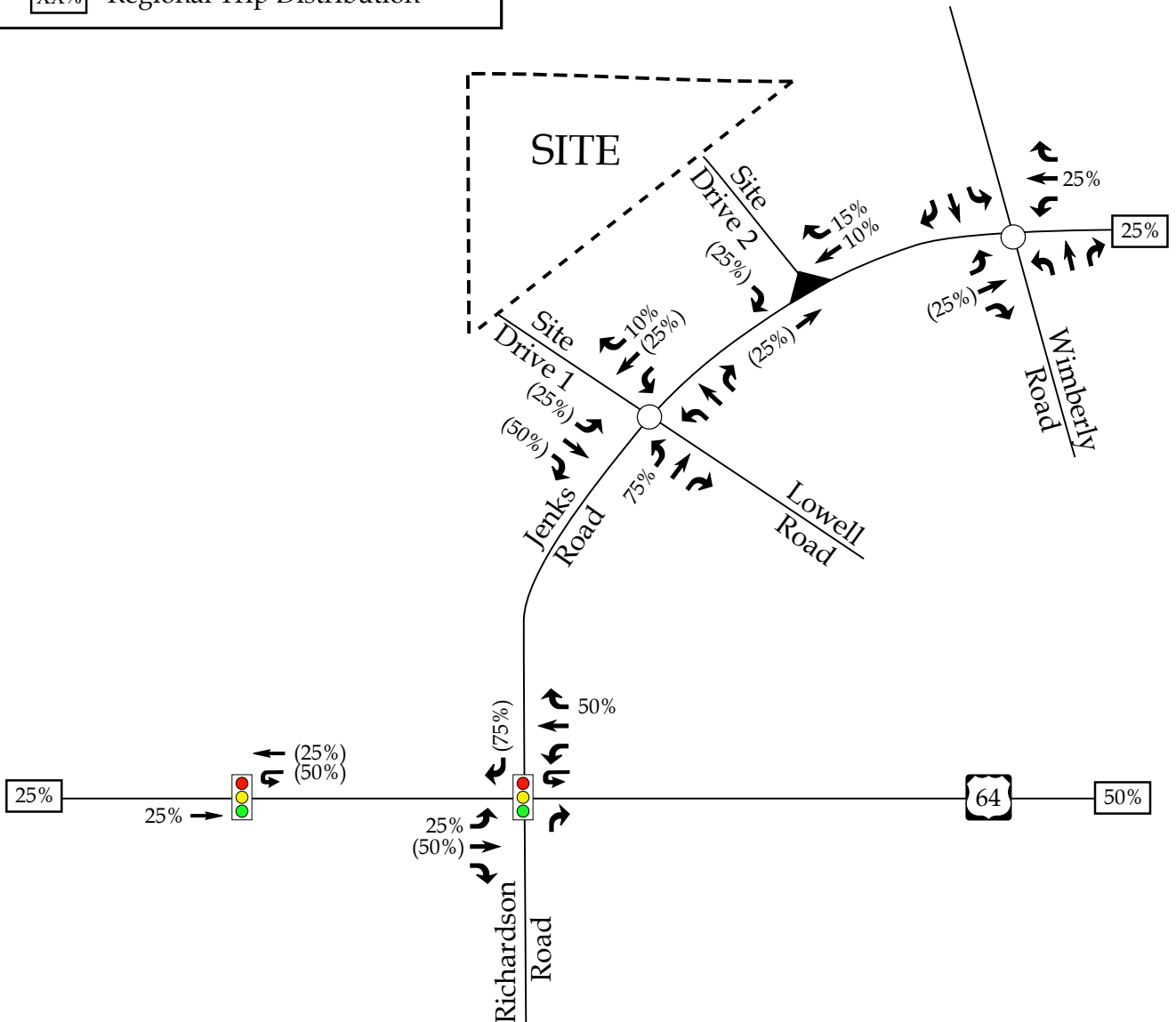


Right-In/Right-Out Intersection

X% → Entering Trip Distribution

(Y%) → Exiting Trip Distribution

[XX%] Regional Trip Distribution



Moving forward.



RAMEY KEMP ASSOCIATES

Arden at Apex  
Apex, NC

Site Trip Distribution

Scale: Not to Scale

Figure 8

## LEGEND



Signalized Intersection



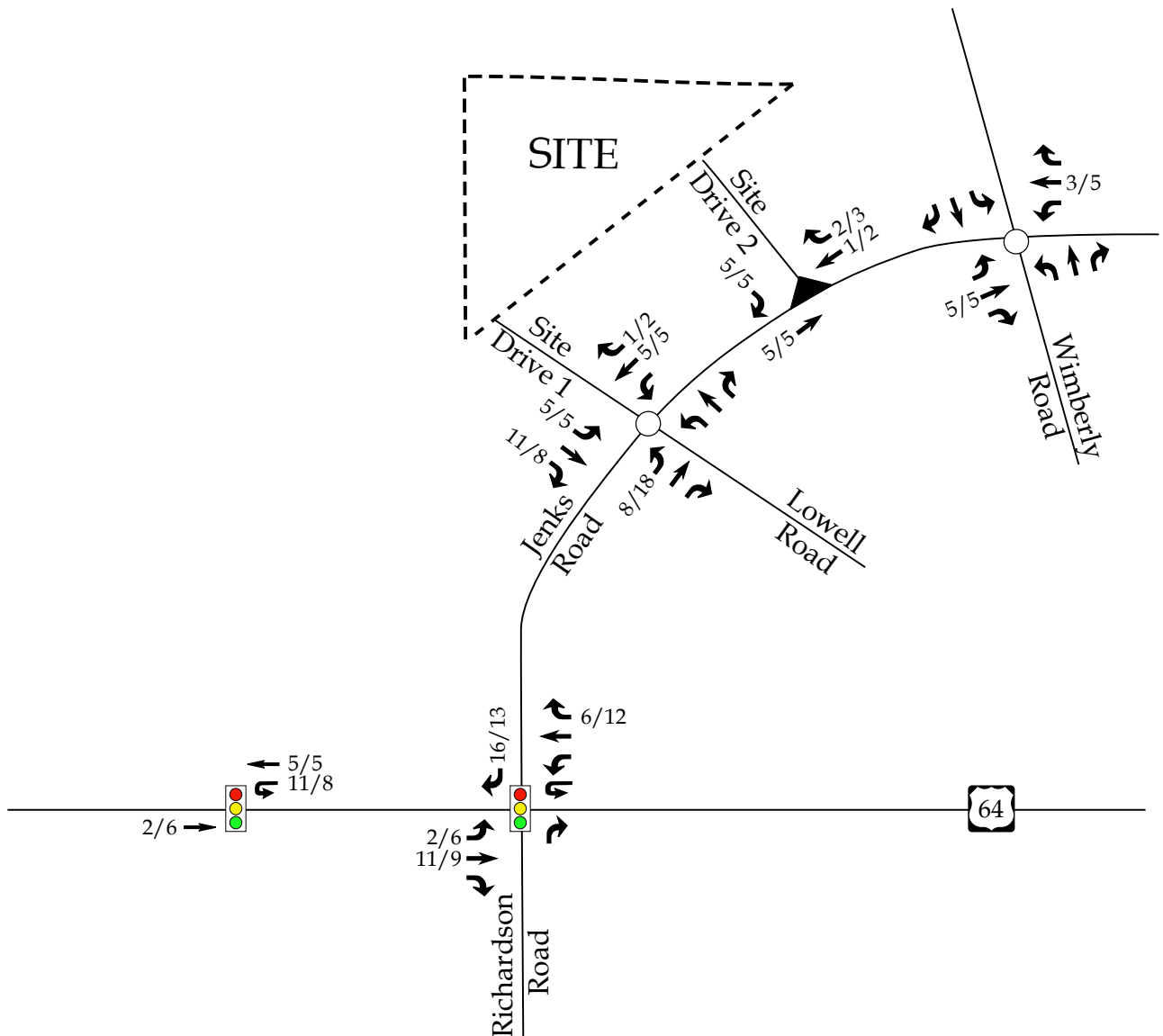
Unsignalized Intersection



Right-In/Right-Out Intersection

X / Y →

Weekday AM / PM Peak Hour  
Site Trips



Moving forward.



RAMEY KEMP ASSOCIATES

Arden at Apex  
Apex, NC

Residential  
Site Trip Assignment

Scale: Not to Scale

Figure 9A

## LEGEND



Signalized Intersection



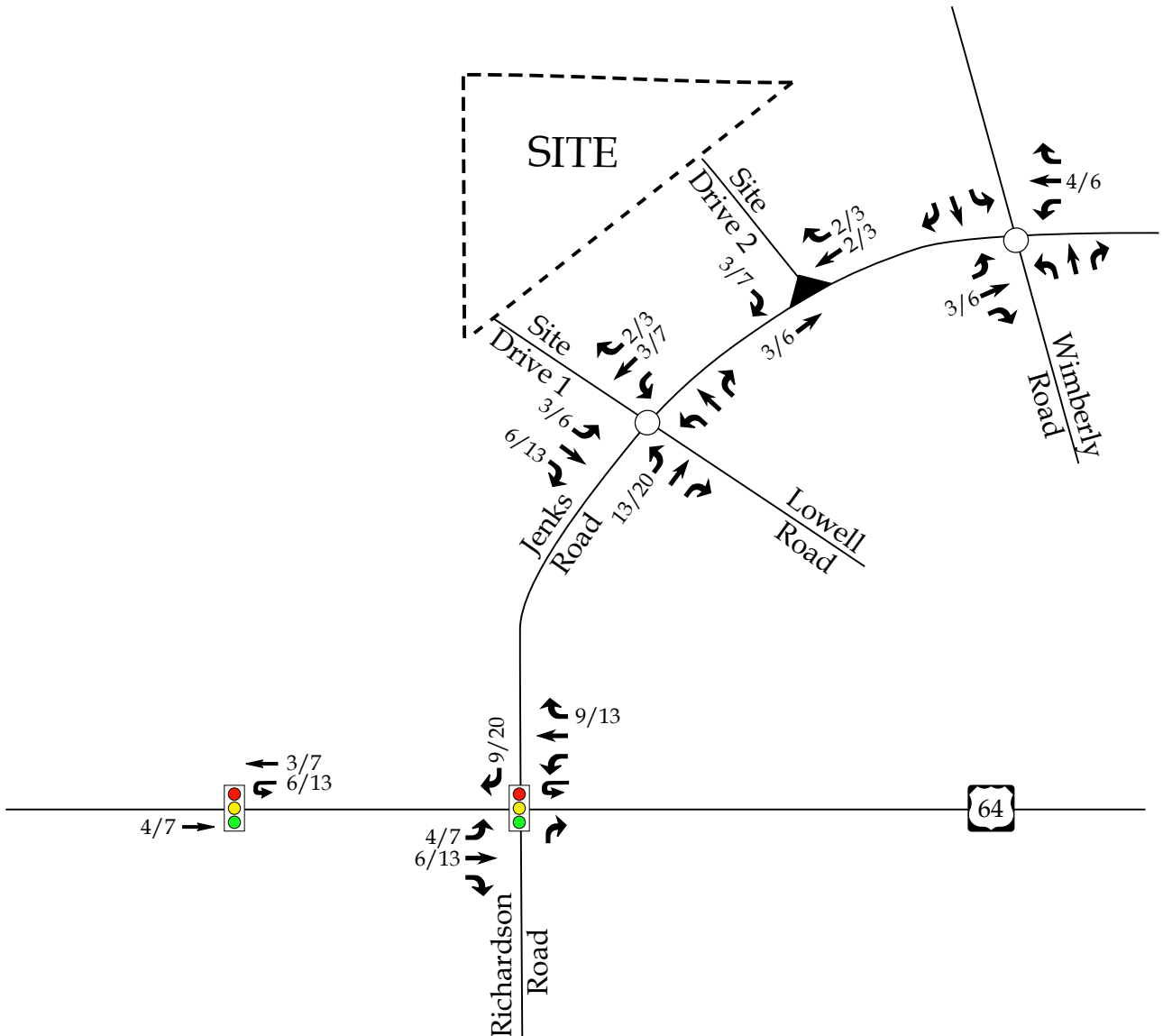
Unsignalized Intersection



Right-In/Right-Out Intersection

X / Y →

Weekday AM / PM Peak Hour  
Site Trips



Moving forward.

**RKA**  
RAMEY KEMP ASSOCIATES

Arden at Apex  
Apex, NC

Commercial  
Site Trip Assignment

Scale: Not to Scale Figure 9B





### LEGEND



Signalized Intersection

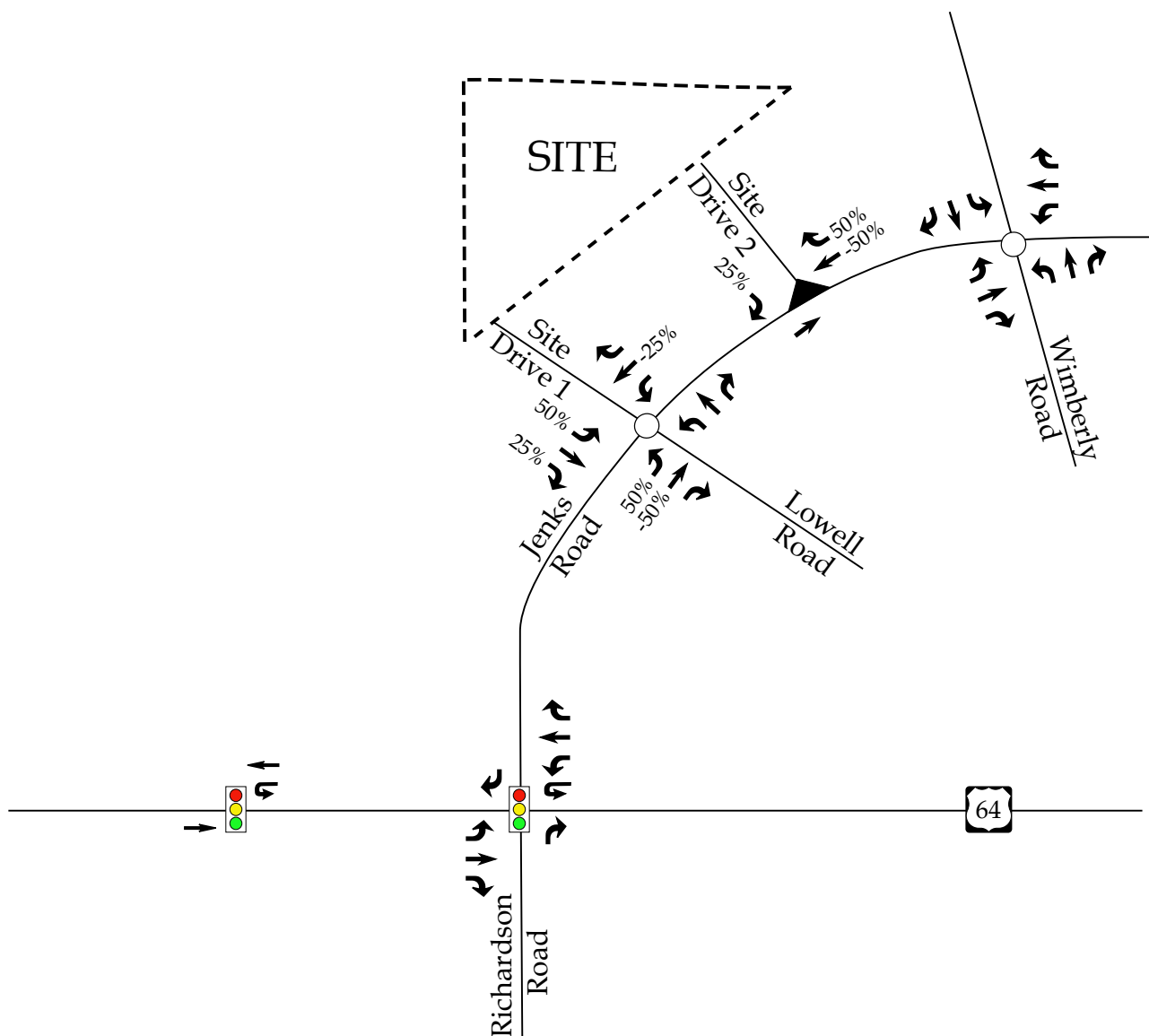


Unsignalized Intersection



Right-In/Right-Out Intersection

x% → Weekday PM Pass-By Trip Distribution



Moving forward.

**RKA**  
RAMEY KEMP ASSOCIATES

Arden at Apex  
Apex, NC





Pass-By Site  
Trip Distribution

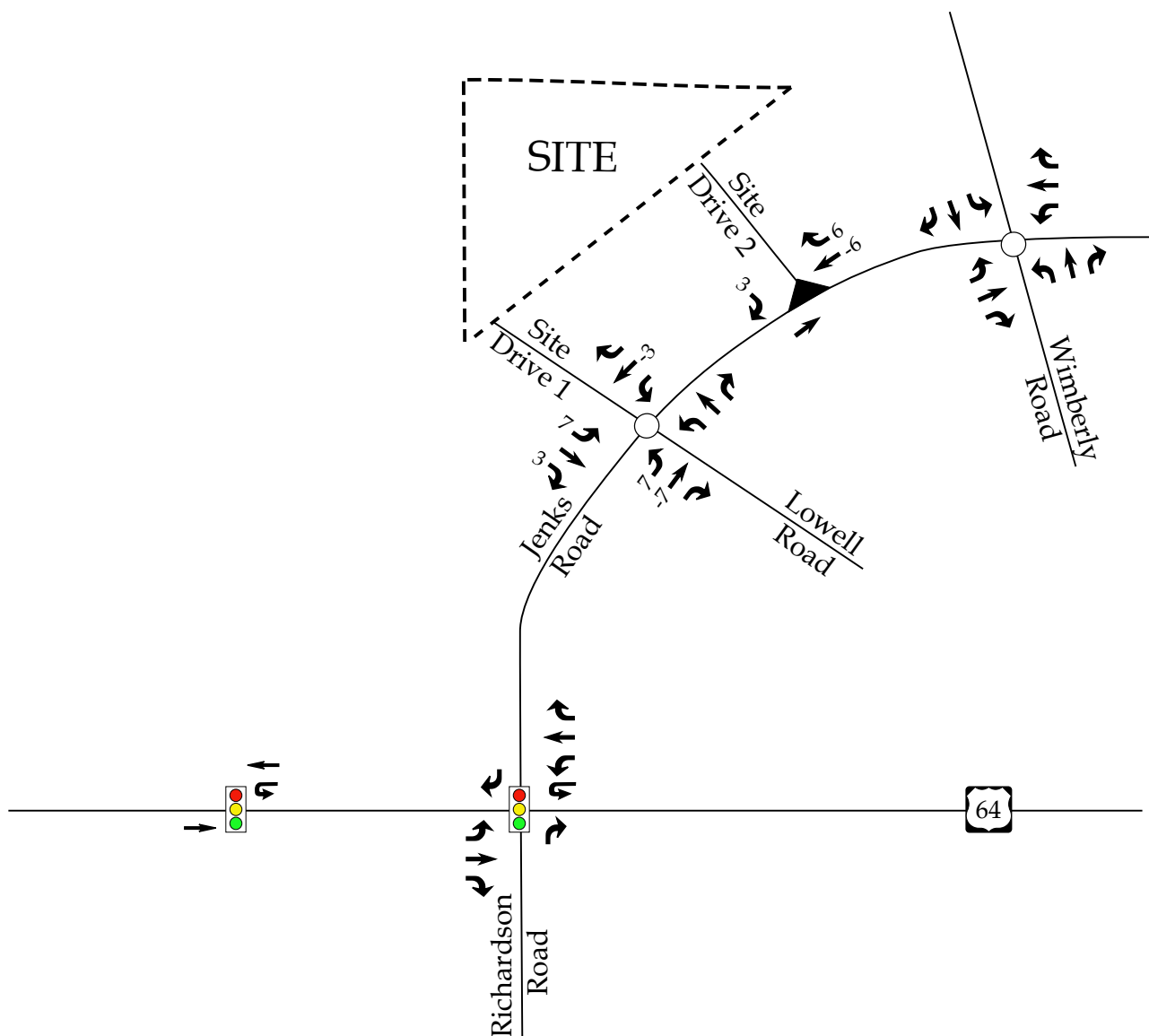
Scale: Not to Scale

Figure 10



### LEGEND

-  Signalized Intersection
-  Unsignalized Intersection
-  Right-In/Right-Out Intersection
-  Weekday PM Peak Hour Site Trips



Moving forward.



Arden at Apex  
Apex, NC

Pass-By Site  
Trip Assignment

Scale: Not to Scale Figure 11

## LEGEND



Signalized Intersection



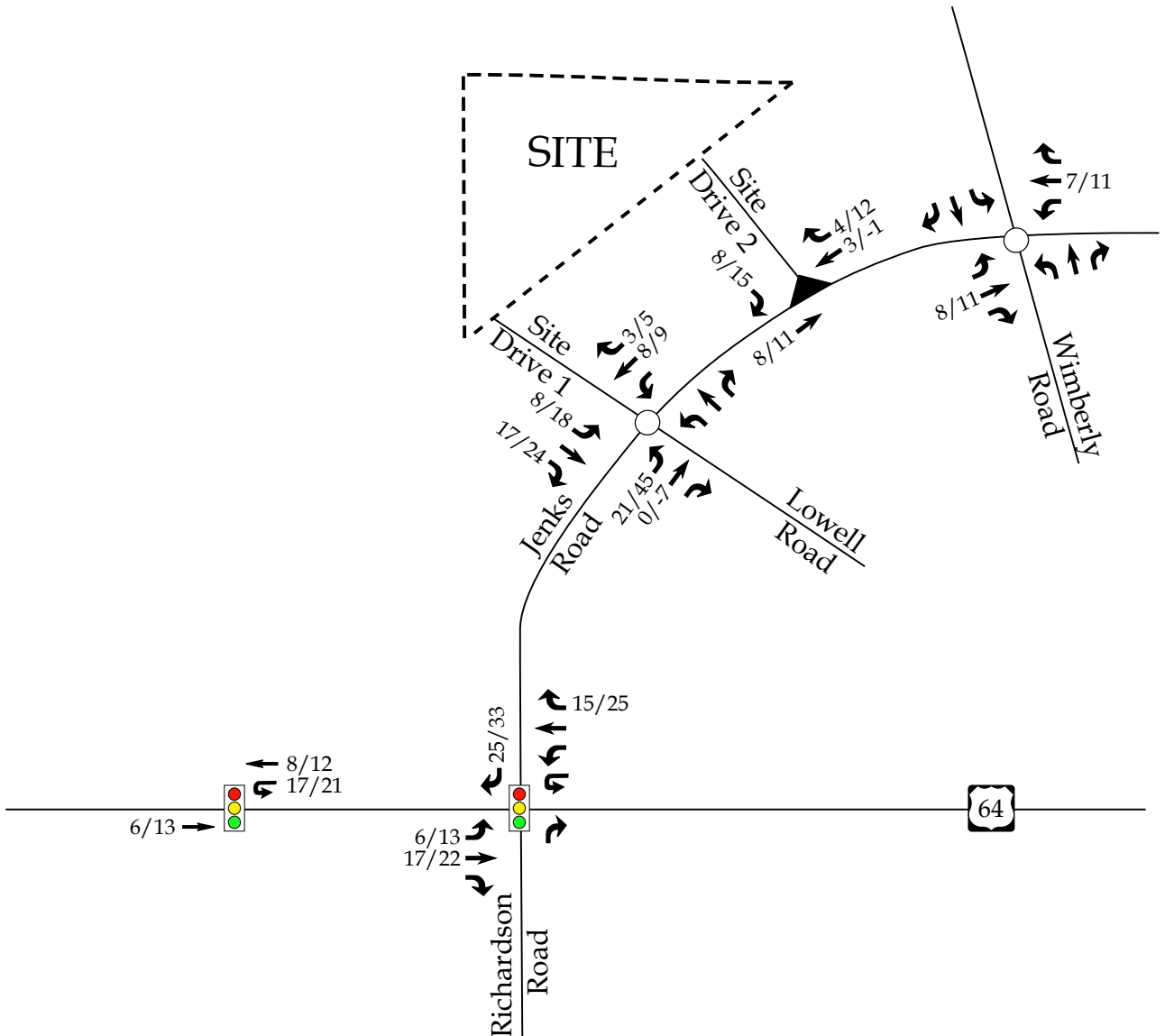
Unsignalized Intersection



Right-In/Right-Out Intersection

X / Y →

Weekday AM / PM Peak Hour  
Site Trips



Moving forward.



RAMEY KEMP ASSOCIATES

Arden at Apex  
Apex, NC

Total Site Trip  
Assignment

Scale: Not to Scale

Figure 12



## **Appendix D:**

### **Trip Generation**

**Jenks @ Wimberly Residential**

**Table 1 - Trip Generation**

Land Use	Intensity	Daily			AM Peak Hour			PM Peak Hour		
		Total	In	Out	Total	In	Out	Total	In	Out
221 Multifamily Housing (Mid-Rise, Not Close to Rail)	300 d.u.	1,386	693	693	120	28	92	117	71	46
<b>Total Net New External Trips</b>		<b>1,386</b>	<b>693</b>	<b>693</b>	<b>120</b>	<b>28</b>	<b>92</b>	<b>117</b>	<b>71</b>	<b>46</b>

## **Appendix E:**

# **Intersection Spreadsheets**



## Intersection Analysis Sheet

Project:	Jenks @ Wimberly Residential
Location:	Apex, NC
Ct. Date:	4/25/2024
N/S Street:	Jenks Road/Richardson Road
E/W Street:	US 64

	AM In	AM Out	PM In	PM Out
Net New Trips:	28	92	71	46
Pass-By Trips:	0	0	0	0

Annual Growth Rate:	2.0%	Existing Year:	2024
Growth Factor:	0.061208	Buildout Year:	2027

### AM PEAK HOUR AM PHF = 0.92

Description	US 64 Eastbound				US 64 Westbound				- Northbound				Jenks Road Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2024 Traffic Count	0	124	0	0	0	0	1327	82	0	0	0	0	0	0	0	141
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024 Existing Traffic	0	124	0	0	0	0	1327	82	0	0	0	0	0	0	0	141
Growth Factor 2.0% per year	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061
2027 Background Growth	0	8	0	0	0	0	81	5	0	0	0	0	0	0	0	9
Committed Projects																
Sweetwater Commercial	0	0	0	0	0	0	29	29	0	0	0	0	0	0	0	53
Parks at Wimberly (50% Remaining)	0	2	0	0	0	0	0	4	0	0	0	0	0	0	0	20
Retreat at Preserve at White Oak	0	15	0	0	0	0	0	29	0	0	0	0	0	0	0	43
Westford - Commercial	0	21	0	0	0	0	0	17	0	0	0	0	0	0	0	82
Apex Light Industrial	0	9	0	0	0	0	189	0	0	0	0	0	0	0	0	57
Yellowbridge PUD	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0
Arden at Summit Pines	0	6	0	0	0	0	0	15	0	0	0	0	0	0	0	25
Total Committed Traffic	0	53	0	0	0	0	234	94	0	0	0	0	0	0	0	280
2027 Background Traffic	0	185	0	0	0	0	1642	181	0	0	0	0	0	0	0	430
Project Traffic																
Percent Assignment Inbound	0%	20%	0%	0%	0%	0%	0%	35%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	0	6	0	0	0	0	0	10	0	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	35%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	55%
Outbound Project Traffic	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	51
Total Project Traffic	0	6	32	0	0	0	0	10	0	0	0	0	0	0	0	51
2027 Buildout Total	0	191	32	0	0	0	1642	191	0	0	0	0	0	0	0	481
Percent Impact (Approach)			17.0%				0.5%				-				10.6%	
Overall Percent Impact	3.9%															

### PM PEAK HOUR PM PHF = 0.97

Description	US 64 Eastbound				US 64 Westbound				- Northbound				Jenks Road Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2024 Traffic Count	0	100	0	0	0	0	1614	71	0	0	0	0	0	0	0	157
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024 Existing Traffic	0	100	0	0	0	0	1614	71	0	0	0	0	0	0	0	157
Growth Factor 2.0% per year	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061
2027 Background Growth	0	6	0	0	0	0	99	4	0	0	0	0	0	0	0	10
Committed Projects																
Sweetwater Commercial	0	0	0	0	0	0	64	64	0	0	0	0	0	0	0	51
Parks at Wimberly (50% Remaining)	0	7	0	0	0	0	0	14	0	0	0	0	0	0	0	13
Retreat at Preserve at White Oak	0	15	0	0	0	0	0	29	0	0	0	0	0	0	0	49
Westford - Commercial	0	44	0	0	0	0	-13	28	0	0	0	0	0	0	0	86
Apex Light Industrial	0	48	0	0	0	0	74	0	0	0	0	0	0	0	0	22
Yellowbridge PUD	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0
Arden at Summit Pines	0	13	0	0	0	0	0	25	0	0	0	0	0	0	0	33
Total Committed Traffic	0	127	0	0	0	0	141	160	0	0	0	0	0	0	0	254
2027 Background Traffic	0	233	0	0	0	0	1854	235	0	0	0	0	0	0	0	421
Project Traffic																
Percent Assignment Inbound	0%	20%	0%	0%	0%	0%	0%	35%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	0	14	0	0	0	0	0	25	0	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	35%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	55%
Outbound Project Traffic	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	25
Total Project Traffic	0	14	16	0	0	0	0	25	0	0	0	0	0	0	0	25
2027 Buildout Total	0	247	16	0	0	0	1854	260	0	0	0	0	0	0	0	446
Percent Impact (Approach)			11.4%				1.2%				-				5.6%	
Overall Percent Impact	2.8%															

## Intersection Analysis Sheet

Project:	Jenks @ Wimberly Residential
Location:	Apex, NC
Ct. Date:	4/25/2024
N/S Street:	U-Turn West of Jenks Road
E/W Street:	US 64

	AM In	AM Out	PM In	PM Out
Net New Trips:	28	92	71	46
Pass-By Trips:	0	0	0	0

Annual Growth Rate:	2.0%	Existing Year:	2024
Growth Factor:	0.061208	Buildout Year:	2027

### AM PEAK HOUR AM PHF = 0.92

Description	US 64 Eastbound				US 64 Westbound				- Northbound				U-Turn West of Jenks Road Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2024 Traffic Count	0	0	1589	0	73	0	1412	0	0	0	0	0	0	0	0	0
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024 Existing Traffic	0	0	1589	0	73	0	1412	0	0	0	0	0	0	0	0	0
Growth Factor 2.0% per year	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061
2027 Background Growth	0	0	97	0	4	0	86	0	0	0	0	0	0	0	0	0
Committed Projects																
Sweetwater Commercial	0	0	53	0	53	0	29	0	0	0	0	0	0	0	0	0
Parks at Wimberly (50% Remaining)	0	0	2	0	13	0	7	0	0	0	0	0	0	0	0	0
Retreat at Preserve at White Oak	0	0	15	0	29	0	14	0	0	0	0	0	0	0	0	0
Westford - Commercial	0	0	21	0	50	0	32	0	0	0	0	0	0	0	0	0
Apex Light Industrial	0	0	41	0	0	0	246	0	0	0	0	0	0	0	0	0
Yellowbridge PUD	0	0	9	0	0	0	16	0	0	0	0	0	0	0	0	0
Arden at Summit Pines	0	0	6	0	17	0	8	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	147	0	162	0	352	0	0	0	0	0	0	0	0	0
2027 Background Traffic	0	0	1833	0	239	0	1850	0	0	0	0	0	0	0	0	0
Project Traffic																
Percent Assignment Inbound	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	35%	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	32	0	18	0	0	0	0	0	0	0	0	0
Total Project Traffic	0	0	6	0	32	0	18	0	0	0	0	0	0	0	0	0
2027 Buildout Total	0	0	1839	0	271	0	1868	0	0	0	0	0	0	0	0	0
Percent Impact (Approach)			0.3%				2.3%				-				-	
Overall Percent Impact	1.4%															

### PM PEAK HOUR PM PHF = 0.96

Description	US 64 Eastbound				US 64 Westbound				- Northbound				U-Turn West of Jenks Road Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2024 Traffic Count	0	0	1438	0	73	0	1707	0	0	0	0	0	0	0	0	0
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024 Existing Traffic	0	0	1438	0	73	0	1707	0	0	0	0	0	0	0	0	0
Growth Factor 2.0% per year	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061
2027 Background Growth	0	0	88	0	4	0	104	0	0	0	0	0	0	0	0	0
Committed Projects																
Sweetwater Commercial	0	0	51	0	51	0	64	0	0	0	0	0	0	0	0	0
Parks at Wimberly (50% Remaining)	0	0	7	0	9	0	4	0	0	0	0	0	0	0	0	0
Retreat at Preserve at White Oak	0	0	15	0	33	0	16	0	0	0	0	0	0	0	0	0
Westford - Commercial	0	0	35	0	49	0	27	0	0	0	0	0	0	0	0	0
Apex Light Industrial	0	0	208	0	0	0	96	0	0	0	0	0	0	0	0	0
Yellowbridge PUD	0	0	21	0	0	0	16	0	0	0	0	0	0	0	0	0
Arden at Summit Pines	0	0	13	0	21	0	12	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	350	0	163	0	235	0	0	0	0	0	0	0	0	0
2027 Background Traffic	0	0	1876	0	240	0	2046	0	0	0	0	0	0	0	0	0
Project Traffic																
Percent Assignment Inbound	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	35%	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	16	0	9	0	0	0	0	0	0	0	0	0
Total Project Traffic	0	0	14	0	16	0	9	0	0	0	0	0	0	0	0	0
2027 Buildout Total	0	0	1890	0	256	0	2055	0	0	0	0	0	0	0	0	0
Percent Impact (Approach)			0.7%				1.1%				-				-	
Overall Percent Impact	0.9%															

## Intersection Analysis Sheet

Project:	Jenks @ Wimberly Residential
Location:	Apex, NC
Ct. Date:	4/25/2024
N/S Street:	Wimberly Road
E/W Street:	Jenks Road

	AM In	AM Out	PM In	PM Out
Net New Trips:	28	92	71	46
Pass-By Trips:	0	0	0	0

Annual Growth Rate:	2.0%	Existing Year:	2024
Growth Factor:	0.061208	Buildout Year:	2027

### AM PEAK HOUR AM PHF = 0.84

Description	Jenks Road Eastbound				Jenks Road Westbound				Wimberly Road Northbound				Wimberly Road Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2024 Traffic Count	0	74	135	7	0	14	81	31	0	9	8	42	0	45	3	35
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024 Existing Traffic	0	74	135	7	0	14	81	31	0	9	8	42	0	45	3	35
Growth Factor 2.0% per year	0.000	0.061	0.061	0.000	0.000	0.000	0.061	0.061	0.000	0.000	0.000	0.000	0.000	0.061	0.000	0.061
2027 Background Growth	0	5	8	0	0	0	5	2	0	0	0	0	0	3	0	2
Committed Projects																
Sweetwater Commercial	0	14	14	0	0	0	26	0	0	0	0	0	0	0	0	26
Parks at Wimberly (50% Remaining)	0	6	0	0	0	0	0	2	0	0	0	0	0	6	0	20
Retreat at Preserve at White Oak	0	41	3	0	0	0	31	5	0	0	0	0	0	19	0	12
Westford - Commercial	0	6	19	0	0	0	13	0	0	0	0	0	0	0	0	4
Apex Light Industrial	0	3	5	0	0	0	30	0	0	0	0	0	0	0	0	19
Yellowbridge PUD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arden at Summit Pines	0	0	8	0	0	0	7	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	70	49	0	0	0	107	7	0	0	0	0	0	25	0	81
2027 Background Traffic	0	149	192	7	0	14	193	40	0	9	8	42	0	73	3	118
Project Traffic																
Percent Assignment Inbound	0%	55%	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	0	15	0	0	0	0	0	8	0	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%	55%
Outbound Project Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	28	0	51
Total Project Traffic	0	15	0	0	0	0	0	8	0	0	0	0	0	28	0	51
2027 Buildout Total	0	164	192	7	0	14	193	48	0	9	8	42	0	101	3	169
Percent Impact (Approach)			4.1%				3.1%				0.0%				28.9%	

Overall Percent Impact 10.7%

### PM PEAK HOUR PM PHF = 0.91

Description	Jenks Road Eastbound				Jenks Road Westbound				Wimberly Road Northbound				Wimberly Road Southbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2024 Traffic Count	0	46	91	7	0	36	103	33	0	7	4	35	0	79	13	65
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024 Existing Traffic	0	46	91	7	0	36	103	33	0	7	4	35	0	79	13	65
Growth Factor 2.0% per year	0.000	0.061	0.061	0.000	0.000	0.000	0.061	0.061	0.000	0.000	0.000	0.000	0.000	0.061	0.000	0.061
2027 Background Growth	0	3	6	0	0	0	6	2	0	0	0	0	0	5	0	4
Committed Projects																
Sweetwater Commercial	0	32	32	0	0	0	25	0	0	0	0	0	0	0	0	25
Parks at Wimberly (50% Remaining)	0	21	0	0	0	0	0	7	0	0	0	0	0	4	0	13
Retreat at Preserve at White Oak	0	36	8	0	0	0	33	4	0	0	0	0	0	26	0	16
Westford - Commercial	0	5	16	0	0	0	21	0	0	0	0	0	0	0	0	7
Apex Light Industrial	0	16	26	0	0	0	12	0	0	0	0	0	0	0	0	7
Yellowbridge PUD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arden at Summit Pines	0	0	11	0	0	0	11	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	110	93	0	0	0	102	11	0	0	0	0	0	30	0	68
2027 Background Traffic	0	159	190	7	0	36	211	46	0	7	4	35	0	114	13	137
Project Traffic																
Percent Assignment Inbound	0%	55%	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	0	39	0	0	0	0	0	21	0	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%	55%
Outbound Project Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	25
Total Project Traffic	0	39	0	0	0	0	0	21	0	0	0	0	0	14	0	25
2027 Buildout Total	0	198	190	7	0	36	211	67	0	7	4	35	0	128	13	162
Percent Impact (Approach)			9.9%				6.7%				0.0%				12.9%	

Overall Percent Impact 9.4%



## Intersection Analysis Sheet

**Project:** Jenks @ Wimberly Residential  
**Location:** Apex, NC  
**Ct. Date:** 4/25/2024  
**N/S Street:** White Oak Pond Road/North Site Drwy.  
**E/W Street:** Wimberly Road

	AM In	AM Out	PM In	PM Out
Net New Trips:	28	92	71	46
Pass-By Trips:	0	0	0	0

Annual Growth Rate:	2.0%	Existing Year:	2024
Growth Factor:	0.061208	Buildout Year:	2027

### AM PEAK HOUR AM PHF = 0.89

Description		Wimberly Road Eastbound				Wimberly Road Westbound				North Site Driveway Northbound				White Oak Pond Road Southbound			
		U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2024 Traffic Count	Traffic Count	0	4	72	0	0	0	98	19	0	0	0	0	0	16	0	9
	Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024	Existing Traffic	0	4	72	0	0	0	98	19	0	0	0	0	0	16	0	9
Growth Factor 2.0% per year		0.000	0.000	0.061	0.000	0.000	0.000	0.061	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2027	Background Growth	0	0	4	0	0	0	6	0	0	0	0	0	0	0	0	0
Committed Projects																	
	Sweetwater Commercial	0	0	26	0	0	0	14	0	0	0	0	0	0	0	0	0
	Parks at Wimberly (50% Remaining)	0	1	6	0	0	0	1	8	0	0	0	0	0	20	0	3
	Retreat at Preserve at White Oak	0	0	11	0	0	0	11	0	0	0	0	0	0	0	0	0
	Westford - Commercial	0	0	4	0	0	0	6	0	0	0	0	0	0	0	0	0
	Apex Light Industrial	0	0	19	0	0	0	3	0	0	0	0	0	0	0	0	0
	Yellowbridge PUD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Arden at Summit Pines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic		0	1	66	0	0	0	35	8	0	0	0	0	0	20	0	3
2027	Background Traffic	0	5	142	0	0	0	139	27	0	0	0	0	0	36	0	12
Project Traffic																	
	Percent Assignment Inbound	0%	0%	10%	5%	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Inbound Project Traffic	0	0	3	1	0	6	0	0	0	0	0	0	0	0	0	0
	Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	10%	0%	0%	5%	0%	20%	0%	0%	0%	0%
	Outbound Project Traffic	0	0	0	0	0	0	9	0	0	5	0	18	0	0	0	0
Total Project Traffic		0	0	3	1	0	6	9	0	0	5	0	18	0	0	0	0
2027	Buildout Total	0	5	145	1	0	6	148	27	0	5	0	18	0	36	0	12
Percent Impact (Approach)		2.6%				8.3%				100.0%				0.0%			

### PM PEAK HOUR PM PHF = 0.87

Description		Wimberly Road <u>Eastbound</u>				Wimberly Road <u>Westbound</u>				North Site Driveway <u>Northbound</u>				White Oak Pond Road <u>Southbound</u>			
		U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2024 Traffic Count	Count Balancing	0	11	145	0	0	0	67	15	0	0	0	0	0	9	0	11
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024	Existing Traffic	0	11	145	0	0	0	67	15	0	0	0	0	0	9	0	11
Growth Factor 2.0% per year		0.000	0.000	0.061	0.000	0.000	0.000	0.061	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2027	Background Growth	0	0	9	0	0	0	4	0	0	0	0	0	0	0	0	0
Committed Projects																	
Sweetwater Commercial		0	0	25	0	0	0	32	0	0	0	0	0	0	0	0	0
Parks at Wimberly (50% Remaining)		0	4	4	0	0	0	2	26	0	0	0	0	0	13	0	2
Retreat at Preserve at White Oak		0	0	11	0	0	0	12	0	0	0	0	0	0	0	0	0
Westford - Commercial		0	0	7	0	0	0	5	0	0	0	0	0	0	0	0	0
Apex Light Industrial		0	0	7	0	0	0	16	0	0	0	0	0	0	0	0	0
Yellowbridge PUD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arden at Summit Pines		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic		0	4	54	0	0	0	67	26	0	0	0	0	0	13	0	2
2027	Background Traffic	0	15	208	0	0	0	138	41	0	0	0	0	0	22	0	13
Project Traffic																	
Percent Assignment Inbound		0%	0%	10%	5%	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic		0	0	7	4	0	14	0	0	0	0	0	0	0	0	0	0
Percent Assignment Outbound		0%	0%	0%	0%	0%	0%	10%	0%	0%	5%	0%	20%	0%	0%	0%	0%
Outbound Project Traffic		0	0	0	0	0	0	5	0	0	2	0	9	0	0	0	0
Total Project Traffic		0	0	7	4	0	14	5	0	0	2	0	9	0	0	0	0
2027	Buildout Total	0	15	215	4	0	14	143	41	0	2	0	9	0	22	0	13
Percent Impact (Approach)		4.7%				9.6%				100.0%				0.0%			

## Intersection Analysis Sheet

**Project:** Jenks @ Wimberly Residential  
**Location:** Apex, NC  
**Ct. Date:** 4/25/2024  
**N/S Street:** Wimberly Road  
**E/W Street:** Retreat at Preserve Drwy./South Site Drwy.

	AM In	AM Out	PM In	PM Out
Net New Trips:	28	92	71	46
Pass-By Trips:	0	0	0	0

Annual Growth Rate:	2.0%	Existing Year:	2024
Growth Factor:	0.061208	Buildout Year:	2027

### AM PEAK HOUR AM PHF = 0.9

Description		South Site Drwy. Eastbound				Retreat at Preserve at White Oak Drwy. Westbound				Wimberly Road Northbound				Wimberly Road Southbound			
		U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2024 Traffic Count Count Balancing		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	117	0	0	0	88	0
2024 Existing Traffic		0	0	0	0	0	0	0	0	0	0	117	0	0	0	88	0
Growth Factor 2.0% per year		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.061	0.000	0.000	0.000	0.061	0.000
2027 Background Growth		0	0	0	0	0	0	0	0	0	0	7	0	0	0	5	0
Committed Projects																	
Sweetwater Commercial		0	0	0	0	0	0	0	0	0	0	14	0	0	0	26	0
Parks at Wimberly (50% Remaining)		0	0	0	0	0	0	0	0	0	0	8	0	0	0	26	0
Retreat at Preserve at White Oak		0	0	0	0	0	31	0	11	0	0	0	46	0	11	0	0
Westford - Commercial		0	0	0	0	0	0	0	0	0	0	6	0	0	0	4	0
Apex Light Industrial		0	0	0	0	0	0	0	0	0	0	3	0	0	0	19	0
Yellowbridge PUD		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arden at Summit Pines		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic		0	0	0	0	0	31	0	11	0	0	31	46	0	11	75	0
2027 Background Traffic		0	0	0	0	0	31	0	11	0	0	155	46	0	11	168	0
Project Traffic																	
Percent Assignment Inbound		0%	0%	0%	0%	0%	0%	0%	0%	0%	65%	20%	0%	0%	0%	0%	10%
Inbound Project Traffic		0	0	0	0	0	0	0	0	0	18	6	0	0	0	0	3
Percent Assignment Outbound		0%	10%	0%	65%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%
Outbound Project Traffic		0	9	0	60	0	0	0	0	0	0	0	0	0	0	18	0
Total Project Traffic		0	9	0	60	0	0	0	0	0	18	6	0	0	0	18	3
2027 Buildout Total		0	9	0	60	0	31	0	11	0	18	161	46	0	11	186	3
Percent Impact (Approach)		100.0%				0.0%				10.7%				10.5%			

### PM PEAK HOUR PM PHF = 0.9













Description		South Site Drwy. <u>Eastbound</u>				Retreat at Preserve at White Oak Drwy. <u>Westbound</u>				Wimberly Road <u>Northbound</u>				Wimberly Road <u>Southbound</u>			
		U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
2024 Traffic Count	Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2024 Existing Traffic	0	0	0	0	0	0	0	0	0	0	82	0	0	0	154	0
Growth Factor 2.0% per year		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.061	0.000	0.000	0.000	0.061	0.000
2027 Background Growth		0	0	0	0	0	0	0	0	0	0	5	0	0	0	9	0
	Committed Projects																
	Sweetwater Commercial	0	0	0	0	0	0	0	0	0	0	32	0	0	0	25	0
	Parks at Wimberly (50% Remaining)	0	0	0	0	0	0	0	0	0	0	28	0	0	0	17	0
	Retreat at Preserve at White Oak	0	0	0	0	0	42	0	12	0	0	0	40	0	11	0	0
	Westford - Commercial	0	0	0	0	0	0	0	0	0	0	5	0	0	0	7	0
	Apex Light Industrial	0	0	0	0	0	0	0	0	0	0	16	0	0	0	7	0
	Yellowbridge PUD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Arden at Summit Pines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total Committed Traffic	0	0	0	0	0	42	0	12	0	0	81	40	0	11	56	0
2027 Background Traffic		0	0	0	0	0	42	0	12	0	0	168	40	0	11	219	0
	Project Traffic																
Percent Assignment Inbound		0%	0%	0%	0%	0%	0%	0%	0%	0%	65%	20%	0%	0%	0%	0%	10%
Inbound Project Traffic		0	0	0	0	0	0	0	0	0	46	14	0	0	0	0	7
Percent Assignment Outbound		0%	10%	0%	65%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%
Outbound Project Traffic		0	5	0	30	0	0	0	0	0	0	0	0	0	0	9	0
Total Project Traffic		0	5	0	30	0	0	0	0	0	46	14	0	0	0	9	7
2027 Buildout Total		0	5	0	30	0	42	0	12	0	46	182	40	0	11	228	7
	Percent Impact (Approach)	100.0%				0.0%				22.4%				6.5%			

**Appendix F:**  
**Synchro Output:**  
**Existing (2024)**



Jenks at Wimberly Residential  
1: Jenks Road & US 64 Westbound

Existing AM  
05/28/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑	↑		↑				↑
Traffic Volume (vph)	0	0	0	0	1327	82	0	124	0	0	0	141
Future Volume (vph)	0	0	0	0	1327	82	0	124	0	0	0	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		-2%			4%			1%			-1%	
Storage Length (ft)	0		0	0		100	0		0	0		150
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	100			100			100			100		
Satd. Flow (prot)	0	0	0	0	3131	1401	0	1734	0	0	0	1488
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	3131	1401	0	1734	0	0	0	1488
Link Speed (mph)		55			55			45			45	
Link Distance (ft)		1006			267			188			1026	
Travel Time (s)		12.5			3.3			2.8			15.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	13%	13%	13%	9%	9%	9%	11%	11%	11%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1442	89	0	135	0	0	0	153
Sign Control		Free			Free			Yield			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	93.3%				ICU Level of Service F							
Analysis Period (min)	15											

Jenks at Wimberly Residential  
1: Jenks Road & US 64 Westbound

Existing AM  
05/28/2024

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑	↑		↑				↑
Traffic Vol, veh/h	0	0	0	0	1327	82	0	124	0	0	0	141
Future Vol, veh/h	0	0	0	0	1327	82	0	124	0	0	0	141
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Yield	Yield	Yield	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Yield	-	-	None	-	-	None
Storage Length	-	-	-	-	-	100	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-2	-	-	4	-	-	1	-	-	-1	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	13	13	13	9	9	9	11	11	11
Mvmt Flow	0	0	0	0	1442	89	0	135	0	0	0	153

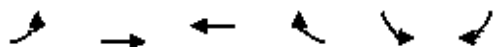
Major/Minor	Major2			Minor2		
Conflicting Flow All	-	-	0	-	-	721
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.02
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.41
Pot Cap-1 Maneuver	0	-	-	0	0	357
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	0	357
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-

Approach	WB	SB
HCM Control Delay, s/v	0	22.5
HCM LOS		C

Minor Lane/Major Mvmt	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	357
HCM Lane V/C Ratio	-	-	0.429
HCM Control Delay (s/veh)	-	-	22.5
HCM Lane LOS	-	-	C
HCM 95th %tile Q (veh)	-	-	2.1

Jenks at Wimberly Residential  
2: US 64 Eastbound & U-Turn West of Jenks Road

Existing AM  
05/28/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↑	
Traffic Volume (vph)	0	1589	0	0	73	0
Future Volume (vph)	0	1589	0	0	73	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		-1%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	100				100	
Satd. Flow (prot)	0	3359	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3359	0	0	1770	0
Link Speed (mph)		55	55		45	
Link Distance (ft)		999	830		63	
Travel Time (s)		12.4	10.3		1.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	8%	8%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1727	0	0	79	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	89.6%
Analysis Period (min)	15
	ICU Level of Service E























Jenks at Wimberly Residential  
2: US 64 Eastbound & U-Turn West of Jenks Road

Existing AM  
05/28/2024

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↓	
Traffic Vol, veh/h	0	1589	0	0	73	0
Future Vol, veh/h	0	1589	0	0	73	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-1	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	8	8	2	2	2	2
Mvmt Flow	0	1727	0	0	79	0
Major/Minor	Major1		Minor2			
Conflicting Flow All	-	0			864	-
Stage 1	-	-			0	-
Stage 2	-	-			864	-
Critical Hdwy	-	-			6.84	-
Critical Hdwy Stg 1	-	-			-	-
Critical Hdwy Stg 2	-	-			5.84	-
Follow-up Hdwy	-	-			3.52	-
Pot Cap-1 Maneuver	0	-			293	0
Stage 1	0	-			-	0
Stage 2	0	-			373	0
Platoon blocked, %		-				
Mov Cap-1 Maneuver	-	-			293	-
Mov Cap-2 Maneuver	-	-			293	-
Stage 1	-	-			-	-
Stage 2	-	-			373	-
Approach	EB			SB		
HCM Control Delay, s/v	0			21.8		
HCM LOS				C		
Minor Lane/Major Mvmt	EBT SBLn1					
Capacity (veh/h)	- 293					
HCM Lane V/C Ratio	- 0.271					
HCM Control Delay (s/veh)	- 21.8					
HCM Lane LOS	- C					
HCM 95th %tile Q (veh)	- 1.1					











Jenks at Wimberly Residential  
3: Wimberly Road & Jenks Road

Existing AM  
05/28/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	74	135	7	14	81	31	9	8	42	45	4	35
Future Volume (vph)	74	135	7	14	81	31	9	8	42	45	4	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	9	12	9
Grade (%)	0%			0%			0%			0%		
Storage Length (ft)	200		0	250		0	0		100	0		100
Storage Lanes	1		1	1		0	0		1	0		1
Taper Length (ft)	100			100			100			100		
Satd. Flow (prot)	1770	1863	1583	1770	1786	0	0	1814	1583	0	1781	1425
Flt Permitted	0.950			0.950				0.974			0.956	
Satd. Flow (perm)	1770	1863	1583	1770	1786	0	0	1814	1583	0	1781	1425
Link Speed (mph)	45			45			45			45		
Link Distance (ft)	1338			1087			333			590		
Travel Time (s)	20.3			16.5			5.0			8.9		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)	0%			0%			0%			0%		
Shared Lane Traffic (%)												
Lane Group Flow (vph)	82	150	8	16	124	0	0	19	47	0	54	39
Sign Control	Free			Free			Stop			Stop		
Intersection Summary												
Area Type:	Other											
Control Type: Unsignalized												
Intersection Capacity Utilization 27.7%				ICU Level of Service A								
Analysis Period (min) 15												

Jenks at Wimberly Residential  
3: Wimberly Road & Jenks Road

Existing AM  
05/28/2024

Intersection												
Int Delay, s/veh	4.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	74	135	7	14	81	31	9	8	42	45	4	35
Future Vol, veh/h	74	135	7	14	81	31	9	8	42	45	4	35
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	200	-	0	250	-	-	-	-	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	82	150	8	16	90	34	10	9	47	50	4	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	124	0	0	158	0	0	475	470	150	485	461	107
Stage 1	-	-	-	-	-	-	314	314	-	139	139	-
Stage 2	-	-	-	-	-	-	161	156	-	346	322	-
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	1463	-	-	1422	-	-	500	492	896	492	497	947
Stage 1	-	-	-	-	-	-	697	656	-	864	782	-
Stage 2	-	-	-	-	-	-	841	769	-	670	651	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1463	-	-	1422	-	-	452	460	896	436	464	947
Mov Cap-2 Maneuver	-	-	-	-	-	-	452	460	-	436	464	-
Stage 1	-	-	-	-	-	-	658	619	-	816	773	-
Stage 2	-	-	-	-	-	-	793	761	-	591	615	-

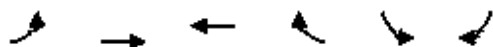
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	2.6	0.8	10.4	12.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	456	896	1463	-	-	1422	-	-	438	947
HCM Lane V/C Ratio	0.041	0.052	0.056	-	-	0.011	-	-	0.124	0.041
HCM Control Delay (s/veh)	13.2	9.2	7.6	-	-	7.6	-	-	14.4	9
HCM Lane LOS	B	A	A	-	-	A	-	-	B	A
HCM 95th %tile Q (veh)	0.1	0.2	0.2	-	-	0	-	-	0.4	0.1



Jenks at Wimberly Residential  
4: Wimberly Road & White Oak Pond Road

Existing AM  
05/28/2024







Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	4	72	98	19	16	9
Future Volume (vph)	4	72	98	19	16	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	100	0
Storage Lanes	0			0	1	1
Taper Length (ft)	100				50	
Satd. Flow (prot)	0	1708	1674	0	1671	1495
Flt Permitted		0.998			0.950	
Satd. Flow (perm)	0	1708	1674	0	1671	1495
Link Speed (mph)		45	45		25	
Link Distance (ft)		701	647		405	
Travel Time (s)		10.6	9.8		11.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	11%	11%	11%	11%	8%	8%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	84	130	0	18	10
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	17.1%
Analysis Period (min)	15
	ICU Level of Service A












Jenks at Wimberly Residential  
4: Wimberly Road & White Oak Pond Road

Existing AM  
05/28/2024

Intersection						
Int Delay, s/veh	1.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	72	98	19	16	9
Future Vol, veh/h	4	72	98	19	16	9
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, %	11	11	11	11	8	8
Mvmt Flow	4	80	109	21	18	10
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	130	0	-	0	208	120
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	88	-
Critical Hdwy	4.21	-	-	-	6.48	6.28
Critical Hdwy Stg 1	-	-	-	-	5.48	-
Critical Hdwy Stg 2	-	-	-	-	5.48	-
Follow-up Hdwy	2.299	-	-	-	3.572	3.372
Pot Cap-1 Maneuver	1402	-	-	-	767	916
Stage 1	-	-	-	-	891	-
Stage 2	-	-	-	-	921	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1402	-	-	-	765	916
Mov Cap-2 Maneuver	-	-	-	-	765	-
Stage 1	-	-	-	-	888	-
Stage 2	-	-	-	-	921	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	0.4	0		9.5		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1402	-	-	-	765	916
HCM Lane V/C Ratio	0.003	-	-	-	0.023	0.011
HCM Control Delay (s/veh)	7.6	0	-	-	9.8	9
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q (veh)	0	-	-	-	0.1	0

Jenks at Wimberly Residential  
1: Jenks Road & US 64 Westbound

Existing PM  
05/28/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑	↑		↑				↑
Traffic Volume (vph)	0	0	0	0	1614	71	0	100	0	0	0	157
Future Volume (vph)	0	0	0	0	1614	71	0	100	0	0	0	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		-2%			4%			1%			-1%	
Storage Length (ft)	0		0	0		100	0		0	0		150
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	100			100			100			100		
Satd. Flow (prot)	0	0	0	0	3276	1465	0	1767	0	0	0	1544
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	3276	1465	0	1767	0	0	0	1544
Link Speed (mph)		55			55			45			35	
Link Distance (ft)		1006			267			188			1026	
Travel Time (s)		12.5			3.3			2.8			20.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	8%	8%	8%	7%	7%	7%	7%	7%	7%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1664	73	0	103	0	0	0	162
Sign Control		Free			Free			Yield			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	98.7%											
Analysis Period (min)	15											
	ICU Level of Service F											



Jenks at Wimberly Residential  
1: Jenks Road & US 64 Westbound

Existing PM  
05/28/2024

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑	↑		↑				↑
Traffic Vol, veh/h	0	0	0	0	1614	71	0	100	0	0	0	157
Future Vol, veh/h	0	0	0	0	1614	71	0	100	0	0	0	157
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Yield	Yield	Yield	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Yield	-	-	None	-	-	None
Storage Length	-	-	-	-	-	100	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-2	-	-	4	-	-	1	-	-	-1	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	8	8	8	7	7	7	7	7	7
Mvmt Flow	0	0	0	0	1664	73	0	103	0	0	0	162

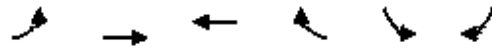
Major/Minor	Major2			Minor2		
Conflicting Flow All	-	-	0	-	-	832
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.37
Pot Cap-1 Maneuver	0	-	-	0	0	309
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	0	309
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-

Approach	WB	SB
HCM Control Delay, s/v	0	28.8
HCM LOS		D

Minor Lane/Major Mvmt	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	309
HCM Lane V/C Ratio	-	-	0.524
HCM Control Delay (s/veh)	-	-	28.8
HCM Lane LOS	-	-	D
HCM 95th %tile Q (veh)	-	-	2.9

Jenks at Wimberly Residential  
2: US 64 Eastbound & U-Turn West of Jenks Road

Existing PM  
05/28/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↑	
Traffic Volume (vph)	0	1438	0	0	73	0
Future Volume (vph)	0	1438	0	0	73	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		-1%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	100				100	
Satd. Flow (prot)	0	3391	0	0	1752	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3391	0	0	1752	0
Link Speed (mph)		55	55		45	
Link Distance (ft)		999	830		63	
Travel Time (s)		12.4	10.3		1.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	7%	7%	2%	2%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1498	0	0	76	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	93.6%
Analysis Period (min)	15
	ICU Level of Service F

Jenks at Wimberly Residential  
2: US 64 Eastbound & U-Turn West of Jenks Road





















Existing PM  
05/28/2024

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↓	
Traffic Vol, veh/h	0	1438	0	0	73	0
Future Vol, veh/h	0	1438	0	0	73	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-1	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	7	7	2	2	3	3
Mvmt Flow	0	1498	0	0	76	0
Major/Minor	Major1		Minor2			
Conflicting Flow All	-	0			749	-
Stage 1	-	-			0	-
Stage 2	-	-			749	-
Critical Hdwy	-	-			6.86	-
Critical Hdwy Stg 1	-	-			-	-
Critical Hdwy Stg 2	-	-			5.86	-
Follow-up Hdwy	-	-			3.53	-
Pot Cap-1 Maneuver	0	-			345	0
Stage 1	0	-			-	0
Stage 2	0	-			425	0
Platoon blocked, %		-				
Mov Cap-1 Maneuver	-	-			345	-
Mov Cap-2 Maneuver	-	-			345	-
Stage 1	-	-			-	-
Stage 2	-	-			425	-
Approach	EB		SB			
HCM Control Delay, s/v	0				18.4	
HCM LOS					C	
Minor Lane/Major Mvmt	EBT SBLn1					
Capacity (veh/h)	-		345			
HCM Lane V/C Ratio	-		0.22			
HCM Control Delay (s/veh)	-		18.4			
HCM Lane LOS	-		C			
HCM 95th %tile Q (veh)	-		0.8			













Jenks at Wimberly Residential  
3: Wimberly Road & Jenks Road

Existing PM  
05/28/2024

													
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	46	91	7	36	103	33	7	4	35	79	13	65	
Future Volume (vph)	46	91	7	36	103	33	7	4	35	79	13	65	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	9	12	9	
Grade (%)	0%				0%				0%		0%		
Storage Length (ft)	200			0	250			0	0	100		0	100
Storage Lanes	1			1	1			0	0	1		0	1
Taper Length (ft)	100			100				100				100	
Satd. Flow (prot)	1770	1863	1583	1770	1796	0		0	1803	1583	0	1786	1425
Flt Permitted	0.950			0.950				0.968				0.959	
Satd. Flow (perm)	1770	1863	1583	1770	1796	0		0	1803	1583	0	1786	1425
Link Speed (mph)	45				45				45				45
Link Distance (ft)	1338				1087				333				590
Travel Time (s)	20.3				16.5				7.6				8.9
Confl. Peds. (#/hr)													
Confl. Bikes (#/hr)													1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)													
Mid-Block Traffic (%)	0%				0%				0%				0%
Shared Lane Traffic (%)													
Lane Group Flow (vph)	51	100	8	40	149	0	0	12	38	0	101	71	
Sign Control	Free				Free				Stop				Stop
Intersection Summary													
Area Type:	Other												
Control Type:	Unsignalized												
Intersection Capacity Utilization	32.5%				ICU Level of Service A								
Analysis Period (min)	15												

Jenks at Wimberly Residential  
3: Wimberly Road & Jenks Road

Existing PM  
05/28/2024

Intersection												
Int Delay, s/veh	5.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	46	91	7	36	103	33	7	4	35	79	13	65
Future Vol, veh/h	46	91	7	36	103	33	7	4	35	79	13	65
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	0	250	-	-	-	-	100	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	51	100	8	40	113	36	8	4	38	87	14	71

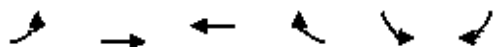
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	149	0	0	108	0	0	456	431	100	438	421	131
Stage 1	-	-	-	-	-	-	202	202	-	211	211	-
Stage 2	-	-	-	-	-	-	254	229	-	227	210	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
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	1432	-	-	1483	-	-	515	517	956	529	524	919
Stage 1	-	-	-	-	-	-	800	734	-	791	728	-
Stage 2	-	-	-	-	-	-	750	715	-	776	728	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1432	-	-	1483	-	-	443	485	956	480	492	919
Mov Cap-2 Maneuver	-	-	-	-	-	-	443	485	-	480	492	-
Stage 1	-	-	-	-	-	-	771	708	-	763	708	-
Stage 2	-	-	-	-	-	-	659	696	-	714	702	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	2.4	1.6	9.9	12.2
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	457	956	1432	-	-	1483	-	-	482	919
HCM Lane V/C Ratio	0.026	0.04	0.035	-	-	0.027	-	-	0.21	0.078
HCM Control Delay (s/veh)	13.1	8.9	7.6	-	-	7.5	-	-	14.4	9.2
HCM Lane LOS	B	A	A	-	-	A	-	-	B	A
HCM 95th %tile Q (veh)	0.1	0.1	0.1	-	-	0.1	-	-	0.8	0.3

Jenks at Wimberly Residential  
4: Wimberly Road & White Oak Pond Road

Existing PM  
05/28/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	11	145	67	15	9	11
Future Volume (vph)	11	145	67	15	9	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	100	0
Storage Lanes	0			0	1	1
Taper Length (ft)	100				50	
Satd. Flow (prot)	0	1857	1781	0	1641	1468
Flt Permitted		0.997			0.950	
Satd. Flow (perm)	0	1857	1781	0	1641	1468
Link Speed (mph)		30	55		30	
Link Distance (ft)		701	647		405	
Travel Time (s)		15.9	8.0		9.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	4%	4%	10%	10%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	173	91	0	10	12
Sign Control		Free	Free		Stop	





Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	24.9%
Analysis Period (min)	15
	ICU Level of Service A



Jenks at Wimberly Residential  
4: Wimberly Road & White Oak Pond Road


Existing PM  
05/28/2024

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	145	67	15	9	11
Future Vol, veh/h	11	145	67	15	9	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	4	4	10	10
Mvmt Flow	12	161	74	17	10	12
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	91	0	-	0	268	83
Stage 1	-	-	-	-	83	-
Stage 2	-	-	-	-	185	-
Critical Hdwy	4.12	-	-	-	6.5	6.3
Critical Hdwy Stg 1	-	-	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	5.5	-
Follow-up Hdwy	2.218	-	-	-	3.59	3.39
Pot Cap-1 Maneuver	1504	-	-	-	704	955
Stage 1	-	-	-	-	920	-
Stage 2	-	-	-	-	828	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1504	-	-	-	698	955
Mov Cap-2 Maneuver	-	-	-	-	698	-
Stage 1	-	-	-	-	912	-
Stage 2	-	-	-	-	828	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	0.5	0		9.4		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1504	-	-	-	698	955
HCM Lane V/C Ratio	0.008	-	-	-	0.014	0.013
HCM Control Delay (s/veh)	7.4	0	-	-	10.2	8.8
HCM Lane LOS	A	A	-	-	B	A
HCM 95th %tile Q (veh)	0	-	-	-	0	0

**Appendix G:**  
**Synchro Output:**  
**Background (2027)**

Jenks at Wimberly Residential  
1: Jenks Road & US 64 Westbound

Background AM  
05/29/2024













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑	↑		↑				↑
Traffic Volume (vph)	0	0	0	0	1642	181	0	185	0	0	0	430
Future Volume (vph)	0	0	0	0	1642	181	0	185	0	0	0	430
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		-2%			4%			1%			-1%	
Storage Length (ft)	0		0	0		100	0		0	0		150
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	100			100			100			100		
Satd. Flow (prot)	0	0	0	0	3131	1401	0	1734	0	0	0	1488
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	3131	1401	0	1734	0	0	0	1488
Right Turn on Red			No			No	No		No			No
Satd. Flow (RTOR)												
Link Speed (mph)		55			55			45			45	
Link Distance (ft)		1006			267			188			1026	
Travel Time (s)		12.5			3.3			2.8			15.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	13%	13%	13%	9%	9%	9%	11%	11%	11%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1785	197	0	201	0	0	0	467
Turn Type					NA	Perm		NA				Perm
Protected Phases					6			3				
Permitted Phases						6						8
Detector Phase					6	6		3				8
Switch Phase												
Minimum Initial (s)					14.0	14.0		7.0				7.0
Minimum Split (s)					20.2	20.2		12.6				12.6
Total Split (s)					65.0	65.0		45.0				45.0
Total Split (%)					59.1%	59.1%		40.9%				40.9%
Yellow Time (s)					4.8	4.8		3.0				3.0
All-Red Time (s)					1.4	1.4		2.6				2.6
Lost Time Adjust (s)					-1.2	-1.2		-0.6				-0.6
Total Lost Time (s)					5.0	5.0		5.0				5.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode					C-Max	C-Max		None				None
Act Effct Green (s)					62.7	62.7		37.3				37.3
Actuated g/C Ratio					0.57	0.57		0.34				0.34
v/c Ratio					1.00	0.24		0.34				0.92
Control Delay (s/veh)					46.5	13.5		27.4				60.4
Queue Delay					0.0	0.0		0.0				0.0
Total Delay (s/veh)					46.5	13.5		27.4				60.4



# Jenks at Wimberly Residential

## 1: Jenks Road & US 64 Westbound

Background AM  
05/29/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS					D	B		C				E
Approach Delay (s/veh)					43.3			27.4			60.4	
Approach LOS					D			C			E	
Queue Length 50th (ft)					~721	70		126				303
Queue Length 95th (ft)					#861	115		m140				#490
Internal Link Dist (ft)		926			187			108			946	
Turn Bay Length (ft)						100						150
Base Capacity (vph)					1783	798		630				541
Starvation Cap Reductn					0	0		0				0
Spillback Cap Reductn					0	0		0				0
Storage Cap Reductn					0	0		0				0
Reduced v/c Ratio					1.00	0.25		0.32				0.86

### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 2: and 6:WBT, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay (s/veh): 45.1

Intersection LOS: D

Intersection Capacity Utilization 131.2%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

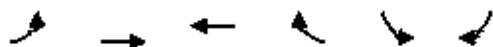
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Jenks Road & US 64 Westbound



Jenks at Wimberly Residential  
2: US 64 Eastbound & U-Turn West of Jenks Road

Background AM  
05/29/2024

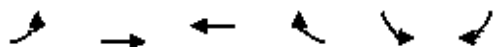


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↓	
Traffic Volume (vph)	0	1833	0	0	239	0
Future Volume (vph)	0	1833	0	0	239	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		-1%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	100				100	
Satd. Flow (prot)	0	3359	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3359	0	0	1770	0
Right Turn on Red				No	No	No
Satd. Flow (RTOR)						
Link Speed (mph)		55	55		45	
Link Distance (ft)		999	830		63	
Travel Time (s)		12.4	10.3		1.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	8%	8%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1992	0	0	260	0
Turn Type		NA			Prot	
Protected Phases		2			7	
Permitted Phases						
Detector Phase		2			7	
Switch Phase						
Minimum Initial (s)		14.0			7.0	
Minimum Split (s)		20.3			13.3	
Total Split (s)		80.0			30.0	
Total Split (%)		72.7%			27.3%	
Yellow Time (s)		5.3			3.0	
All-Red Time (s)		1.0			3.3	
Lost Time Adjust (s)		-1.3			-1.3	
Total Lost Time (s)		5.0			5.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			None	
Act Effct Green (s)		79.0			21.0	
Actuated g/C Ratio		0.72			0.19	
v/c Ratio		0.82			0.77	
Control Delay (s/veh)		15.4			39.2	
Queue Delay		0.0			0.0	
Total Delay (s/veh)		15.4			39.2	

# Jenks at Wimberly Residential

## 2: US 64 Eastbound & U-Turn West of Jenks Road

Background AM  
05/29/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
LOS		B			D	
Approach Delay (s/veh)		15.5			39.2	
Approach LOS		B			D	
Queue Length 50th (ft)		462			74	
Queue Length 95th (ft)		652			m89	
Internal Link Dist (ft)		919	750		1	
Turn Bay Length (ft)						
Base Capacity (vph)		2412			402	
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.83			0.65	

### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 2:EBT and 6:, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay (s/veh): 18.2

Intersection LOS: B

Intersection Capacity Utilization 109.3%

ICU Level of Service H

Analysis Period (min) 15

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






















Splits and Phases: 2: US 64 Eastbound & U-Turn West of Jenks Road















Jenks at Wimberly Residential  
3: Wimberly Road & Jenks Road

Background AM  
05/29/2024

													
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	149	192	7	14	193	40	9	8	42	73	4	118	
Future Volume (vph)	149	192	7	14	193	40	9	8	42	73	4	118	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	9	12	9	
Grade (%)	0%				0%				0%		0%		
Storage Length (ft)	200			0	250			0	0			100	
Storage Lanes	1			1	1			0	0			1	
Taper Length (ft)	100			100				100				100	
Satd. Flow (prot)	1770	1863	1583	1770	1814	0		0	1814	1583	0	1779	1425
Flt Permitted	0.950			0.950				0.974				0.955	
Satd. Flow (perm)	1770	1863	1583	1770	1814	0		0	1814	1583	0	1779	1425
Link Speed (mph)	45				45				45				45
Link Distance (ft)	1338				1087				333				590
Travel Time (s)	20.3				16.5				5.0				8.9
Confl. Peds. (#/hr)			7		7				4				4
Confl. Bikes (#/hr)													
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)													
Mid-Block Traffic (%)	0%				0%				0%				0%
Shared Lane Traffic (%)													
Lane Group Flow (vph)	166	213	8	16	258	0	0	19	47	0	85	131	
Sign Control	Free				Free				Stop				Stop
Intersection Summary													
Area Type:	Other												
Control Type:	Unsignalized												
Intersection Capacity Utilization	42.1%				ICU Level of Service A								
Analysis Period (min)	15												

Jenks at Wimberly Residential  
3: Wimberly Road & Jenks Road

Background AM  
05/29/2024

Intersection												
Int Delay, s/veh	6.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	149	192	7	14	193	40	9	8	42	73	4	118
Future Vol, veh/h	149	192	7	14	193	40	9	8	42	73	4	118
Conflicting Peds, #/hr	0	0	7	7	0	0	4	0	0	0	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	0	250	-	-	-	-	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	166	213	8	16	214	44	10	9	47	81	4	131

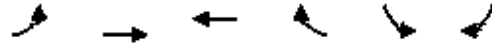
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	258	0	0	228	0	0	892	842	220	845	828	240
Stage 1	-	-	-	-	-	-	552	552	-	268	268	-
Stage 2	-	-	-	-	-	-	340	290	-	577	560	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
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	1307	-	-	1340	-	-	263	301	820	283	306	799
Stage 1	-	-	-	-	-	-	518	515	-	738	687	-
Stage 2	-	-	-	-	-	-	675	672	-	502	511	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1307	-	-	1332	-	-	192	258	815	233	262	796
Mov Cap-2 Maneuver	-	-	-	-	-	-	192	258	-	233	262	-
Stage 1	-	-	-	-	-	-	450	447	-	644	679	-
Stage 2	-	-	-	-	-	-	552	664	-	405	444	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	3.5	0.4	13.6	17.7
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	218	815	1307	-	-	1332	-	-	234	796
HCM Lane V/C Ratio	0.087	0.057	0.127	-	-	0.012	-	-	0.366	0.165
HCM Control Delay (s/veh)	23.1	9.7	8.2	-	-	7.7	-	-	29	10.4
HCM Lane LOS	C	A	A	-	-	A	-	-	D	B
HCM 95th %tile Q (veh)	0.3	0.2	0.4	-	-	0	-	-	1.6	0.6

Jenks at Wimberly Residential  
4: Wimberly Road & White Oak Pond Road

Background AM  
05/29/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	5	142	139	27	36	12
Future Volume (vph)	5	142	139	27	36	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	100	0
Storage Lanes	0			0	1	1
Taper Length (ft)	100				50	
Satd. Flow (prot)	0	1708	1674	0	1671	1495
Flt Permitted		0.998			0.950	
Satd. Flow (perm)	0	1708	1674	0	1671	1495
Link Speed (mph)		45	45		25	
Link Distance (ft)		701	647		405	
Travel Time (s)		10.6	9.8		11.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	11%	11%	11%	11%	8%	8%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	164	184	0	40	13
Sign Control		Free	Free		Stop	

Intersection Summary





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



Jenks at Wimberly Residential  
4: Wimberly Road & White Oak Pond Road










Background AM

05/29/2024

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	142	139	27	36	12
Future Vol, veh/h	5	142	139	27	36	12
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, %	11	11	11	11	8	8
Mvmt Flow	6	158	154	30	40	13
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	184	0	-	0	339	169
Stage 1	-	-	-	-	169	-
Stage 2	-	-	-	-	170	-
Critical Hdwy	4.21	-	-	-	6.48	6.28
Critical Hdwy Stg 1	-	-	-	-	5.48	-
Critical Hdwy Stg 2	-	-	-	-	5.48	-
Follow-up Hdwy	2.299	-	-	-	3.572	3.372
Pot Cap-1 Maneuver	1338	-	-	-	645	860
Stage 1	-	-	-	-	846	-
Stage 2	-	-	-	-	846	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1338	-	-	-	642	860
Mov Cap-2 Maneuver	-	-	-	-	642	-
Stage 1	-	-	-	-	842	-
Stage 2	-	-	-	-	846	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	0.3	0		10.6		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1338	-	-	-	642	860
HCM Lane V/C Ratio	0.004	-	-	-	0.062	0.016
HCM Control Delay (s/veh)	7.7	0	-	-	11	9.3
HCM Lane LOS	A	A	-	-	B	A
HCM 95th %tile Q (veh)	0	-	-	-	0.2	0

Jenks at Wimberly Residential  
5: Wimberly Road & Retreat @ Preserve Drwy.

Background AM  
05/29/2024

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	31	11	155	46	11	168
Future Volume (vph)	31	11	155	46	11	168
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	100				100	
Satd. Flow (prot)	1733	0	1805	0	0	1857
Flt Permitted	0.964					0.997
Satd. Flow (perm)	1733	0	1805	0	0	1857
Link Speed (mph)	25		45			45
Link Distance (ft)	351		590			647
Travel Time (s)	9.6		8.9			9.8
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	46	0	223	0	0	199
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	27.9%			ICU Level of Service A		
Analysis Period (min)	15					

Jenks at Wimberly Residential  
5: Wimberly Road & Retreat @ Preserve Drwy.













Background AM  
05/29/2024

Intersection						
Int Delay, s/veh	1.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			A
Traffic Vol, veh/h	31	11	155	46	11	168
Future Vol, veh/h	31	11	155	46	11	168
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	34	12	172	51	12	187
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	409	198	0	0	223	0
Stage 1	198	-	-	-	-	-
Stage 2	211	-	-	-	-	-
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	599	843	-	-	1346	-
Stage 1	835	-	-	-	-	-
Stage 2	824	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	593	843	-	-	1346	-
Mov Cap-2 Maneuver	593	-	-	-	-	-
Stage 1	835	-	-	-	-	-
Stage 2	816	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s/v	11	0	0.5			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	643	1346	-	
HCM Lane V/C Ratio	-	-	0.073	0.009	-	
HCM Control Delay (s/veh)	-	-	11	7.7	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q (veh)	-	-	0.2	0	-	



Jenks at Wimberly Residential  
1: Jenks Road & US 64 Westbound

Background PM  
05/29/2024













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑	↑		↑				↑
Traffic Volume (vph)	0	0	0	0	1854	235	0	233	0	0	0	421
Future Volume (vph)	0	0	0	0	1854	235	0	233	0	0	0	421
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		-2%			4%			1%			-1%	
Storage Length (ft)	0		0	0		100	0		0	0		150
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	100			100			100			100		
Satd. Flow (prot)	0	0	0	0	3276	1465	0	1750	0	0	0	1544
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	3276	1465	0	1750	0	0	0	1544
Right Turn on Red			No			No	No		No			No
Satd. Flow (RTOR)												
Link Speed (mph)		55			55			45			35	
Link Distance (ft)		1006			267			188			1026	
Travel Time (s)		12.5			3.3			2.8			20.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	8%	8%	8%	8%	8%	8%	7%	7%	7%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1911	242	0	240	0	0	0	434
Turn Type					NA	Perm		NA				Perm
Protected Phases					6			3				
Permitted Phases						6						8
Detector Phase					6	6		3				8
Switch Phase												
Minimum Initial (s)					14.0	14.0		7.0				7.0
Minimum Split (s)					20.2	20.2		12.6				12.6
Total Split (s)					55.0	55.0		35.0				35.0
Total Split (%)					61.1%	61.1%		38.9%				38.9%
Yellow Time (s)					4.8	4.8		3.0				3.0
All-Red Time (s)					1.4	1.4		2.6				2.6
Lost Time Adjust (s)					-2.0	-2.0		-2.0				-2.0
Total Lost Time (s)					4.2	4.2		3.6				3.6
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode					C-Max	C-Max		None				None
Act Effct Green (s)					53.1	53.1		29.1				29.1
Actuated g/C Ratio					0.59	0.59		0.32				0.32
v/c Ratio					0.98	0.28		0.42				0.86
Control Delay (s/veh)					38.3	10.7		23.7				47.6
Queue Delay					0.0	0.0		0.0				0.0
Total Delay (s/veh)					38.3	10.7		23.7				47.6

# Jenks at Wimberly Residential

## 1: Jenks Road & US 64 Westbound

Background PM

05/29/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS					D	B		C				D
Approach Delay (s/veh)					35.2			23.7			47.6	
Approach LOS					D			C			D	
Queue Length 50th (ft)					-620	67		128				221
Queue Length 95th (ft)					#757	112		m144				#378
Internal Link Dist (ft)		926			187			108			946	
Turn Bay Length (ft)						100						150
Base Capacity (vph)					1932	863		610				538
Starvation Cap Reductn					0	0		0				0
Spillback Cap Reductn					0	0		0				0
Storage Cap Reductn					0	0		0				0
Reduced v/c Ratio					0.99	0.28		0.39				0.81

### Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2: and 6:WBT, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay (s/veh): 36.1

Intersection LOS: D

Intersection Capacity Utilization 134.9%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

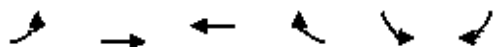
Splits and Phases: 1: Jenks Road & US 64 Westbound



Jenks at Wimberly Residential  
2: US 64 Eastbound & U-Turn West of Jenks Road

Background PM

05/29/2024

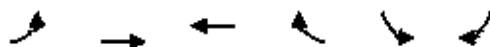


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↓	
Traffic Volume (vph)	0	1876	0	0	240	0
Future Volume (vph)	0	1876	0	0	240	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		-1%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	100				100	
Satd. Flow (prot)	0	3391	0	0	1752	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3391	0	0	1752	0
Right Turn on Red				No	No	No
Satd. Flow (RTOR)						
Link Speed (mph)		55	55		45	
Link Distance (ft)		999	830		63	
Travel Time (s)		12.4	10.3		1.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)				1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	7%	7%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1954	0	0	250	0
Turn Type		NA			Prot	
Protected Phases		2			7	
Permitted Phases						
Detector Phase		2			7	
Switch Phase						
Minimum Initial (s)		14.0			7.0	
Minimum Split (s)		20.3			13.3	
Total Split (s)		65.0			25.0	
Total Split (%)		72.2%			27.8%	
Yellow Time (s)		5.3			3.0	
All-Red Time (s)		1.0			3.3	
Lost Time Adjust (s)		-1.3			-1.3	
Total Lost Time (s)		5.0			5.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			None	
Act Effct Green (s)		62.7			17.3	
Actuated g/C Ratio		0.70			0.19	
v/c Ratio		0.82			0.74	
Control Delay (s/veh)		14.5			41.2	
Queue Delay		0.0			0.0	
Total Delay (s/veh)		14.5			41.2	



Jenks at Wimberly Residential  
2: US 64 Eastbound & U-Turn West of Jenks Road

Background PM  
05/29/2024

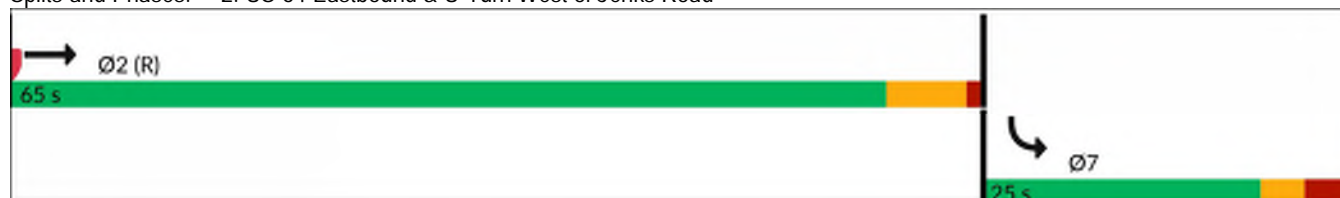


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
LOS		B			D	
Approach Delay (s/veh)		14.5			41.3	
Approach LOS		B			D	
Queue Length 50th (ft)		378			64	
Queue Length 95th (ft)		531			m83	
Internal Link Dist (ft)		919	750		1	
Turn Bay Length (ft)						
Base Capacity (vph)		2363			389	
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.83			0.64	

Intersection Summary






















Area Type: Other  
Cycle Length: 90  
Actuated Cycle Length: 90  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:, Start of Green  
Natural Cycle: 65  
Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 0.83  
Intersection Signal Delay (s/veh): 17.5 Intersection LOS: B  
Intersection Capacity Utilization 115.9% ICU Level of Service H  
Analysis Period (min) 15  
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: US 64 Eastbound & U-Turn West of Jenks Road



Jenks at Wimberly Residential  
3: Wimberly Road & Jenks Road











Background PM  
05/29/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	159	190	7	36	211	46	7	4	35	114	13	137
Future Volume (vph)	159	190	7	36	211	46	7	4	35	114	13	137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	9	12	9
Grade (%)	0%			0%			0%			0%		
Storage Length (ft)	200		0	250		0	0		100	0		100
Storage Lanes	1		1	1		0	0		1	0		1
Taper Length (ft)	100			100			100			100		
Satd. Flow (prot)	1770	1863	1583	1770	1812	0	0	1803	1583	0	1783	1425
Flt Permitted	0.950			0.950				0.968			0.957	
Satd. Flow (perm)	1770	1863	1583	1770	1812	0	0	1803	1583	0	1783	1425
Link Speed (mph)	45			45			45			45		
Link Distance (ft)	1338			1087			333			590		
Travel Time (s)	20.3			16.5			7.6			8.9		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)	0%			0%			0%			0%		
Shared Lane Traffic (%)												
Lane Group Flow (vph)	175	209	8	40	283	0	0	12	38	0	139	151
Sign Control	Free			Free			Stop			Stop		
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	46.4%			ICU Level of Service A								
Analysis Period (min)	15											

Jenks at Wimberly Residential  
3: Wimberly Road & Jenks Road

Background PM

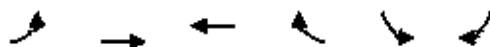
05/29/2024

Intersection												
Int Delay, s/veh	10.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	159	190	7	36	211	46	7	4	35	114	13	137
Future Vol, veh/h	159	190	7	36	211	46	7	4	35	114	13	137
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	200	-	0	250	-	-	-	-	100	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	175	209	8	40	232	51	8	4	38	125	14	151
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	283	0	0	217	0	0	979	922	209	922	905	258
Stage 1	-	-	-	-	-	-	559	559	-	338	338	-
Stage 2	-	-	-	-	-	-	420	363	-	584	567	-
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	1279	-	-	1353	-	-	229	270	831	251	276	781
Stage 1	-	-	-	-	-	-	513	511	-	676	641	-
Stage 2	-	-	-	-	-	-	611	625	-	498	507	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1279	-	-	1353	-	-	154	226	831	207	231	781
Mov Cap-2 Maneuver	-	-	-	-	-	-	154	226	-	207	231	-
Stage 1	-	-	-	-	-	-	443	441	-	583	622	-
Stage 2	-	-	-	-	-	-	468	606	-	406	438	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	3.7			1			13.7			30.2		
HCM LOS							B			D		
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	
Capacity (veh/h)	174		831	1279	-	-	1353	-	-	209	781	
HCM Lane V/C Ratio	0.069		0.046	0.137	-	-	0.029	-	-	0.668	0.193	
HCM Control Delay (s/veh)	27.2		9.5	8.3	-	-	7.7	-	-	51.2	10.7	
HCM Lane LOS	D		A	A	-	-	A	-	-	F	B	
HCM 95th %tile Q (veh)	0.2		0.1	0.5	-	-	0.1	-	-	4.1	0.7	



Jenks at Wimberly Residential  
4: Wimberly Road & White Oak Pond Road

Background PM  
05/29/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	15	208	138	41	22	13
Future Volume (vph)	15	208	138	41	22	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	100	0
Storage Lanes	0			0	1	1
Taper Length (ft)	100				50	
Satd. Flow (prot)	0	1857	1770	0	1641	1468
Flt Permitted		0.997			0.950	
Satd. Flow (perm)	0	1857	1770	0	1641	1468
Link Speed (mph)		45	45		25	
Link Distance (ft)		701	647		405	
Travel Time (s)		15.9	8.0		9.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	4%	4%	10%	10%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	248	199	0	24	14
Sign Control		Free	Free		Stop	





Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	33.3%
Analysis Period (min)	15
	ICU Level of Service A

Jenks at Wimberly Residential  
4: Wimberly Road & White Oak Pond Road










Background PM

05/29/2024

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	208	138	41	22	13
Future Vol, veh/h	15	208	138	41	22	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	4	4	10	10
Mvmt Flow	17	231	153	46	24	14
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	199	0	-	0	441	176
Stage 1	-	-	-	-	176	-
Stage 2	-	-	-	-	265	-
Critical Hdwy	4.12	-	-	-	6.5	6.3
Critical Hdwy Stg 1	-	-	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	5.5	-
Follow-up Hdwy	2.218	-	-	-	3.59	3.39
Pot Cap-1 Maneuver	1373	-	-	-	559	847
Stage 1	-	-	-	-	836	-
Stage 2	-	-	-	-	761	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1373	-	-	-	551	847
Mov Cap-2 Maneuver	-	-	-	-	551	-
Stage 1	-	-	-	-	824	-
Stage 2	-	-	-	-	761	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	0.5	0		10.9		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1373	-	-	-	551	847
HCM Lane V/C Ratio	0.012	-	-	-	0.044	0.017
HCM Control Delay (s/veh)	7.7	0	-	-	11.8	9.3
HCM Lane LOS	A	A	-	-	B	A
HCM 95th %tile Q (veh)	0	-	-	-	0.1	0.1

Jenks at Wimberly Residential  
5: Wimberly Road & Retreat @ Preserve Drwy.

Background PM  
05/29/2024

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	42	12	168	40	11	219
Future Volume (vph)	42	12	168	40	11	219
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	100				100	
Satd. Flow (prot)	1740	0	1814	0	0	1859
Flt Permitted	0.962					0.998
Satd. Flow (perm)	1740	0	1814	0	0	1859
Link Speed (mph)	25		45			45
Link Distance (ft)	351		590			647
Travel Time (s)	8.0		13.4			14.7
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	60	0	231	0	0	255
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	30.5%			ICU Level of Service A		
Analysis Period (min)	15					



Jenks at Wimberly Residential  
5: Wimberly Road & Retreat @ Preserve Drwy.

















Background PM  
05/29/2024

Intersection						
Int Delay, s/veh	1.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	W	T	T	T	T
Traffic Vol, veh/h	42	12	168	40	11	219
Future Vol, veh/h	42	12	168	40	11	219
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	47	13	187	44	12	243
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	476	209	0	0	231	0
Stage 1	209	-	-	-	-	-
Stage 2	267	-	-	-	-	-
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	548	831	-	-	1337	-
Stage 1	826	-	-	-	-	-
Stage 2	778	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	543	831	-	-	1337	-
Mov Cap-2 Maneuver	543	-	-	-	-	-
Stage 1	826	-	-	-	-	-
Stage 2	770	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s/v	11.8	0	0.4			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	588	1337	-	
HCM Lane V/C Ratio	-	-	0.102	0.009	-	
HCM Control Delay (s/veh)	-	-	11.8	7.7	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q (veh)	-	-	0.3	0	-	

**Appendix H:**  
**Synchro Output:**  
**Build-out (2027)**

Jenks at Wimberly Residential  
1: Jenks Road & US 64 Westbound

Build AM  
05/29/2024













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1642	191	0	191	0	0	0	481
Future Volume (vph)	0	0	0	0	1642	191	0	191	0	0	0	481
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		-2%			4%			1%			-1%	
Storage Length (ft)	0		0	0		100	0		0	0		150
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	100			100			100			100		
Satd. Flow (prot)	0	0	0	0	3131	1401	0	1734	0	0	0	1488
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	3131	1401	0	1734	0	0	0	1488
Right Turn on Red			No			No	No		No			No
Satd. Flow (RTOR)												
Link Speed (mph)		55			55			45			45	
Link Distance (ft)		1006			267			188			1026	
Travel Time (s)		12.5			3.3			2.8			15.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	13%	13%	13%	9%	9%	9%	11%	11%	11%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1785	208	0	208	0	0	0	523
Turn Type					NA	Perm		NA				Perm
Protected Phases					6			3				
Permitted Phases						6						8
Detector Phase					6	6		3				8
Switch Phase												
Minimum Initial (s)					14.0	14.0		7.0				7.0
Minimum Split (s)					20.2	20.2		12.6				12.6
Total Split (s)					55.0	55.0		35.0				35.0
Total Split (%)					61.1%	61.1%		38.9%				38.9%
Yellow Time (s)					4.8	4.8		3.0				3.0
All-Red Time (s)					1.4	1.4		2.6				2.6
Lost Time Adjust (s)					-1.2	-1.2		-0.6				-0.6
Total Lost Time (s)					5.0	5.0		5.0				5.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode					C-Max	C-Max		None				None
Act Effct Green (s)					50.0	50.0		30.0				30.0
Actuated g/C Ratio					0.56	0.56		0.33				0.33
v/c Ratio					1.02	0.26		0.35				1.05
Control Delay (s/veh)					50.0	11.5		21.6				86.9
Queue Delay					0.0	0.0		0.0				0.0
Total Delay (s/veh)					50.0	11.5		21.6				86.9



# Jenks at Wimberly Residential

## 1: Jenks Road & US 64 Westbound

Build AM  
05/29/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS					D	B		C				F
Approach Delay (s/veh)					46.0			21.6			86.9	
Approach LOS					D			C			F	
Queue Length 50th (ft)					~575	58		108				~329
Queue Length 95th (ft)					#712	99		m113				#522
Internal Link Dist (ft)		926			187			108			946	
Turn Bay Length (ft)						100						150
Base Capacity (vph)					1739	778		578				496
Starvation Cap Reductn					0	0		0				0
Spillback Cap Reductn					0	0		0				0
Storage Cap Reductn					0	0		0				0
Reduced v/c Ratio					1.03	0.27		0.36				1.05

### Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2: and 6:WBT, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.05

Intersection Signal Delay (s/veh): 52.0

Intersection LOS: D

Intersection Capacity Utilization 135.2%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

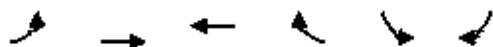
Splits and Phases: 1: Jenks Road & US 64 Westbound



# Jenks at Wimberly Residential

## 2: US 64 Eastbound & U-Turn West of Jenks Road

Build AM  
05/29/2024

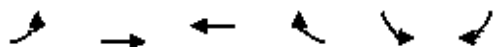


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↓	
Traffic Volume (vph)	0	1839	0	0	271	0
Future Volume (vph)	0	1839	0	0	271	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		-1%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	100				100	
Satd. Flow (prot)	0	3359	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3359	0	0	1770	0
Right Turn on Red				No	No	No
Satd. Flow (RTOR)						
Link Speed (mph)		55	55		45	
Link Distance (ft)		999	830		63	
Travel Time (s)		12.4	10.3		1.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	8%	8%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1999	0	0	295	0
Turn Type		NA			Prot	
Protected Phases		2			7	
Permitted Phases						
Detector Phase		2			7	
Switch Phase						
Minimum Initial (s)		14.0			7.0	
Minimum Split (s)		20.3			13.3	
Total Split (s)		65.0			25.0	
Total Split (%)		72.2%			27.8%	
Yellow Time (s)		5.3			3.0	
All-Red Time (s)		1.0			3.3	
Lost Time Adjust (s)		-1.3			-1.3	
Total Lost Time (s)		5.0			5.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			None	
Act Effct Green (s)		61.5			18.5	
Actuated g/C Ratio		0.68			0.21	
v/c Ratio		0.87			0.81	
Control Delay (s/veh)		17.2			37.5	
Queue Delay		0.0			0.0	
Total Delay (s/veh)		17.2			37.5	

# Jenks at Wimberly Residential

## 2: US 64 Eastbound & U-Turn West of Jenks Road

Build AM  
05/29/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
LOS		B			D	
Approach Delay (s/veh)		17.3			37.6	
Approach LOS		B			D	
Queue Length 50th (ft)		433			82	
Queue Length 95th (ft)		574			m75	
Internal Link Dist (ft)		919	750		1	
Turn Bay Length (ft)						
Base Capacity (vph)		2296			393	
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.87			0.75	

### Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBT and 6:, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay (s/veh): 19.9

Intersection LOS: B

Intersection Capacity Utilization 110.0%

ICU Level of Service H

Analysis Period (min) 15

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






















Splits and Phases: 2: US 64 Eastbound & U-Turn West of Jenks Road















Jenks at Wimberly Residential  
3: Wimberly Road & Jenks Road

Build AM  
05/29/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	164	192	7	14	193	48	9	8	42	101	4	169
Future Volume (vph)	164	192	7	14	193	48	9	8	42	101	4	169
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	9	12	9
Grade (%)	0%				0%				0%		0%	
Storage Length (ft)	200		0	250		0	0		100	0		100
Storage Lanes	1		1	1		0	0		1	0		1
Taper Length (ft)	100			100			100			100		
Satd. Flow (prot)	1770	1863	1583	1770	1807	0	0	1814	1583	0	1777	1425
Flt Permitted	0.950			0.950				0.974			0.954	
Satd. Flow (perm)	1770	1863	1583	1770	1807	0	0	1814	1583	0	1777	1425
Link Speed (mph)	45				45				45		45	
Link Distance (ft)	1338				1087				333		590	
Travel Time (s)	20.3				16.5				5.0		8.9	
Confl. Peds. (#/hr)			7	7			4					4
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)	0%				0%				0%		0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	182	213	8	16	267	0	0	19	47	0	116	188
Sign Control	Free				Free				Stop		Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	44.7%				ICU Level of Service A							
Analysis Period (min)	15											


















Jenks at Wimberly Residential  
3: Wimberly Road & Jenks Road

Build AM  
05/29/2024

Intersection												
Int Delay, s/veh	8.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	164	192	7	14	193	48	9	8	42	101	4	169
Future Vol, veh/h	164	192	7	14	193	48	9	8	42	101	4	169
Conflicting Peds, #/hr	0	0	7	7	0	0	4	0	0	0	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	0	250	-	-	-	-	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	182	213	8	16	214	53	10	9	47	112	4	188
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	267	0	0	228	0	0	957	883	220	882	865	245
Stage 1	-	-	-	-	-	-	584	584	-	273	273	-
Stage 2	-	-	-	-	-	-	373	299	-	609	592	-
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	1297	-	-	1340	-	-	237	285	820	267	292	794
Stage 1	-	-	-	-	-	-	498	498	-	733	684	-
Stage 2	-	-	-	-	-	-	648	666	-	482	494	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1297	-	-	1332	-	-	156	241	815	217	247	791
Mov Cap-2 Maneuver	-	-	-	-	-	-	156	241	-	217	247	-
Stage 1	-	-	-	-	-	-	426	426	-	630	676	-
Stage 2	-	-	-	-	-	-	483	658	-	382	422	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	3.7			0.4			14.5			21.8		
HCM LOS							B			C		
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	
Capacity (veh/h)	187		815	1297	-	-	1332	-	-	218	791	
HCM Lane V/C Ratio	0.101		0.057	0.14	-	-	0.012	-	-	0.535	0.237	
HCM Control Delay (s/veh)	26.4		9.7	8.2	-	-	7.7	-	-	39.1	11	
HCM Lane LOS	D		A	A	-	-	A	-	-	E	B	
HCM 95th %tile Q (veh)	0.3		0.2	0.5	-	-	0	-	-	2.8	0.9	

Jenks at Wimberly Residential  
4: North Site Drwy./White Oak Pond Road & Wimberly Road






Build AM  
05/29/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	145	4	6	148	27	5	4	18	36	4	12
Future Volume (vph)	5	145	4	6	148	27	5	4	18	36	4	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	100		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	100			25			100			50		
Satd. Flow (prot)	0	1706	0	0	1679	0	0	1678	0	1671	1578	0
Flt Permitted		0.998			0.998			0.990		0.950		
Satd. Flow (perm)	0	1706	0	0	1679	0	0	1678	0	1671	1578	0
Link Speed (mph)		45			45			25			25	
Link Distance (ft)		701			647			402			405	
Travel Time (s)		10.6			9.8			11.0			11.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	11%	11%	2%	2%	11%	11%	2%	2%	2%	8%	2%	8%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	171	0	0	201	0	0	30	0	40	17	0
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	26.6%											
Analysis Period (min)	15											
	ICU Level of Service A											



Jenks at Wimberly Residential  
4: North Site Drwy./White Oak Pond Road & Wimberly Road

Build AM  
05/29/2024

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	145	4	6	148	27	5	4	18	36	4	12
Future Vol, veh/h	5	145	4	6	148	27	5	4	18	36	4	12
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	-	-
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, %	11	11	2	2	11	11	2	2	2	8	2	8
Mvmt Flow	6	161	4	7	164	30	6	4	20	40	4	13

















Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	194	0	0	165	0	0	377	383	163	380	370	179
Stage 1	-	-	-	-	-	-	175	175	-	193	193	-
Stage 2	-	-	-	-	-	-	202	208	-	187	177	-
Critical Hdwy	4.21	-	-	4.12	-	-	7.12	6.52	6.22	7.18	6.52	6.28
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.18	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.18	5.52	-
Follow-up Hdwy	2.299	-	-	2.218	-	-	3.518	4.018	3.318	3.572	4.018	3.372
Pot Cap-1 Maneuver	1327	-	-	1413	-	-	580	550	882	567	560	849
Stage 1	-	-	-	-	-	-	827	754	-	795	741	-
Stage 2	-	-	-	-	-	-	800	730	-	801	753	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1327	-	-	1413	-	-	563	544	882	546	554	849
Mov Cap-2 Maneuver	-	-	-	-	-	-	563	544	-	546	554	-
Stage 1	-	-	-	-	-	-	823	750	-	791	737	-
Stage 2	-	-	-	-	-	-	778	726	-	774	749	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.3	0.3	10.1	11.4
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	737	1327	-	-	1413	-	-	546	749
HCM Lane V/C Ratio	0.041	0.004	-	-	0.005	-	-	0.073	0.024
HCM Control Delay (s/veh)	10.1	7.7	0	-	7.6	0	-	12.1	9.9
HCM Lane LOS	B	A	A	-	A	A	-	B	A
HCM 95th %tile Q (veh)	0.1	0	-	-	0	-	-	0.2	0.1

Jenks at Wimberly Residential  
5: Wimberly Road & South Site Drwy./Retreat @ Preserve Drwy.

Build AM  
05/29/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	4	60	31	4	11	18	161	46	11	186	4
Future Volume (vph)	9	4	60	31	4	11	18	161	46	11	186	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	50		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	100			100			100			100		
Satd. Flow (prot)	0	1644	0	0	1744	0	1770	1801	0	0	1853	0
Flt Permitted		0.994			0.967		0.950				0.997	
Satd. Flow (perm)	0	1644	0	0	1744	0	1770	1801	0	0	1853	0
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		519			351			590			647	
Travel Time (s)		14.2			9.6			8.9			9.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	81	0	0	50	0	20	230	0	0	223	0
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	35.0%											
Analysis Period (min)	15											
	ICU Level of Service A											

Jenks at Wimberly Residential  
5: Wimberly Road & South Site Drwy./Retreat @ Preserve Drwy.

Build AM  
05/29/2024

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↖			↕	
Traffic Vol, veh/h	9	4	60	31	4	11	18	161	46	11	186	4
Future Vol, veh/h	9	4	60	31	4	11	18	161	46	11	186	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	-	-	-
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	10	4	67	34	4	12	20	179	51	12	207	4

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	486	503	209	514	480	205	211	0	0	230	0	0
Stage 1	233	233	-	245	245	-	-	-	-	-	-	-
Stage 2	253	270	-	269	235	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	492	471	831	471	485	836	1360	-	-	1338	-	-
Stage 1	770	712	-	759	703	-	-	-	-	-	-	-
Stage 2	751	686	-	737	710	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	472	459	831	422	473	836	1360	-	-	1338	-	-
Mov Cap-2 Maneuver	472	459	-	422	473	-	-	-	-	-	-	-
Stage 1	758	705	-	748	692	-	-	-	-	-	-	-
Stage 2	724	676	-	667	703	-	-	-	-	-	-	-













Approach	EB		WB		NB		SB	
HCM Control Delay, s/v	10.5		13.3		0.6		0.4	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1360	-	-	730	484	1338	-
HCM Lane V/C Ratio	0.015	-	-	0.111	0.106	0.009	-
HCM Control Delay (s/veh)	7.7	-	-	10.5	13.3	7.7	0
HCM Lane LOS	A	-	-	B	B	A	A
HCM 95th %tile Q (veh)	0	-	-	0.4	0.4	0	-



Jenks at Wimberly Residential  
1: Jenks Road & US 64 Westbound













Build PM  
05/29/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑	↑		↑				↑
Traffic Volume (vph)	0	0	0	0	1854	260	0	247	0	0	0	446
Future Volume (vph)	0	0	0	0	1854	260	0	247	0	0	0	446
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		-2%			4%			1%			-1%	
Storage Length (ft)	0		0	0		100	0		0	0		150
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	100			100			100			100		
Satd. Flow (prot)	0	0	0	0	3276	1465	0	1750	0	0	0	1544
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	3276	1465	0	1750	0	0	0	1544
Right Turn on Red			No			No	No		No			No
Satd. Flow (RTOR)												
Link Speed (mph)		55			55			45			35	
Link Distance (ft)		1006			267			188			1026	
Travel Time (s)		12.5			3.3			2.8			20.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	8%	8%	8%	8%	8%	8%	7%	7%	7%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1911	268	0	255	0	0	0	460
Turn Type					NA	Perm		NA				Perm
Protected Phases					6			3				
Permitted Phases						6						8
Detector Phase					6	6		3				8
Switch Phase												
Minimum Initial (s)					14.0	14.0		7.0				7.0
Minimum Split (s)					20.2	20.2		12.6				12.6
Total Split (s)					55.0	55.0		35.0				35.0
Total Split (%)					61.1%	61.1%		38.9%				38.9%
Yellow Time (s)					4.8	4.8		3.0				3.0
All-Red Time (s)					1.4	1.4		2.6				2.6
Lost Time Adjust (s)					-2.0	-2.0		-2.0				-2.0
Total Lost Time (s)					4.2	4.2		3.6				3.6
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode					C-Max	C-Max		None				None
Act Effct Green (s)					52.3	52.3		29.9				29.9
Actuated g/C Ratio					0.58	0.58		0.33				0.33
v/c Ratio					1.00	0.31		0.43				0.89
Control Delay (s/veh)					42.3	11.3		23.7				50.5
Queue Delay					0.0	0.0		0.0				0.0
Total Delay (s/veh)					42.3	11.3		23.7				50.5

# Jenks at Wimberly Residential

## 1: Jenks Road & US 64 Westbound

Build PM  
05/29/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS					D	B		C				D
Approach Delay (s/veh)					38.6			23.8			50.6	
Approach LOS					D			C			D	
Queue Length 50th (ft)					-620	76		137				239
Queue Length 95th (ft)					#757	124		m154				#413
Internal Link Dist (ft)		926			187			108			946	
Turn Bay Length (ft)						100						150
Base Capacity (vph)					1903	850		610				538
Starvation Cap Reductn					0	0		0				0
Spillback Cap Reductn					0	0		0				0
Storage Cap Reductn					0	0		0				0
Reduced v/c Ratio					1.00	0.32		0.42				0.86

### Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2: and 6:WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay (s/veh): 39.2

Intersection LOS: D

Intersection Capacity Utilization 136.9%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

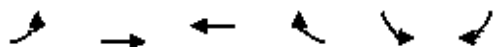
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Jenks Road & US 64 Westbound



Jenks at Wimberly Residential  
2: US 64 Eastbound & U-Turn West of Jenks Road

Build PM  
05/29/2024



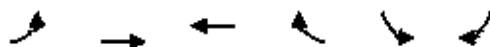
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↓	
Traffic Volume (vph)	0	1890	0	0	256	0
Future Volume (vph)	0	1890	0	0	256	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		-1%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	100				100	
Satd. Flow (prot)	0	3391	0	0	1752	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3391	0	0	1752	0
Right Turn on Red				No	No	No
Satd. Flow (RTOR)						
Link Speed (mph)		55	55		45	
Link Distance (ft)		999	830		63	
Travel Time (s)		12.4	10.3		1.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)				1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	7%	7%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1969	0	0	267	0
Turn Type		NA			Prot	
Protected Phases		2			7	
Permitted Phases						
Detector Phase		2			7	
Switch Phase						
Minimum Initial (s)		14.0			7.0	
Minimum Split (s)		20.3			13.3	
Total Split (s)		65.0			25.0	
Total Split (%)		72.2%			27.8%	
Yellow Time (s)		5.3			3.0	
All-Red Time (s)		1.0			3.3	
Lost Time Adjust (s)		-1.3			-1.3	
Total Lost Time (s)		5.0			5.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			None	
Act Effct Green (s)		62.2			17.8	
Actuated g/C Ratio		0.69			0.20	
v/c Ratio		0.84			0.77	
Control Delay (s/veh)		15.3			41.8	
Queue Delay		0.0			0.0	
Total Delay (s/veh)		15.3			41.8	



# Jenks at Wimberly Residential

## 2: US 64 Eastbound & U-Turn West of Jenks Road

Build PM  
05/29/2024

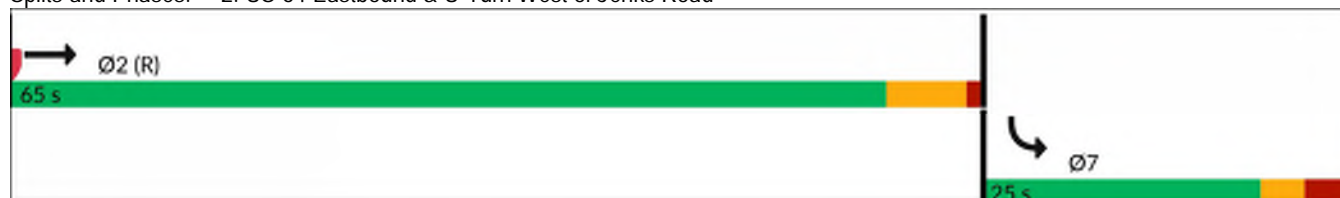


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
LOS		B			D	
Approach Delay (s/veh)		15.3			41.9	
Approach LOS		B			D	
Queue Length 50th (ft)		402			67	
Queue Length 95th (ft)		541			m85	
Internal Link Dist (ft)		919	750		1	
Turn Bay Length (ft)						
Base Capacity (vph)		2344			389	
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.84			0.69	

### Intersection Summary





















Area Type: Other  
Cycle Length: 90  
Actuated Cycle Length: 90  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:, Start of Green  
Natural Cycle: 60  
Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 0.84  
Intersection Signal Delay (s/veh): 18.5 Intersection LOS: B  
Intersection Capacity Utilization 116.6% ICU Level of Service H  
Analysis Period (min) 15  
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: US 64 Eastbound & U-Turn West of Jenks Road













Jenks at Wimberly Residential  
3: Wimberly Road & Jenks Road

Build PM  
05/29/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	198	190	7	36	211	67	7	4	35	128	13	162
Future Volume (vph)	198	190	7	36	211	67	7	4	35	128	13	162
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	9	12	9
Grade (%)	0%				0%				0%		0%	
Storage Length (ft)	200			0	250			0	0			100
Storage Lanes	1			1	1			0	0			1
Taper Length (ft)	100			100				100				100
Satd. Flow (prot)	1770	1863	1583	1770	1796	0	0	1803	1583	0	1781	1425
Flt Permitted	0.950			0.950				0.968				0.956
Satd. Flow (perm)	1770	1863	1583	1770	1796	0	0	1803	1583	0	1781	1425
Link Speed (mph)	45				45				25		45	
Link Distance (ft)	1338				1087				333		590	
Travel Time (s)	20.3				16.5				7.6		8.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)	0%				0%				0%		0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	218	209	8	40	306	0	0	12	38	0	155	178
Sign Control	Free				Free				Stop		Stop	
Intersection Summary												
Area Type:	Other											
Control Type: Unsignalized												
Intersection Capacity Utilization 50.6%				ICU Level of Service A								
Analysis Period (min) 15												

Jenks at Wimberly Residential  
3: Wimberly Road & Jenks Road

Build PM  
05/29/2024

Intersection												
Int Delay, s/veh	17.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	198	190	7	36	211	67	7	4	35	128	13	162
Future Vol, veh/h	198	190	7	36	211	67	7	4	35	128	13	162
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	200	-	0	250	-	-	-	-	100	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	218	209	8	40	232	74	8	4	38	141	14	178

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	306	0	0	217	0	0	1090	1031	209	1019	1002	269
Stage 1	-	-	-	-	-	-	645	645	-	349	349	-
Stage 2	-	-	-	-	-	-	445	386	-	670	653	-
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	1255	-	-	1353	-	-	193	233	831	215	242	770
Stage 1	-	-	-	-	-	-	461	467	-	667	633	-
Stage 2	-	-	-	-	-	-	592	610	-	446	464	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1255	-	-	1353	-	-	119	187	831	171	194	770
Mov Cap-2 Maneuver	-	-	-	-	-	-	119	187	-	171	194	-
Stage 1	-	-	-	-	-	-	381	386	-	551	614	-
Stage 2	-	-	-	-	-	-	431	592	-	347	383	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	4.2			0.9			15.3			51		
HCM LOS							C			F		


















  

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	137	831	1255	-	-	1353	-	-	173	770
HCM Lane V/C Ratio	0.088	0.046	0.173	-	-	0.029	-	-	0.896	0.231
HCM Control Delay (s/veh)	33.8	9.5	8.5	-	-	7.7	-	-	96.9	11.1
HCM Lane LOS	D	A	A	-	-	A	-	-	F	B
HCM 95th %tile Q (veh)	0.3	0.1	0.6	-	-	0.1	-	-	6.6	0.9








Jenks at Wimberly Residential  
4: North Site Drwy./White Oak Pond Road & Wimberly Road

Build PM  
05/29/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	215	4	14	143	41	4	4	9	22	4	13
Future Volume (vph)	15	215	4	14	143	41	4	4	9	22	4	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	100		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	100			25			100			50		
Satd. Flow (prot)	0	1853	0	0	1771	0	0	1704	0	1641	1550	0
Flt Permitted		0.997			0.996			0.989		0.950		
Satd. Flow (perm)	0	1853	0	0	1771	0	0	1704	0	1641	1550	0
Link Speed (mph)		45			45			25			25	
Link Distance (ft)		701			647			402			405	
Travel Time (s)		15.9			8.0			9.1			9.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	4%	4%	2%	2%	2%	10%	2%	10%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	260	0	0	221	0	0	18	0	24	18	0
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	26.9%				ICU Level of Service A							
Analysis Period (min)	15											

Jenks at Wimberly Residential  
4: North Site Drwy./White Oak Pond Road & Wimberly Road

Build PM  
05/29/2024

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	215	4	14	143	41	4	4	9	22	4	13
Future Vol, veh/h	15	215	4	14	143	41	4	4	9	22	4	13
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	-	-
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	4	4	2	2	2	10	2	10
Mvmt Flow	17	239	4	16	159	46	4	4	10	24	4	14


















Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	205	0	0	243	0	0	498	512	241	496	491	182
Stage 1	-	-	-	-	-	-	275	275	-	214	214	-
Stage 2	-	-	-	-	-	-	223	237	-	282	277	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.2	6.52	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.2	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.2	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.59	4.018	3.39
Pot Cap-1 Maneuver	1366	-	-	1323	-	-	483	465	798	471	478	840
Stage 1	-	-	-	-	-	-	731	683	-	770	725	-
Stage 2	-	-	-	-	-	-	780	709	-	708	681	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1366	-	-	1323	-	-	461	452	798	452	465	840
Mov Cap-2 Maneuver	-	-	-	-	-	-	461	452	-	452	465	-
Stage 1	-	-	-	-	-	-	721	673	-	759	715	-
Stage 2	-	-	-	-	-	-	751	699	-	685	671	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.5	0.5	11.3	12
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	590	1366	-	-	1323	-	-	452	706
HCM Lane V/C Ratio	0.032	0.012	-	-	0.012	-	-	0.054	0.027
HCM Control Delay (s/veh)	11.3	7.7	0	-	7.8	0	-	13.4	10.2
HCM Lane LOS	B	A	A	-	A	A	-	B	B
HCM 95th %tile Q (veh)	0.1	0	-	-	0	-	-	0.2	0.1

Jenks at Wimberly Residential  
5: Wimberly Road & South Site Drwy./Retreat @ Preserve Drwy.

Build PM  
05/29/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	4	30	42	4	12	46	182	40	11	228	7
Future Volume (vph)	5	4	30	42	4	12	46	182	40	11	228	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	50		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	100			100			100			100		
Satd. Flow (prot)	0	1657	0	0	1749	0	1770	1812	0	0	1852	0
Flt Permitted		0.993			0.965		0.950				0.998	
Satd. Flow (perm)	0	1657	0	0	1749	0	1770	1812	0	0	1852	0
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		519			351			590			647	
Travel Time (s)		11.8			8.0			13.4			14.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	43	0	0	64	0	51	246	0	0	273	0
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	39.5%											
Analysis Period (min)	15											
	ICU Level of Service A											



Jenks at Wimberly Residential  
5: Wimberly Road & South Site Drwy./Retreat @ Preserve Drwy.

Build PM  
05/29/2024

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↖			↕	
Traffic Vol, veh/h	5	4	30	42	4	12	46	182	40	11	228	7
Future Vol, veh/h	5	4	30	42	4	12	46	182	40	11	228	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	-	-	-
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	6	4	33	47	4	13	51	202	44	12	253	8

Major/Minor	Minor2		Minor1		Major1			Major2			
Conflicting Flow All	616	629	257	626	611	224	261	0	0	246	0
Stage 1	281	281	-	326	326	-	-	-	-	-	-
Stage 2	335	348	-	300	285	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-
Pot Cap-1 Maneuver	403	399	782	397	409	815	1303	-	-	1320	-
Stage 1	726	678	-	687	648	-	-	-	-	-	-
Stage 2	679	634	-	709	676	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-
Mov Cap-1 Maneuver	378	379	782	362	389	815	1303	-	-	1320	-
Mov Cap-2 Maneuver	378	379	-	362	389	-	-	-	-	-	-
Stage 1	698	671	-	660	623	-	-	-	-	-	-
Stage 2	637	609	-	667	669	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s/v	11.2		15.4		1.4		0.3	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1303	-	-	628	411	1320	-
HCM Lane V/C Ratio	0.039	-	-	0.069	0.157	0.009	-
HCM Control Delay (s/veh)	7.9	-	-	11.2	15.4	7.8	0
HCM Lane LOS	A	-	-	B	C	A	A
HCM 95th %tile Q (veh)	0.1	-	-	0.2	0.6	0	-

# **Appendix I:**

## **SimTraffic Reports**

---

1: Jenks Road & US 64 Westbound Performance by approach

---

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.2	0.0
Total Del/Veh (s)	0.8	16.0	12.4	2.9

---

2: US 64 Eastbound & U-Turn West of Jenks Road Performance by approach

---

Approach	EB	SB	All
Denied Del/Veh (s)	0.3	0.0	0.3
Total Del/Veh (s)	1.1	21.9	2.0

---

3: Wimberly Road & Jenks Road Performance by approach

---

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.3	0.6	0.0	0.1	0.8
Total Del/Veh (s)	0.9	0.7	3.6	4.0	1.7

---

4: Wimberly Road & White Oak Pond Road Performance by approach

---

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.1	0.0	2.3	0.3
Total Del/Veh (s)	0.2	0.3	4.1	0.7

---

Total Zone Performance

---

Denied Del/Veh (s)	0.4
Total Del/Veh (s)	346.7



---

1: Jenks Road & US 64 Westbound Performance by approach

---

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	0.9	21.3	32.5	4.7

---

2: US 64 Eastbound & U-Turn West of Jenks Road Performance by approach

---

Approach	EB	SB	All
Denied Del/Veh (s)	0.3	0.0	0.3
Total Del/Veh (s)	1.0	16.6	1.8

---

3: Wimberly Road & Jenks Road Performance by approach

---

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.2	0.9	0.0	0.0	0.7
Total Del/Veh (s)	0.8	0.9	4.6	5.1	2.5

---

4: Wimberly Road & White Oak Pond Road Performance by approach

---

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.2	0.0	2.3	0.3
Total Del/Veh (s)	0.4	1.0	6.4	1.1

---

Total Zone Performance

---

Denied Del/Veh (s)	0.4
Total Del/Veh (s)	664.1

### 3: Wimberly Road & Jenks Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.6	0.4	0.0	0.0	0.8
Total Del/Veh (s)	1.8	1.4	5.3	7.1	3.1

### 4: Wimberly Road & White Oak Pond Road Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.2	0.0	2.4	0.3
Total Del/Veh (s)	0.2	0.5	4.6	0.8

### 5: Wimberly Road & Retreat @ Preserve Drwy. Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	6.1	0.8	0.8	1.4

### Total Zone Performance

Denied Del/Veh (s)	0.9
Total Del/Veh (s)	78.1

### 3: Wimberly Road & Jenks Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.7	0.7	0.0	0.0	0.9
Total Del/Veh (s)	2.0	1.6	6.4	9.5	4.2

### 4: Wimberly Road & White Oak Pond Road Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.2	0.0	2.5	0.3
Total Del/Veh (s)	0.6	1.2	7.2	1.3

### 5: Wimberly Road & Retreat @ Preserve Drwy. Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	5.5	0.7	0.9	1.4

### Total Zone Performance

Denied Del/Veh (s)	1.0
Total Del/Veh (s)	279.8



### 3: Wimberly Road & Jenks Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.9	0.4	0.0	0.0	0.8
Total Del/Veh (s)	2.2	1.6	6.2	9.9	4.6

### 4: North Site Drwy./White Oak Pond Road & Wimberly Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.0	0.1	2.4	0.3
Total Del/Veh (s)	0.6	0.8	4.0	5.0	1.3

### 5: Wimberly Road & South Site Drwy./Retreat @ Preserve Drwy. Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Del/Veh (s)	4.3	6.6	0.8	1.1	1.9

### Total Zone Performance

Denied Del/Veh (s)	0.9
Total Del/Veh (s)	137.6

3: Wimberly Road & Jenks Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	2.0	0.8	0.0	0.0	1.0
Total Del/Veh (s)	2.7	1.8	8.4	15.6	6.4

4: North Site Drwy./White Oak Pond Road & Wimberly Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.0	0.1	1.9	0.2
Total Del/Veh (s)	0.5	1.9	7.3	7.2	1.7

5: Wimberly Road & South Site Drwy./Retreat @ Preserve Drwy. Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Del/Veh (s)	7.1	6.6	1.3	0.8	2.1

Total Zone Performance

Denied Del/Veh (s)	1.1
Total Del/Veh (s)	534.8

**Appendix J:**  
**Site Driveway Turn Lane Warrants**



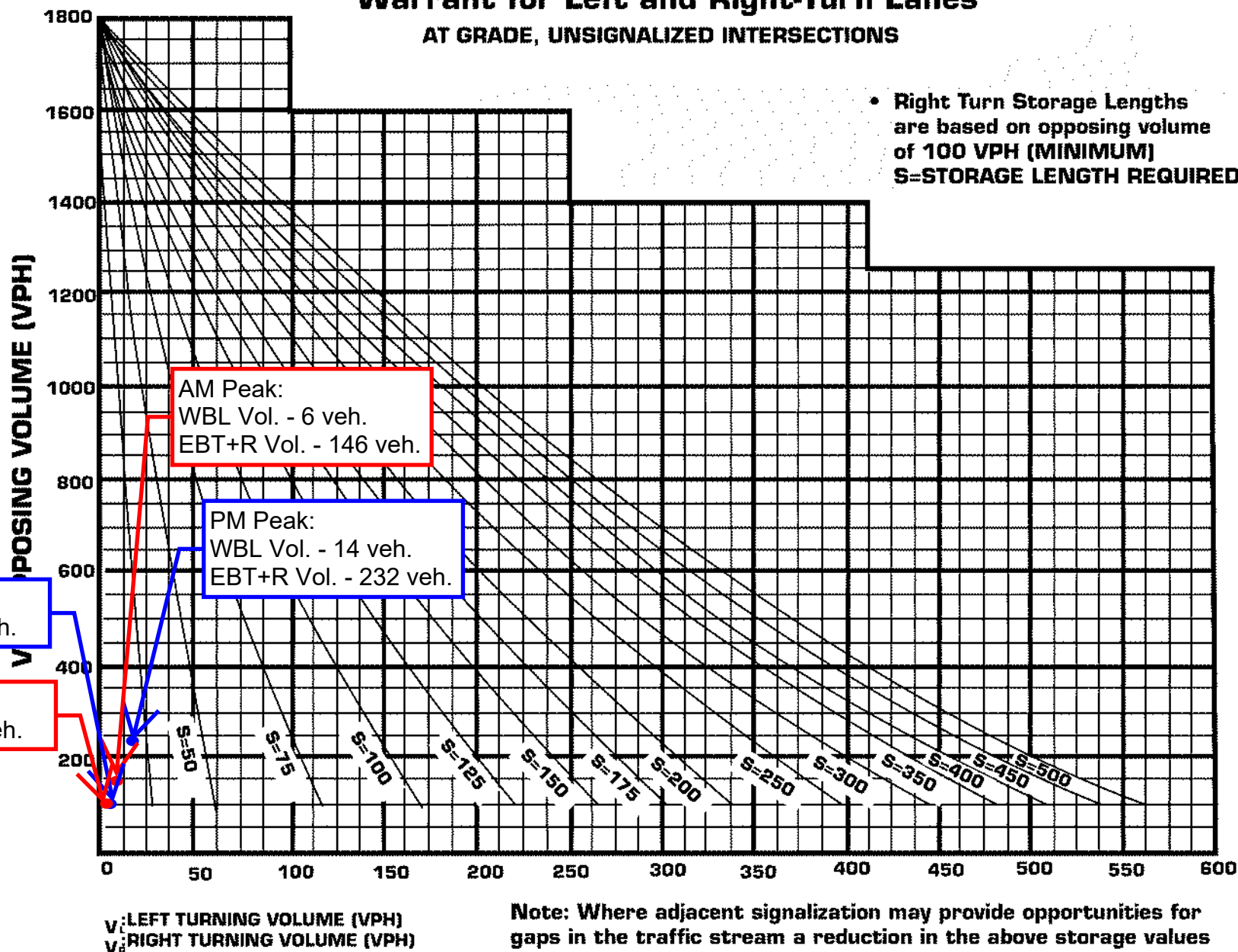
# Turn Lane Warrant Analysis

Wimberly Road at North Site Drwy.

## Warrant for Left and Right-Turn Lanes

AT GRADE, UNSIGNALIZED INTERSECTIONS

- Right Turn Storage Lengths are based on opposing volume of 100 VPH (MINIMUM)  
S=STORAGE LENGTH REQUIRED



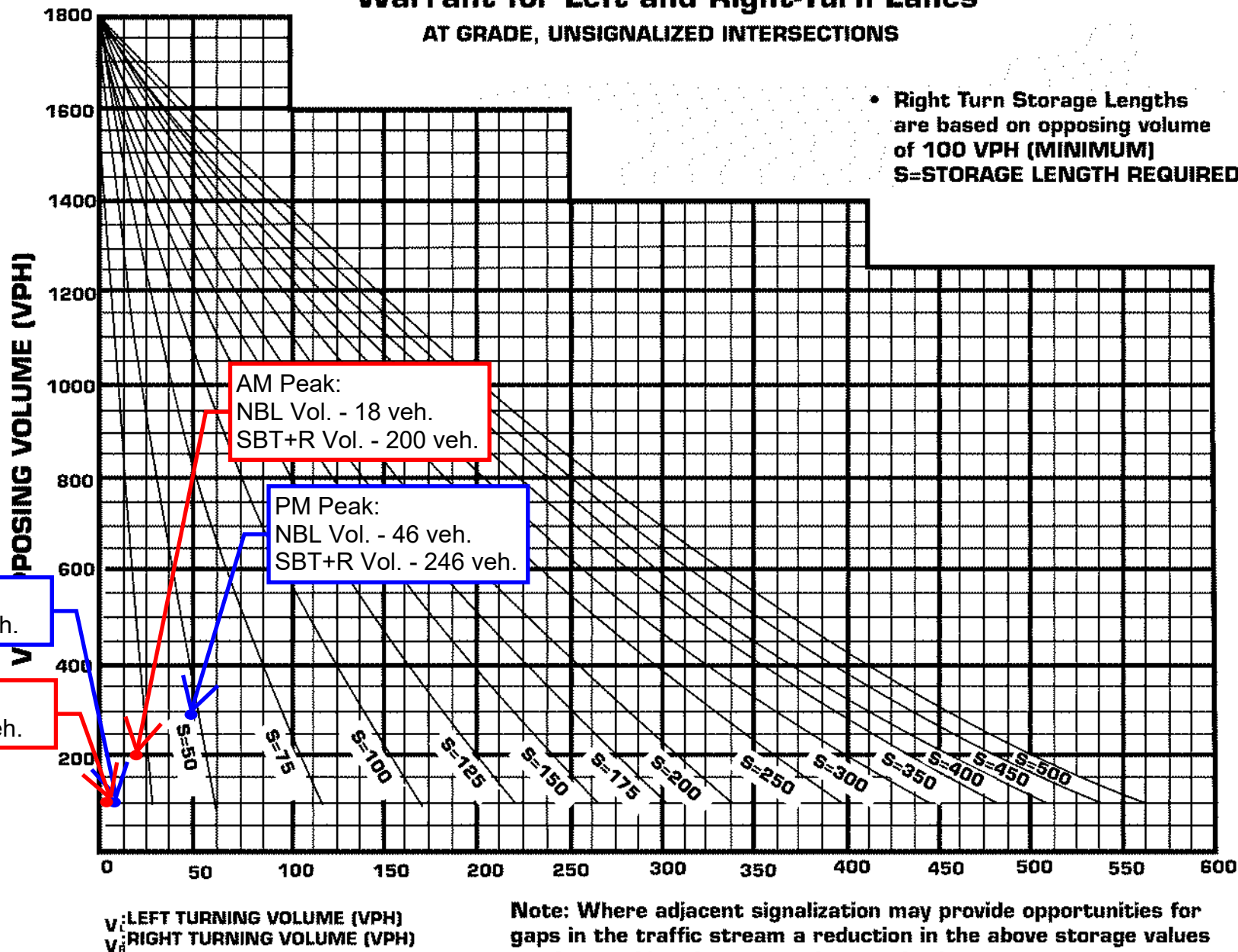
## Turn Lane Warrant Analysis

Wimberly Road at South Site Drwy.

### Warrant for Left and Right-Turn Lanes

AT GRADE, UNSIGNALIZED INTERSECTIONS

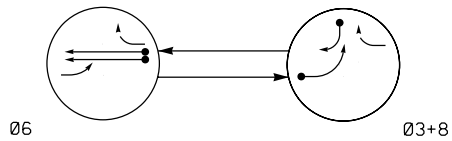
- Right Turn Storage Lengths are based on opposing volume of 100 VPH (MINIMUM)  
S=STORAGE LENGTH REQUIRED



## **Appendix K:**

## **Signal Plans**

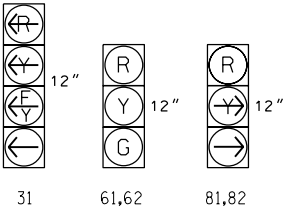
DEFAULT PHASING DIAGRAM



DEFAULT PHASING TABLE OF OPERATION				
SIGNAL FACE	PHASE			FLASH
	06	03+8	06	
31	Y	Y	Y	
61,62	G	R	Y	
81,82	R	→	R	

SIGNAL FACE I.D.

All Heads L.E.D.



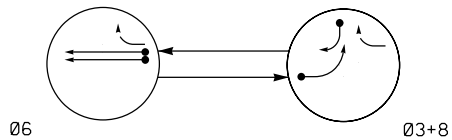
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART											
INDUCTIVE LOOPS						DETECTOR PROGRAMMING					
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP NEW CARD
3A	6X40	0	2-4-2	Y	3	Y	Y	-	-	15*	- Y
6A	6X6	420	6	Y	6	Y	Y	-	-	-	- Y
6B	6X6	420	6	Y	6	Y	Y	-	-	-	- Y
8A	6X40	0	2-4-2	Y	8	Y	Y	-	-	15	- Y

\* Disable delay during Alternate Phasing operation.

2 Phase  
Fully Actuated  
(US 64 & Jenks/Richardson Road  
Closed Loop System)  
Signal System: 10534  
NOTES

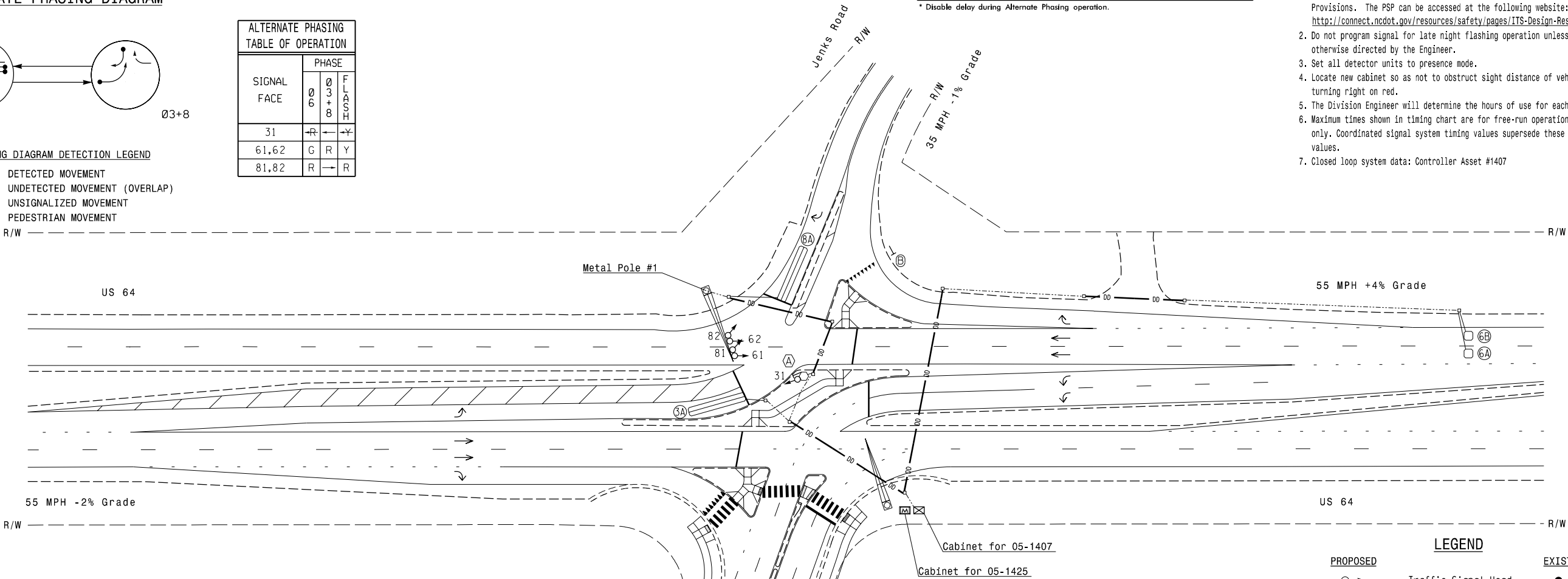
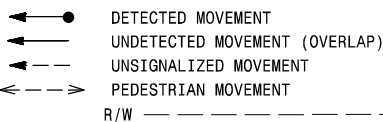
- Refer to "Roadway Standard Drawings NCDOT" dated January 2018, "Standard Specifications for Roads and Structures" dated January 2018, and all applicable sections of the latest version of the generic Project Special Provisions. The PSP can be accessed at the following website: <http://connect.ncdot.gov/resources/safety/pages/IIS-Design-Resources.aspx>
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- The Division Engineer will determine the hours of use for each phasing plan.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Closed loop system data: Controller Asset #1407

ALTERNATE PHASING DIAGRAM



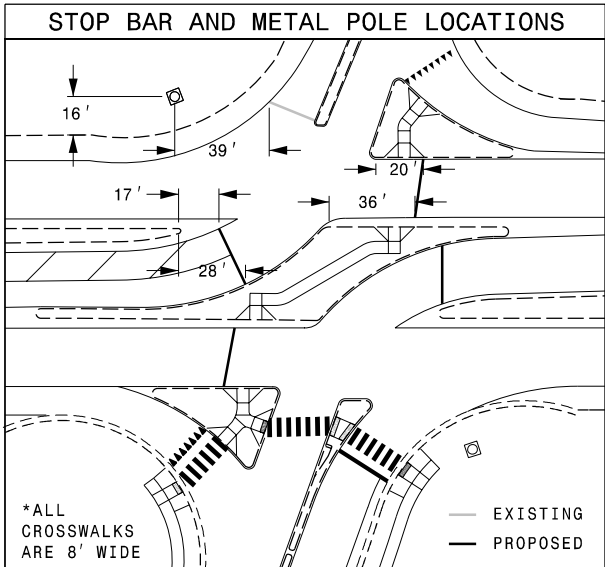
ALTERNATE PHASING TABLE OF OPERATION				
SIGNAL FACE	PHASE			FLASH
	06	03+8	06	
31	→R	→	→	
61,62	G	R	Y	
81,82	R	→	R	

PHASING DIAGRAM DETECTION LEGEND



OASIS 2070 TIMING CHART				
FEATURE	PHASE			
	3	6	8	
Min Green 1 *	7	14	7	
Extension 1 *	2.0	6.0	2.0	
Max Green 1 *	20	90	20	
Yellow Clearance	3.0	4.8	3.0	
Red Clearance	2.6	1.4	2.6	
Walk 1 *	-	-	-	
Don't Walk 1	-	-	-	
Seconds Per Actuation *	-	1.5	-	
Max Variable Initial *	-	46	-	
Time Before Reduction *	-	15	-	
Time To Reduce *	-	45	-	
Minimum Gap	-	3.4	-	
Recall Mode	-	MIN RECALL	-	
Vehicle Call Memory	-	YELLOW	-	
Dual Entry	ON	-	ON	
Simultaneous Gap	ON	ON	ON	

\* These values may be field adjusted. Do not adjust Min Green and Extension times for phase 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

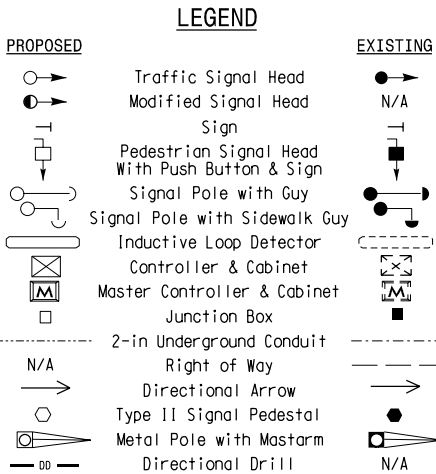


PROPOSED  
(A)  
(B)

SIGNS

No U-Turn Sign (R3-4)  
"YIELD" Sign (R1-2)

EXISTING  
(A)  
(B)



NC Dept of Transportation  
Division of Highways  
Signal Drawing Date: 2/16/2021  
Chris Cook  
ITS & Signals Unit

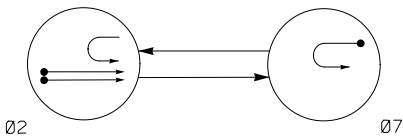
THIS PLAN SUPERSEDES  
THE PLAN SIGNED AND  
SEALED ON 10-29-2020.

New Installation

 RKA RAMEY KEMP ASSOCIATES 8219 University Executive Park Drive Suite 220 Charlotte, North Carolina 28262 Phone: 704-549-4360   www.rkainc.com   NC License No. C-0910	Prepared For:  Division 5 Wake County Apex		
	PLAN DATE: February 2021 REVIEWED BY: WJ Hamilton		
	PREPARED BY: ZM Esposito RKA PROJ. NO.: 19331 (040)		
	REVISIONS		
SCALE 0 40 1" = 40'		INIT. DATE	DATE
SIGNATURE		DATE	
SIC. INVENTORY NO.		05-1407	

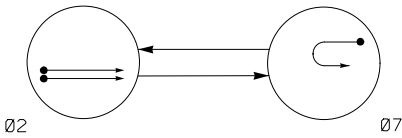


DEFAULT PHASING DIAGRAM



DEFAULT PHASING TABLE OF OPERATION			
SIGNAL FACE	PHASE		
	Ø 2	Ø 7	FLASH
21, 22	G	R	Y
71	(f)Y	(f)R	(f)Y

ALTERNATE PHASING DIAGRAM



ALTERNATE PHASING TABLE OF OPERATION			
SIGNAL FACE	PHASE		
	Ø 2	Ø 7	FLASH
21, 22	G	R	Y
71	(f)R	(f)Y	(f)Y

OASIS 2070 LOOP & DETECTOR INSTALLATION CHART											
INDUCTIVE LOOPS				DETECTOR PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP NEW CARD
2A	6X6	420	6	Y	2	Y	Y	-	-	-	- Y
2B	6X6	420	6	Y	2	Y	Y	-	-	-	- Y
7A	6X40	+5	2-4-2	Y	7	Y	Y	-	-	15*	- Y

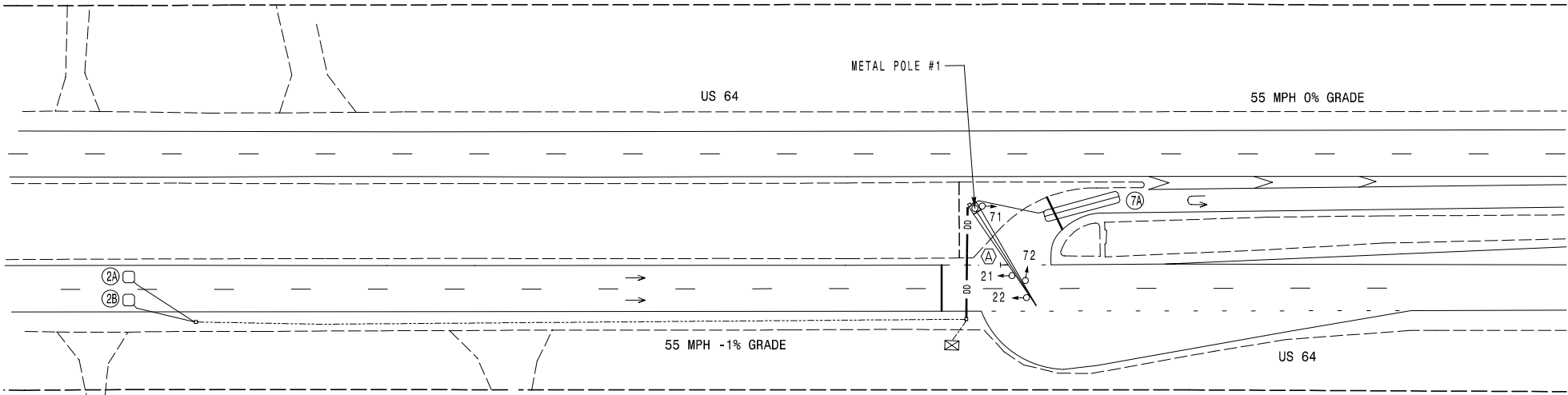
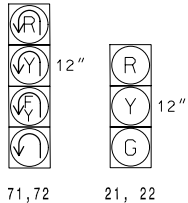
\* Disable delay during Alternate Phasing Operation.

PHASING DIAGRAM DETECTION LEGEND

- ←●→ DETECTED MOVEMENT
- ←→ UNDETECTED MOVEMENT (OVERLAP)
- ←→ UNSIGNALIZED MOVEMENT
- ←→ PEDESTRIAN MOVEMENT

SIGNAL FACE I.D.

All Heads L.E.D.



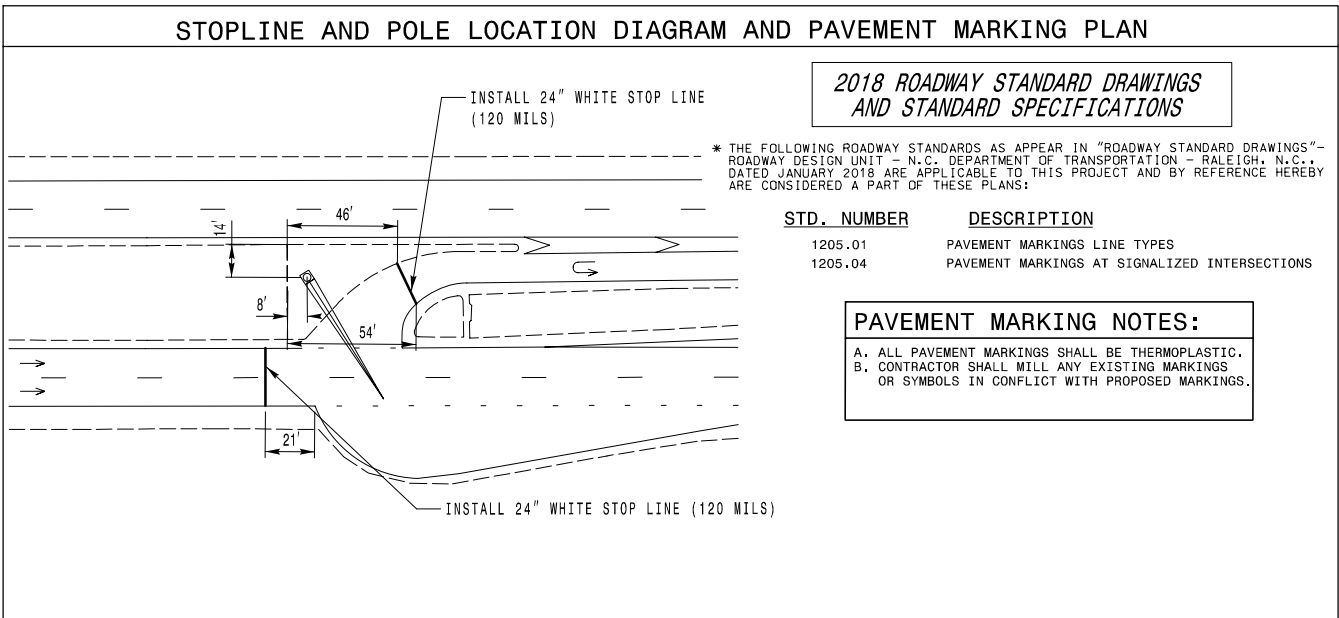
LEGEND

- | PROPOSED | EXISTING |
|----------|----------|
|          |          |
|          |          |
|          |          |
|          |          |
|          |          |
|          |          |
|          |          |
|          |          |
|          |          |
|          |          |
|          |          |
|          |          |

OASIS 2070 TIMING CHART		
FEATURE	PHASE	
	2	7
Min Green 1 *	14	7
Extension 1 *	6.0	2.0
Max Green 1 *	90	30
Yellow Clearance	5.3	3.0
Red Clearance	1.0	3.3
Walk 1 *	-	-
Don't Walk 1	-	-
Seconds Per Actuation *	1.5	-
Max Variable Initial *	46	-
Time Before Reduction *	15	-
Time To Reduce *	45	-
Minimum Gap	3.4	-
Recall Mode	MIN RECALL	-
Vehicle Call Memory	YELLOW	-
Dual Entry	-	-
Simultaneous Gap	ON	ON

\* These values may be field adjusted. Do not adjust Min Green and Extension times for phase 2 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

STOPLINE AND POLE LOCATION DIAGRAM AND PAVEMENT MARKING PLAN



2018 ROADWAY STANDARD DRAWINGS  
AND STANDARD SPECIFICATIONS

\* THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS"-ROADWAY DESIGN UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

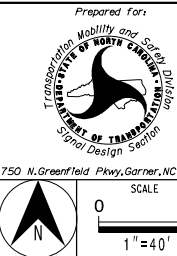
STD. NUMBER	DESCRIPTION
1205.01	PAVEMENT MARKINGS LINE TYPES
1205.04	PAVEMENT MARKINGS AT SIGNALIZED INTERSECTIONS

PAVEMENT MARKING NOTES:

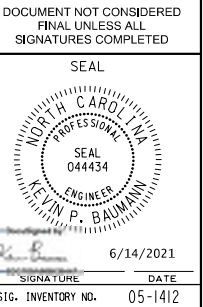
- A. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.
- B. CONTRACTOR SHALL MILL ANY EXISTING MARKINGS OR SYMBOLS IN CONFLICT WITH PROPOSED MARKINGS.

NC Dept of Transportation  
Division of Highways  
Final Drawing Date: 6/16/2021  
Designed by: [Signature]  
It's & Signals Unit

New Installation



US 64 Eastbound at U-Turn West of Richardson Road			
Division 5	Wake County	Apex	
PLAN DATE: April 2021	REVIEWED BY: SP Pennington		
PREPARED BY: CF Davis	REVIEWED BY: KP Baumann		
REVISIONS	INIT.	DATE	





## TOWN OF APEX

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

## PUBLIC NOTIFICATION OF PUBLIC HEARINGS CONDITIONAL ZONING #24CZ11 Altera Heights PUD

Pursuant to the provisions of North Carolina General Statutes §160D-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Planning Board of the Town of Apex. The purpose of these hearings is to consider the following:

**Applicant:** Wood Partners

**Authorized Agents:** Matthew Carpenter and Caitlin Shelby, Parker Poe

**Property Addresses:** 8108 Jenks Rd; 1440 & 1508 Wimberly Rd

**Acreage:** 13.55 acres

**Property Identification Numbers (PINs):** 0722673959; 0722682430; 0722681610

**Current 2045 Land Use Map Designation:** Office Employment/Commercial Services

**If rezoned as proposed, the 2045 Land Use Map Designation will change to:** High Density Residential

**Existing Zoning of Properties:** Rural Residential (RR)

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

**Public Hearing Location:** Apex Town Hall  
Council Chamber, 2<sup>nd</sup> Floor  
73 Hunter Street, Apex, North Carolina

### **Planning Board Public Hearing Date and Time: May 12, 2025, 4:30 PM**

You may attend the meeting in person or view the meeting through the Town's YouTube livestream at:  
<https://www.youtube.com/c/townofapexgov>.

If you are unable to attend, you may provide a written statement by email to [public.hearing@apexnc.org](mailto:public.hearing@apexnc.org), or submit it to the clerk of the Planning Board, Jeri Pederson (322 N. Mason Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Planning Board vote. You must provide your name and address for the record. The written statements will be delivered to the Planning Board prior to their vote. Please include the Public Hearing name in the subject line.

**A separate notice of the Town Council public hearing on this project will be mailed and posted in order to comply with State public notice requirements.**

### **Vicinity Map:**



Property owners, tenants, and neighborhood associations within 300 feet of the proposed conditional zoning have been sent this notice via first class mail. All interested parties may submit comments with respect to the application by the means specified above. In addition to the above map, the location of the property may be viewed online at <https://maps.raleighnc.gov/imaps>. The 2045 Land Use Map may be viewed online at [www.apexnc.org/DocumentCenter/View/478](http://www.apexnc.org/DocumentCenter/View/478). You may call 919-249-3426, Planning Department, with questions or for further information. To view the petition and related documents on-line: <https://www.apexnc.org/DocumentCenter/View/47320>.

Dianne F. Khin, AICP  
Planning Director





## TOWN OF APEX

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

## PUBLIC NOTIFICATION OF PUBLIC HEARINGS CONDITIONAL ZONING #24CZ11 Altera Heights PUD

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte §160D-602 y con la Sección 2.2.11 de la Ordenanza de Desarrollo Unificado (UDO) del Ayuntamiento de Apex, por la presente se notifican las audiencias públicas ante la Junta de Planificación de Apex. El propósito de estas audiencias es considerar lo siguiente:

**Solicitante:** Wood Partners

**Agente autorizado:** Matthew Carpenter and Caitlin Shelby, Parker Poe

**Dirección de las propiedades:** 8108 Jenks Road; 1440 & 1508 Wimberly Road

**Superficie:** ± 13.55 acres

**Números de identificación de las propiedades:** 0722673959; 0722682430; 0722681610

**Designación actual en el Mapa de Uso Territorial para 2045:** Office Employment/Commercial Services

**Si se aprueba el cambio de zonificación como se propone, el Mapa de Uso Territorial para el 2045 cambiará a:** High Density Residential

**Ordenamiento territorial existente de las propiedades:** Rural Residential (RR)

**Ordenamiento territorial propuesto para las propiedades:** Planned Unit Development-Conditional Zoning (PUD-CZ)

**Lugar de la audiencia pública:** Ayuntamiento de Apex  
Cámara del Consejo, 2º piso  
73 Hunter Street, Apex, Carolina del Norte

**Fecha y hora de la audiencia pública de la Junta de Planificación:** 12 de mayo de 2025 4:30 P.M.

Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: <https://www.youtube.com/c/townofapexgov>.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a [public.hearing@apexnc.org](mailto:public.hearing@apexnc.org), o presentarla a la secretaria de la Junta de Planificación, Jeri Pederson (322 N. Mason Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos días hábiles antes de la votación de la Junta de Planificación. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán a la Junta de Planificación antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

**De conformidad con los requisitos estatales de notificaciones públicas, se enviará por correo y se publicará por separado una notificación de la audiencia pública del Consejo Municipal sobre este proyecto.**

### Mapa de las inmediaciones:



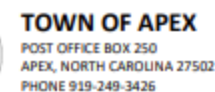
Los propietarios, inquilinos y asociaciones de vecinos en un radio de 300 pies del Ordenamiento Territorial Condicional propuesto han recibido esta notificación por correo postal de primera clase. Todas las partes interesadas pueden presentar comentarios sobre la solicitud a través de los medios especificados anteriormente. La ubicación de la propiedad también puede verse aquí: <https://maps.raleighnc.gov/imaps>. Puede ver el Mapa de Uso Territorial para 2045 aquí: [www.apexnc.org/DocumentCenter/View/478](http://www.apexnc.org/DocumentCenter/View/478). Si tiene preguntas o desea obtener más información, puede comunicarse con el Departamento de Planificación al 919-249-3426. Puede ver la solicitud y otros documentos relacionados aquí: <https://www.apexnc.org/DocumentCenter/View/47320>

Dianne F. Khin, AICP  
Directora de Planificación



Dianne F. Khin, AICP  
Directora de Planificación





Pursuant to the provisions of North Carolina General Statutes §160D-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Planning Board of the Town of Apex. The purpose of these hearings is to consider the following:

**Applicant:** Wood Partners

**Authorized Agents:** Matthew Carpenter and Caitlin Shelby, Parker Poe

**Property Addresses:** 8108 Jenks Rd; 1440 & 1508 Wimberly Rd

**Acreage:** 13.55 acres

Property Identification Numbers (PINs): 0722673959; 0722682430; 0722681610

**Current 2045 Land Use Map Designation:** Office Employment/Commercial Services

If rezoned as proposed, the 2045 Land Use Map Designation will change to: High Density Residential

**Existing Zoning of Properties:** Rural Residential (RR)

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

**Public Hearing Location:** Apex Town Hall  
Council Chamber, 2<sup>nd</sup> Floor  
73 Hunter Street, Apex, North Carolina

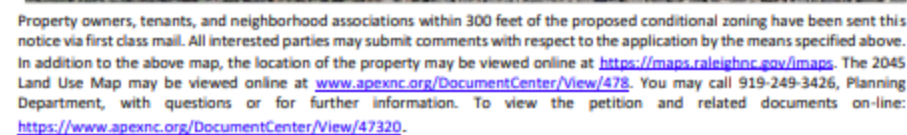
**Planning Board Public Hearing Date and Time: May 12, 2025, 4:30 PM**

You may attend the meeting in person or view the meeting through the Town's YouTube livestream at: <https://www.youtube.com/c/townofapexgov>.

If you are unable to attend, you may provide a written statement by email to [public.hearing@apexnc.org](mailto:public.hearing@apexnc.org), or submit it to the clerk of the Planning Board, Jeri Pederson (322 N. Mason Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Planning Board vote. You must provide your name and address for the record. The written statements will be delivered to the Planning Board prior to their vote. Please include the Public Hearing name in the subject line.

A separate notice of the Town Council public hearing on this project will be mailed and posted in order to comply with State public notice requirements.

**Vicinity Map:**



Dianne F. Khin, AICP  
Planning Director

Published Dates: April 28, 2025 - May 12, 2025



## TOWN OF APEX

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

### AFFIDAVIT CERTIFYING Public Notification – Written (Mailed) Notice

Section 2.2.11

Town of Apex Unified Development Ordinance

Project Name: Conditional Zoning #24CZ11 Altera Heights PUD  
Project Location: 8108 Jenks Road; 1440 & 1508 Wimberly Road  
Applicant or Authorized Agents: Wood Partners & Matthew Carpenter and Caitlin Shelby, Parker Poe  
Firm: Parker Poe & Adams & Bernstein LLP  
Planning Board Public Hearing Date: May 12, 2025  
Project Planner: Bruce Venable

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 April 28, 2025, a notice containing the time and place, location, nature and scope of the application, where additional information may be obtained, and the opportunity for interested parties to be heard, to the property owners and tenants within 300' of the land subject to notification. I further certify that I relied on information from the Wake County Tax Assessor and the Town of Apex Master Address Repository provided to me by Town of Apex GIS Staff as to accuracy of the list and accuracy of mailing addresses of property owners and tenants within 300' of the land subject to notification.

4/28/2025

Date

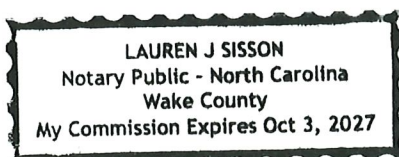
Maiane Fkhin

Planning Director

STATE OF NORTH CAROLINA  
COUNTY OF WAKE

Sworn and subscribed before me, Lauren J Sisson, a Notary Public for the above

State and County, this the 28<sup>th</sup> day of APRIL, 2025.



SEAL

[Signature]

Notary Public

My Commission Expires: 10 / 03 / 2027





## TOWN OF APEX

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

## PUBLIC NOTIFICATION OF PUBLIC HEARINGS CONDITIONAL ZONING #24CZ11 Altera Heights PUD

Pursuant to the provisions of North Carolina General Statutes §160D-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Town Council of the Town of Apex. The purpose of these hearings is to consider the following:

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**Public Hearing Location:** Apex Town Hall  
Council Chamber, 2<sup>nd</sup> Floor  
73 Hunter Street, Apex, North Carolina

***Comments received prior to the Planning Board public hearing will not be provided to the Town Council.  
Separate comments for the Town Council public hearing must be provided by the deadline specified below.***

### **Town Council Public Hearing Date and Time: May 27, 2025, 6:00 PM**

You may attend the meeting in person or view the meeting through the Town's YouTube livestream at:

<https://www.youtube.com/c/townofapexgov>.

If you are unable to attend, you may provide a written statement by email to [public.hearing@apexnc.org](mailto:public.hearing@apexnc.org), or submit it to the Office of the Town Clerk (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Town Council vote. You must provide your name and address for the record. The written statements will be delivered to the Town Council prior to their vote. Please include the Public Hearing name in the subject line.

### **Vicinity Map:**



Property owners, tenants, and neighborhood associations within 300 feet of the proposed conditional zoning have been sent this notice via first class mail. All interested parties may submit comments with respect to the application by the means specified above. In addition to the above map, the location of the property may be viewed online at <https://maps.raleighnc.gov/imaps>. The 2045 Land Use Map may be viewed online at [www.apexnc.org/DocumentCenter/View/478](http://www.apexnc.org/DocumentCenter/View/478). You may call 919-249-3426, Planning Department, with questions or for further information. To view the petition and related documents on-line: <https://www.apexnc.org/DocumentCenter/View/47320>.

Dianne F. Khin, AICP  
Planning Director





## TOWN OF APEX

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

## NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

ORDENAMIENTO TERRITORIAL CONDICIONAL #24CZ11

Altera Heights PUD  
(Desarrollo de Unidad Planificada)

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte §160D-602 y con la Sección 2.2.11 de la Ordenanza de Desarrollo Unificado (UDO) del Ayuntamiento de Apex, por la presente se notifican las audiencias públicas ante la Junta de Planificación de Apex. El propósito de estas audiencias es considerar lo siguiente:

**Solicitante:** Wood Partners

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**Superficie:** ± 13.55 acres

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**Designación actual en el Mapa de Uso Territorial para 2045:** Office Employment/Commercial Services

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**Ordenamiento territorial propuesto para las propiedades:** Planned Unit Development-Conditional Zoning (PUD-CZ)

**Lugar de la audiencia pública:** Ayuntamiento de Apex  
Cámara del Consejo, 2º piso  
73 Hunter Street, Apex, Carolina del Norte

**Fecha y hora de la audiencia pública del Consejo Municipal:** 27 de mayo de 2025, 6:00 P.M.

Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: <https://www.youtube.com/c/townofapexgov>.

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**De conformidad con los requisitos estatales de notificaciones públicas, se enviará por correo y se publicará por separado una notificación de la audiencia pública del Consejo Municipal sobre este proyecto.**

**Mapa de las inmediaciones:**



Los propietarios, inquilinos y asociaciones de vecinos en un radio de 300 pies del Ordenamiento Territorial Condicional propuesto han recibido esta notificación por correo postal de primera clase. Todas las partes interesadas pueden presentar comentarios sobre la solicitud a través de los medios especificados anteriormente. La ubicación de la propiedad también puede verse aquí: <https://maps.raleighnc.gov/imaps>. Puede ver el Mapa de Uso Territorial para 2045 aquí: [www.apexnc.org/DocumentCenter/View/478](http://www.apexnc.org/DocumentCenter/View/478). Si tiene preguntas o desea obtener más información, puede comunicarse con el Departamento de Planificación al 919-249-3426. Puede ver la solicitud y otros documentos relacionados aquí: <https://www.apexnc.org/DocumentCenter/View/47320>.

Dianne F. Khin, AICP  
Directora de Planificación





**PUBLIC NOTIFICATION  
OF PUBLIC HEARINGS**  
CONDITIONAL ZONING #24CZ11  
Altera Heights PUD

Pursuant to the provisions of North Carolina General Statutes §160D-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Town Council of the Town of Apex. The purpose of these hearings is to consider the following:

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**Public Hearing Location:** Apex Town Hall  
Council Chamber, 2<sup>nd</sup> Floor  
73 Hunter Street, Apex, North Carolina

*Comments received prior to the Planning Board public hearing will not be provided to the Town Council. Separate comments for the Town Council public hearing must be provided by the deadline specified below.*

Town Council Public Hearing Date and Time: May 27, 2025, 6:00 PM

You may attend the meeting in person or view the meeting through the Town's YouTube livestream at:

<https://www.youtube.com/c/townofapexgov>.

If you are unable to attend, you may provide a written statement by email to [public.hearing@apexnc.org](mailto:public.hearing@apexnc.org), or submit it to the Office of the Town Clerk (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Town Council vote. You must provide your name and address for the record. The written statements will be delivered to the Town Council prior to their vote. Please include the Public Hearing name in the subject line.

**Vicinity Map:**



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Dianne F. Khin, AICP  
Planning Director

Published Dates: May 2, 2025 - May 27, 2025





## TOWN OF APEX

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

## NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

ORDENAMIENTO TERRITORIAL CONDICIONAL #24CZ11

Altera Heights PUD  
(Desarrollo de Unidad Planificada)

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte §160D-602 y con la Sección 2.2.11 de la Ordenanza de Desarrollo Unificado (UDO) del Ayuntamiento de Apex, por la presente se notifican las audiencias públicas ante la Junta de Planificación de Apex. El propósito de estas audiencias es considerar lo siguiente:

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Superficie:  $\pm$  13.55 acres

Números de identificación de las propiedades: 0722673959; 0722682430; 0722681610

Designación actual en el Mapa de Uso Territorial para 2045: Office Employment/Commercial Services

Si se aprueba el cambio de zonificación como se propone, el Mapa de Uso Territorial para el 2045 cambiará a: High Density Residential

**Ordenamiento territorial existente de las propiedades:** Rural Residencial (RR)

**Ordenamiento territorial propuesto para las propiedades:** Planned Unit Development-Conditional Zoning (PUD-CZ)

Lugar de la audiencia pública: Ayuntamiento de Apex

Cámara del Consejo, 2º piso

73 Hunter Street, Apex, Carolina del Norte

Fecha y hora de la audiencia pública del Consejo Municipal: 27 de mayo de 2025, 6:00 P.M.

Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: <https://www.youtube.com/c/townofapexgov>.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a [public.hearing@apexnc.org](mailto:public.hearing@apexnc.org), o presentarla a la secretaria de la Junta de Planificación, Jeri Pederson (322 N. Mason Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos días hábiles antes de la votación de la Junta de Planificación. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán a la Junta de Planificación antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

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Mapa de las inmediaciones:



Los propietarios, inquilinos y asociaciones de vecinos en un radio de 300 pies del Ordenamiento Territorial Condicional propuesta han recibido esta notificación por correo postal de primera clase. Todas las partes interesadas pueden presentar comentarios sobre la solicitud a través de los medios especificados anteriormente. La ubicación de la propiedad también puede verse aquí: <https://maps.raleigh.gov/maps>. Puede ver el Mapa de Uso Territorial para 2045 aquí: <https://www.apexnc.org/DocumentCenter/View/478>. Si tiene preguntas o desea obtener más información, puede comunicarse con el Departamento de Planificación al 919-249-3426. Puede ver la solicitud y otros documentos relacionados aquí: <https://www.apexnc.org/DocumentCenter/View/47320>.

Dianne F. Khin, AJCP  
Directora de Planificación

Fechas de publicación: 2 de mayo 2025 – 27 de mayo 2025



## TOWN OF APEX

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

### AFFIDAVIT CERTIFYING Public Notification – Written (Mailed) Notice

Section 2.2.11

Town of Apex Unified Development Ordinance

Project Name: Conditional Zoning #24CZ11 Altera Heights PUD  
Project Location: 8108 Jenks Road; 1440 & 1508 Wimberly Road  
Applicant or Authorized Agents: Wood Partners & Matthew Carpenter and Caitlin Shelby  
Firm: Parker Poe  
Town Council  
Public Hearing Date: May 27, 2025  
Project Planner: Bruce Venable

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 May 2, 2025, a notice containing the time and place, location, nature and scope of the application, where additional information may be obtained, and the opportunity for interested parties to be heard, to the property owners and tenants within 300' of the land subject to notification. I further certify that I relied on information from the Wake County Tax Assessor and the Town of Apex Master Address Repository provided to me by Town of Apex GIS Staff as to accuracy of the list and accuracy of mailing addresses of property owners and tenants within 300' of the land subject to notification.

5/5/2025  
Date

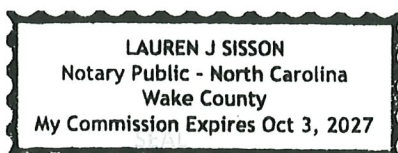
Shianne F. Khin  
Planning Director

STATE OF NORTH CAROLINA  
COUNTY OF WAKE

Sworn and subscribed before me, LAUREN J Sisson, a Notary Public for the above

State and County, this the 5<sup>th</sup> day of May, 202 5.

88  
Notary Public



My Commission Expires: 10 / 03 / 2027



*The Park at  
Wimberly*

*The Preserve at  
White Oak Creek*

Rezoning #24CZ11

1440

Wimberly Rd

Meadowside Ct

Rambling Creek Rd

*Alderwood*

Macassar Ln

8108

Jenks Rd

*Westford  
Apartments*

*Townes at  
Westford*

Public Hearing Sign Posted By

  
Signature

6/14/24  
Date





**WAKE COUNTY**  
**PUBLIC SCHOOL SYSTEM**

**Office of Student Assignment**

5625 Dillard Dr.  
Cary, NC 27518  
studentassignment@wcpss.net

tel: (919) 431-7333  
fax: (919) 694-7753

July 26, 2024

Dianne Khin, AICP  
Director, Planning Department  
Town of Apex  
Dianne.Khin@apexnc.org

Dear Dianne,

The Wake County Public School System (WCPSS) Office of School Assignment received information about a proposed rezoning/development within the Town of Apex planning area. We are providing this letter to share information about WCPSS's capacity related to the proposal. The following information about the proposed rezoning/development was provided through the Wake County Residential Development Notification database:

- Date of application: June 3, 2024
- Name of development: 24CZ11 Alterra Heights PUD
- Address of rezoning: 8108 Jenks Rd; 1440 & 1508 Wimberly Rd
- Total number of proposed residential units: 300
- Type(s) of residential units proposed: Apartments

Based on the information received at the time of application, the Office of School Assignment is providing the following assessment of possible impacts to the Wake County Public School System:

- ☐ Schools at all grade levels within the current assignment area for the proposed rezoning/development are anticipated to have sufficient capacity for future students.
- ☒ Schools at the following grade levels within the current assignment area for the proposed rezoning/development are anticipated to have insufficient capacity for future students; transportation to schools outside of the current assignment area should be anticipated:

☐ Elementary ☐ Middle ☒ High

The following mitigation of capacity concerns due to school construction or expansion is anticipated:

- ☐ Not applicable – existing school capacity is anticipated to be sufficient.
- ☐ School expansion or construction within the next five years is not anticipated to address concerns.
- ☒ School expansion or construction within the next five years may address concerns at these grade levels:

☐ Elementary ☐ Middle ☒ High

Thank you for sharing this information with the Town of Apex Planning Board and Town Council as they consider the proposed rezoning/development.

Sincerely,



8.30.24

Susan W. Pullium, MSA  
Senior Director