

Pender County Planning and Community Development

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AGENDA

**Pender County Planning Board
Tuesday, August 2, 2016 7:00 p.m.
Pender County Public Meeting Room
805 S. Walker Street, Burgaw, North Carolina**

Call to Order: Chairman Williams

Roll Call: Chairman Williams

Pender County Planning Board Members:

Williams: ___ Fullerton ___ Baker: ___ Carter: ___ Edens: ___ McClammy: ___ Nalee: ___

- 1. Adoption of the Agenda:**
- 2. Adoption of the Minutes: (July 6, 2016)**
- 3. Public Comment:**

(Public Hearings Open)

4. Conditional Zoning Map Amendment:

DRC Hampstead, LLC., applicant, on behalf of Jesse F. Lea SR et al, owner, is requesting approval of a Conditional Zoning Map Amendment for three (3) tracts totaling approximately 78.39 acres from RP, Residential Performance zoning district to RM-CD 2, Residential Mixed conditional zoning district 2. The request is to allow the following NAICS uses only: conventional single family detached homes, multifamily and associated neighborhood amenities in a proposed residential mixed use development known as Sparrows Bend. The project proposal consists of 135 conventional single family detached homes and 264 multifamily units. The subject properties are located to the west of US HWY 17 and along the east side of Hoover Road (SR 1569). The subject properties are in the Topsail Township and may be further identified by Pender County PINs 3293-01-5693-0000, 3293-11-0659-0000 and 3293-01-9640-0000.

(Public Hearings Closed)

Anyone wishing to address the **Pender County Planning Board** shall make a request on the "Public Comment" sign-up sheet. **Please provide the information requested.**

If you wish to speak on **a specific public hearing item**, please sign-in on the appropriate "Public Hearing" sign-up sheet. Speakers will be allowed to speak *prior* to any action/vote taken by the Board.

*A time limit of **two** minutes per speaker or up to **ten** minutes for groups of five or more, with a designated speaker will be imposed.

5. Discussion Items:

a. Planning Staff Items:

- i. Zoning Text Amendment Update:
- ii. Comprehensive Land Use Plan Update:
- iii. TRC Update:

b. Planning Board Members Items:

6. Next Meeting: September 7, 2016, Work Session at 6:00 pm

7. Adjournment:

PLANNING STAFF REPORT
Conditional Zoning Map Amendment

SUMMARY:

Hearing Date: August 2, 2016 Planning Board
September 19, 2016 BOCC
Applicant: DRC Hampstead, LLC
Property Owner: Jesse F. Lea SR et al
Case Number: CZMA 305-2016

Rezoning Proposal: DRC Hampstead, LLC., applicant, on behalf of Jesse F. Lea SR et al, owner, is requesting approval of a Conditional Zoning Map Amendment for three (3) tracts totaling approximately 78.39 acres from RP, Residential Performance zoning district to RM-CD 2, Residential Mixed conditional zoning district 2. The request is to allow the following NAICS uses only: conventional single family detached homes, multifamily and associated neighborhood amenities in a proposed residential mixed use development known as Sparrows Bend. The project proposal consists of 135 conventional single family detached homes and 264 multifamily units.

Property Record Numbers, Acreage, and Location: The subject properties are located to the west of US HWY 17 and along the east side of Hoover Road (SR 1569). The subject properties are in the Topsail Township and may be further identified by Pender County PINs 3293-01-5693-0000, 3293-11-0659-0000 and 3293-01-9640-0000.

RECOMMENDATION

The application consists of a conditional rezoning of three (3) tracts totaling approximately 78.39 acres from RP, Residential Performance zoning district to RM-CD 2, Residential Mixed conditional zoning district. As submitted, the request does not meet all criteria set forth in Section 3.4.4 Review Criteria for Rezoning of the Pender County Unified Development Ordinance. Specifically, Section 3.4.4 (A) (1) that requires consideration of the plan's consistency to all adopted land use plans and the Unified Development Ordinance. The project potentially conflicts with two (2) adopted plans. The application may be considered inconsistent with the Pender County Collector Street Plan Appendix A, Maps 9 and 10 and also the US 17/NC 210 Highway Corridor Study Appendix C Map 1, as the plans do not provide a collector road to traverse north on the subject property as is identified in these documents. Planning staff has met with the applicant to identify these inconsistencies and is unable to vary from the standards of the ordinance.

The application is supported by one (1) goal and eight (8) policies of the 2010 Pender County Comprehensive Land Use Plan. The project is potentially in conflict with one (1) policy of the 2010 Pender County Comprehensive Land Use Plan.

HISTORY

The property is currently undeveloped except for a dirt access way that has been recently cleared. Noteworthy, there are two parcels existing as an island within the parcel proposed for development. Pender County PIN 3293-11-0659-0000 is approximately 0.35 acres and Pender County PIN 3293-01-9640-0000 is approximately 1.26 acres and are currently listed on Pender County GIS as a former septic easement for the commercial development known as the Bailey Shoppes, located to the southeast. These parcels are included in the acreage for development on the proposed project.

DESCRIPTION

This application consists of a conditional rezoning of three (3) tracts totaling approximately 78.39 acres from RP, Residential Performance zoning district to RM-CD 2, Residential Mixed conditional zoning district 2. The density proposed on the entire tract is eight (8) units per acre.

Proposed Uses

The proposed uses within the RM-CD 2, Residential Mixed conditional zoning district 2 are only to include; single family dwelling conventional detached (NAICS 236117), multifamily housing (NAICS 236116) and other typical neighborhood amenities or project infrastructure as described in the Applicant’s narrative and demonstrated on the Applicant’s site plan. All other uses will be prohibited unless an alteration is made to the approval. Any changes to the requested petition shall be processed in accordance with amendments to the zoning map and in accordance with Section 3.4 of the Pender County Unified Development Ordinance.

It is the Applicant’s intention to develop the site for a single family residential subdivision and a multifamily housing complex. There are 135 proposed residential units on single family lots and 264 multifamily units in 12 (twelve) apartment buildings on the subject parcel. The multifamily units will range between 1 (one) and 3 (three) bedrooms according to the Applicant.

Proposed Lot Sizes

According to the submitted site plan; the minimum lot size proposed is 6,000 sq. ft. and the maximum lot size proposed is 12,000 sq. ft. As proposed, the maximum height of the single family units is requested at 35 feet. The maximum height of the multifamily buildings is requested at 45-feet according to the Applicant, consistent with RM, Residential Mixed regulations. Setbacks of this conditional rezoning are proposed below:

	Residential Mixed (RM) Proposed Setbacks (in feet)	Residential Performance (RP) Existing Zoning District Setbacks (in feet)
Front Yard	5	30
Side Yard	5	10
Corner Yard	5	15
Rear Yard	10	25
Chord Length	40	30

Services (Wastewater/Water)

The Applicant is proposing a public water connection to Pender County Utilities and all review and approvals for the public water service are per Pender County Utilities Department. As indicated at the Technical Review Committee meeting on July 6, a water main connection between Hoover Road and the existing 8-inch water main at the Bailey Shoppes will be required. A letter to confirm capacity to serve has been provided by Pender County Utilities and is included as Attachment 7 in this application.

An intent to service letter was provided by the applicant on behalf of Pluris Hampstead LLC to service the entire project (Attachment 5). The Applicant shall work directly with Pluris Hampstead LLC. and Pender County for wastewater approval for service to each phase of the development prior to final approval.

Density

The proposed density is 8.0 units per acre. The RM, Residential Mixed zoning district allowable density is calculated similar to the PD, Planned Development zoning district. Section 4.8.1.C (1) of the Pender County Unified Development Ordinance is the section that defines the standards for the density calculation and allows a density of 5 units per acre. This project is requesting a density bonus above the typically allowable 5 units per acre in accordance with Section 4.8.1C. (2) under environmentally sensitive design. This section states that an effort to encourage quality urban design and environmentally sensitive development, an increase in density may be allowed by the Planning Board when such an increase can be justified by superior design or the provision of additional amenities such as public and/or private open space. The Applicant’s intent is to utilize Low Impact Design (LID) measures to the greatest extent possible and to preserve mature existing vegetation, according to the submitted site plan and their narrative. The Planning Board will make a determination on whether the density is appropriate for the design provided.

DENSITY CALCULATIONS	
Total Apartment Units: 264	
Total Single Family Units: 135	
Grand Total Units: 399	
Total Acreage	78.39
Total Non-Residential Acreage (ROW, parking, sidewalks)	9.94
Total Wetlands Acreage (11.65) – Total Passive Open Space (5.45)	6.20
Total Open Space (.03 acres/unit)	12.42
Active Open Space	6.97
Passive Open Space	5.45
Total Developable Land Acreage	49.83
Maximum Allowable Density Units/Acre (max. 5du/ac allowed)	249.15
Total Proposed Density Units/Acre using 399 units	8.0

Open Space

All new residential subdivisions shall provide open space in the amount of 0.03 acres per dwelling unit within the subdivision. The Applicant is required to provide 11.97 acres of open space with at least 5.985 acres of active open space. Active open space is defined as areas such as a park for village commons providing space for outdoor recreation activities according to Section 7.6.1.B. of the Pender County Unified Development Ordinance. The Applicant has provided 12.42 acres, with 6.97 acres as active open space, sufficiently meeting Open Space requirements for the proposed development.

Buffers

The buffers provided are consistent with the buffer requirements in the Pender County Unified Development Ordinance Section 8.2.8, Project Boundary Buffer. The south project border is proposed to be a B-3 Buffer. The north project border is proposed to be a B-4 Vegetative Buffer. The east project border is proposed to be a C-4 Buffer. The western project border is proposed to be a B-4 Vegetative Buffer, as well as undisturbed project area.

Recreational Units

All developments containing thirty-four (34) units or more are required to provide recreational units per Section 7.6.2 of the Pender County Unified Development Ordinance. With 399 units proposed the applicant is required to provide 4 (four) recreational units, which equates to \$40,000. This can be installed on the property, approved in conjunction with the Parks and Recreation Master Development Plan or a payment in lieu of dedication can be made as the Board deems appropriate. The Applicant intends to develop the recreation facilities within the subject property. The Parks and Recreation Supervisor stated in her TRC report that a playground should be installed for children ages 2-12 (See Attachment 8). The Applicant has agreed to provide this amenity as requested. Recreation amenity estimates are provided in Attachment 10.

Roadways

The Applicant is proposing public roadways in the single family detached dwelling area of this conditional rezoning request and private driveways and parking lots in the multifamily portion of the conditional rezoning request.

The plan as presented provides a required collector roadway arranged to the east/west (Road A), but fails to demonstrate the installation of a required collector roadway going north/south. An adjustment to this requirement cannot be made administratively or through the conditional rezoning or Master Development Plan process. The required collector roadways are demonstrated in Figure 1.

Figure 1:



According to Section 7.5.1 of the Pender County Unified Development Ordinance the layout of streets as to arrangement, width, grade, character and location shall conform to the Pender County Collector Street Plan or any other approved Transportation Improvement Plan. This roadway is demonstrated in the Pender County Collector Street Plan in Appendix A, Maps 9 and 10, Proposed Collector Street Alignments. It is also demonstrated in Appendix C, Map One "Illustrations Showing Preferred Access Plan" of the 2012 US 17/NC 210 Corridor Study.

In the March 2012 US 17/NC 210 Corridor Study, Section 8 Policy Recommendations, Section 8.2 states, "a future collector street is planned just north of Hampstead United Methodist Church. The street could serve one parcel, in which case it would intersect US 17 with a right-in/right-out only configuration. The collector street could however be extended by private property owners to serve multiple parcels; by doing so, sufficient traffic volume may be served such that a traffic signal on US 17 or a superstreet type median opening may be warranted. If approved by NCDOT, then the collector street, median opening and/or traffic signal would be funded by private sources" (Attachment 11).

The following options could bring the proposed project into compliance:

1. Amend the Conditional Rezoning Request to provide the appropriate north-south collector road
2. Amend the Pender County Collector Street Plan
3. Seek a variance from the requirement from the Board of Adjustment

These options were presented to the applicant at two separate meetings that took place on this development on June 15, 2016 and June 27, 2016. At the present time, no alternatives have been presented.

Ingress and Egress Opportunities

The Applicant has provided evidence of legal rights for ingress and egress from US Hwy 17. Presently there is a full-movement intersection in this location. Plans have been proposed as a part of the NCDOT Highway 17 Median Project (TIP Project U5732) to alter the intersection, however at this time the intent is to leave it as a fully functioning interstation. This project is located within the U-5732 project bounds. Any full access or signal requests are reviewed and approved through NCDOT.

Road A will intersect with Hoover Road and provide ingress and egress opportunities to the development as well.

Roads

There are six (6) roads proposed as a part of the Sparrows Bend project. They have not been given formal names at this point in time and are referred to as Roads A-F. Road A connects Highway 17 with Hoover Road and is proposed as a 60' public right of way and the notes indicate there will be sidewalks on both sides, demonstrating compliance with the Pender County Collector Street Plan. The remaining roads are proposed as 50-foot public right of ways and the plans indicate there will be dual sidewalks. Road cross section compliance is demonstrated on the site plan provided. The Addressing Coordinator has requested that road names be submitted at the earliest opportunity. The proposed cul de sac has a radius of 40-feet. This is in compliance with Section 7.5 and has been approved by the Fire Marshal.

ROAD NAME & DIRECTION	DESCRIPTION
Road A (generally east-west)	60' Public ROW with dual sidewalks with 24' pavement
Road B (connects A & C)	50' Public ROW with dual sidewalks with 24' pavement
Road C (generally north-south)	50' Public ROW with dual sidewalks with 24' pavement
Road D (south of road A, generally east-west)	50' Public ROW with dual sidewalks with 24' pavement
Road E (connects F & A, generally north-south)	50' Public ROW with dual sidewalks with 24' pavement
Road F (connects B & C & intersects E, generally north-west)	50' Public ROW with dual sidewalks with 24' pavement
Apartment Road	Traffic will be two-way, 24' wide and require a street name

For road cross section requirements, refer to Section 5, Design Requirements, of the Pender County Collector Street Plan. They have been included as Attachment 13.

Traffic

Traffic Impact Analysis

According to Section 6.1.4 (A) 16 of the Pender County Unified Development Ordinance, any Master Development Plan proposal in a mixed use district that proposes to generate more than 100 trips during the peak morning or evening hours, or 1,000 trips per day requires a Traffic Impact Analysis. Trip estimates must be based on the latest version of the Institute of Transportation Engineers Trip Generation Manual per Section 6.1.4 (A) 14. A Traffic Impact Analysis has been initiated and the traffic impact has been scoped by the WMPO and is included as Attachment Three (3). A full draft of the Traffic Impact Analysis has been provided as Attachment 12.

Environmental Concerns

The subject parcels, of ±78.39 acres does contain portions of environmentally sensitive areas including wetlands and floodplains.

Wetlands

There are wetlands located throughout the property. These areas have been delineated and a Notification of Jurisdictional Determination has been provided (Attachment Four). Any development within these areas may be subject to the permit requirements of Section 404 of the Clean Water Act.

Flood

A portion of the subject property is within designated Flood Zone X according to the 2007 Flood Insurance Rate Maps (FIRMs), Map Number 3720329200J, Panel Number 3292. The Shaded X zone is a moderate risk area with 0.2% annual chance floodplain where the average flooding depths are less than one (1) foot. The preliminary FIRMs released last year show a portion of this property to be located in an A Flood Zone. This area is proposed for stormwater retention on the site plan. Any development within the Special Flood Hazard Area would be required to comply with the Pender County Flood Damage Prevention Ordinance.

CAMA

After a preliminary analysis, it appears there are no CAMA Areas of Environmental Concern located on the project site.

Public Input Meeting

On July 12, 2016 the Applicant held a Community Meeting at the Hampstead Annex Auditorium from 4:00 PM until 5:30 PM in accordance with Section 3.4.3 of the Pender County Unified Development Ordinance. Approximately 13 citizens were present at the meeting; the roster can be found in Attachment 6. A report of the community meeting can be found in Attachment 9. Concerns raised at this community meeting include but were not limited to:

1. Adequate buffers between existing uses and the proposed project are necessary (fence or berm suggested)
2. Motorists are traveling too fast on Hoover Road (SR 1569). This may be exacerbated with a new development.
3. There is an existing drainage problem around the Kingsport residential subdivision.
4. Peak traffic hour congestion is present at the Hoover Road (SR 1569) and US HWY 17 intersection.
5. Multi-family housing may decrease single family home values.

Following the Community Meeting, the Director of Planning and Community Development contacted the NCDOT regarding the perceived speeding on Hoover Road (SR 1569). He requested information on a previously completed study that considered lowering the speed limit from 45 miles per hour to 35 miles per hour. Staff also contacted the DEQ regarding any stormwater permitting or maintenance requirements on the Kingsport residential subdivision. No follow-up has been provided at this time.

Technical Review Committee

On July 6, 2016 the Pender County Technical Review Committee reviewed the Applicant's submittal; the responses were collected as Attachment 8.

EVALUATION

- A) Public Notifications:** Public Notice of the proposal for map change has been advertised in the *Pender-Topsail Post and Voice*. Adjacent property owners have been given written notice of the request, and a public notification sign has been placed on the property.
- B) Existing Zoning in Area:** The subject property is located on the north side of US HWY 17 and is currently zoned RP, Residential Performance zoning district. The seven (7) properties to the south of this parcel are zoned GB, General Business. The property located to the southwest is zoned OI, Office and Industrial zoning district. All other surrounding properties to the north, east and west are zoned RP, Residential Performance zoning district.
- C) Existing Land Use in Area:** The subject property is located to the north of a shopping center. There is a gas station located to the south of the property as well. The property to the north and the east is undeveloped. The Hampstead United Methodist Church is located to the southwest. The Kingsport residential subdivision is located to the north. Low density residential and vacant land surrounds the remainder of the project.
- D) 2010 Comprehensive Land Use Plan Compliance:** The 2010 Comprehensive Land Use Plan designates the subject property as Suburban Growth. The Suburban Growth land use classification identifies those areas of Pender County where significant residential growth is expected to occur within the planning horizon. Areas designated as Suburban Growth are located primarily adjacent to municipal planning jurisdictions and within or near high growth, unincorporated areas of the County, i.e., Hampstead/Scotts Hill, Rocky Point, and portions of US 421 South. Suburban Growth designates areas where public water and public sewer are available or are planned in the near future. The project request is consistent with this description, as there is both public sewer and water available.

The following goals and policies within this plan which may support the rezoning request:

Growth Management Goal 1.A.1. Manage the physical growth and development of Pender County by promoting more intensive land uses in key locations identified for such growth while preserving and protecting the unique physical character and social assets of the predominant rural lifestyle and coastal environment that makes the County a unique place to live.

Policy 1A.1.1 Encourage development in and around municipal corporate limits and other developed areas within the County to yield a more compact pattern of development that will reduce suburban/rural sprawl.

Policy 1A.1.2 Encourage development in areas where the necessary infrastructure-roads, water, sewer and schools- are available, planned or can be most cost effectively provided and extended to serve existing and future development.

Policy 1A.1.4 The County should develop and utilize innovative and flexible land planning techniques that encourage developments to efficiently use land resources that result in more compact urban areas, infill development, redevelopment, and the adaptive re-use of existing buildings.

Policy 1A.1.5 The county supports a pro-business/pro-growth attitude, balanced by a concern for preserving the natural assets and quality of life factors that make the area attractive to visitors and permanent residents alike.

Policy 1A.1.6 Use conditional zoning process to enable developers to contribute to addressing the impact of developments on capital facilities and other resources; incorporate regulations into new Unified Development Ordinance to enable a small project to address specific impacts to an existing adjacent community.

Emergency Services Policy 2E.1.2 Ensure that streets and parking lots within new developments are designed and constructed to accommodate the turning radius and load bearing requirements for emergency services vehicles and equipment.

Preferred Development Patterns Policy 3A.1.3 Support the inclusion in the UDO of conditional zoning which provides more flexibility for the land owner/developer and the County to mutually agree upon specific development conditions and requirements. (Conditional zoning is a method that incorporates all the site-specific standards directly into the zoning district regulation and then applies that zoning district only to the property that is the subject of the rezoning petition.

Coastal Pender Small Area Plan Policy 4A1.2 Establish flexible development regulations which encourage a variety of mixed use infill and re-development along the US HWY 17 corridor.

The following policy in the 2010 Comprehensive Land Use Plan potentially conflicts with the proposal:

Policy 2B.1.7 Ensure that the Coastal Pender Collector Street Plan, adopted on May 21, 2007, is used consistently when reviewing new development proposals within the Hampstead and Scotts Hill areas of the County. Consider applying Plan recommendations for roadway connectivity to all new developments countywide.

E) Unified Development Ordinance Compliance: Article 3.3.8 of the Unified Development Ordinance provides for standards that shall be followed by the Planning Board before a favorable recommendation of approval for rezoning can be made.

3.4.4 Review Criteria for Rezoning

- A. When evaluating an application for the creation of a conditional zoning district, the Planning Board and Board of Commissioners shall consider the following:
- 1) The application's consistency to the general policies and objectives all adopted Land Use Plans and Unified Development Ordinance.
 - 2) The potential impacts and/or benefits on the surrounding area, adjoining properties.
 - 3) The report of results from the public input meeting.

F) Conditions for Approval of Petition

Section 3.4.5 Conditions of Approval of Petition gives the Pender County Planning Board the ability to add reasonable and appropriate conditions. Potential additions include:

1. Insertion on North/South Collector Road or legally acceptable alternative.
2. Specific approval of density bonus, not to exceed 8 units per acre.
3. Additional buffers along the western property bounds.

RECOMMENDATION

The application consists of a conditional rezoning of three (3) tracts totaling approximately 78.39 acres from RP, Residential Performance zoning district to RM-CD 2, Residential Mixed conditional zoning district 2. As submitted, the request may not meet all criteria set forth in Section 3.4.4 Review Criteria for Rezoning of the Pender County Unified Development Ordinance. Specifically, Section 3.4.4 (A) (1) that requires consideration of the plan's consistency to all adopted land use plans and the Unified Development Ordinance. The project potentially conflicts with two (2) adopted plans. The application may be considered inconsistent with the Pender County Collector Street Plan Appendix A, Maps 9 and 10 and also the US 17/NC 210 Highway Corridor Study Appendix C Map 1, as the plans do not provide a collector road to head north on the subject property as is identified in these documents. The project is supported by the 2010 Comprehensive Land Use Plan, as it is consistent with one (1) goal and eight (8) policies of the 2010 Pender County Comprehensive Land Use Plan. The project potentially conflicts with one (1) policy.

Section 3.4.4 (A) (1) requires consideration of the plan's consistency to all adopted land use plans and the Unified Development Ordinance. Section 7.5.1 of the Pender County Unified Development Ordinance requires that the layout of streets as to arrangement, width, grade, character and location shall conform to the Pender County Collector Street Plan or any other approved Transportation Improvement Plan. This is a potential conflict to consider in the evaluation of the Sparrows Bend Conditional Rezoning request.

BOARD ACTION FOR REZONING REQUEST

Motion: _____ Seconded: _____

Approved: _____ Denied: _____ Unanimous: _____

Williams: _____ Fullerton: _____ Baker: _____ Carter: _____ Edens: _____ McClammy: _____ Nalee: _____

Attachments:

1. **Wetlands Location Map (1 page)**
2. **Southern Environmental Evaluation (2 pages)**
3. **WMPO Scoping for TIA (5 pages)**
4. **US Army Corps Jurisdictional Determination (5 pages)**
5. **Utilities Commission Pluris Letter (2 pages)**
6. **Community Meeting Attendance (1 page)**
7. **PCU Water Availability Letter (1 page)**
8. **TRC Attendance Form and Comments (12 pages)**
9. **Report from Community Meeting (2 pages)**
10. **Recreation Estimates (1 page)**
11. **US 17/NC 210 Corridor Study Excerpt (1 page)**
12. **Draft Traffic Impact Analysis for Lea Tract (42 pages)**
13. **Street Cross Sections (2 pages)**

RECEIVED

JUN 21 2016

PENDER PLANNING DEPT.

APPLICATION FOR CONDITIONAL REZONING

THIS SECTION FOR OFFICE USE

Application No.:	305	Date:	6/21/2016
Application Fee	\$ 123390	Receipt No.	nelly
Pre-Application Conference	6/11 & 6/15	Hearing Date	8/2 & 9/15

SECTION 1: APPLICANT INFORMATION

Applicant's Name:	DRC Hampstead, D. Logan AS L.L.C. (REPRESENTATIVE)	Owner's Name:	JESSE LEA SR.
Applicant's Address:	600 GREGORY RD. SUITE 1	Owner's Address:	802 BAINSBRE DR.
City, State, & Zip	BEWLE, NC 28451	City, State, & Zip	WILMINGTON, NC 28405
Phone Number:	800.741.4707	Phone Number:	
Legal relationship of applicant to land owner:	DEVELOPER INTENDING TO PURCHASE PROPERTY		

SECTION 2: PROJECT INFORMATION

Property Identification Number (PIN):	3293-01-5693-0000	Total property acreage:	78.39AC
Current Zoning District:	RP	Proposed Zoning District:	RM-CD
Project Address or Location:	US HWY 17 & HOOVER RD. AREA LOCATED BEHIND PAILEY STAGES		
Proposed Uses to be Considered (Include NAICS Code):	SINGLE FAMILY DETACHED HOMES AND APARTMENTS (CODE 236116) & (CODE 236117, 236115) - BOTH USES WILL HAVE PRIVATE AMENITIES ASSOCIATED WITH THE USES FOR RESIDENTS OF THE NEW COMMUNITY ONLY		

Proposed Uses to be Eliminated from Consideration (Include NAICS Code):
 NO COMMERCIAL OR INDUSTRIAL USES ARE PROPOSED. ALL USES OTHER THAN DESIGN, BUILDING, & MAINTENANCE OF SINGLE FAMILY DETACHED HOMES & MULTI-FAMILY APARTMENTS ARE ELIMINATED FROM CONSIDERATION.

SECTION 3: SIGNATURES

Applicant's Signature	<i>[Signature]</i> D. LOGAN	Date:	6-20-16
Owner's Signature	<i>[Signature]</i> JESSE LEA	Date:	6-20-16

NOTICE TO APPLICANT

1. Applicant must also submit the information described on the Rezoning Checklist.
2. Applicant or agent authorized in writing must attend the public hearing.
3. Once the public hearing has been advertised, the case will be heard unless the applicant withdraws the application or unless the Planning Board or other authorized person agrees to table or delay the hearing.
4. All fees are non-refundable.
5. A complete application packet must be submitted prior to the deadline in order to be placed on the next Planning Board Agenda.

Conditional (Zoning Map) Amendment Checklist

<input checked="" type="checkbox"/>	Signed application form
<input checked="" type="checkbox"/>	Application fee
<input checked="" type="checkbox"/>	A list of names and addresses, as obtained from the county tax listings & tax abstract, all adjacent property owners, including property owners directly across any road or road easement, & owners of the property under consideration for rezoning.
<input checked="" type="checkbox"/>	Two (2) business size envelopes legibly addressed with first class postage for each of the adjacent and abutting property owners on the above list.
<input checked="" type="checkbox"/>	Accurate legal description or a map drawn to scale showing the property boundaries that are to be rezoned, in sufficient detail to-for the rezoning to be located on the Official Zoning Map.
<input checked="" type="checkbox"/>	12 (11"x17") map copies to be distributed to the Planning Board
<input type="checkbox"/>	20 (11"x17") map copies to be distributed to the Board of Commissioners
<input checked="" type="checkbox"/>	Digital (.pdf) submission of all application materials
<input type="checkbox"/>	Public Input Meeting Report (Section 3.4.3 or see Public Input Meeting on the first page of this application)
<input type="checkbox"/>	A description and/or statement of the present and proposed zoning regulation or district boundary and stating why the request is being made and any information that is pertinent to the case. If the owner and applicant are different, the letter must be signed by both parties.
<input checked="" type="checkbox"/>	All applications which specify an intended use must include a generalized site development plan drawn to a suitable scale, supporting information and text which specifies the use or uses intended for the property and any development standards to be approved concurrently with the rezoning application
<input checked="" type="checkbox"/>	<p>A generalized site development plan shall include the following items:</p> <ul style="list-style-type: none"> <input type="checkbox"/> A vicinity map drawn to a suitable scale which illustrates adjacent or nearby roadways, railroads, waterways & public facilities. <input type="checkbox"/> A (metes and bounds) boundary of the parcel or portion of the parcel to be rezoned and developed. <input type="checkbox"/> All existing easements, reservations and rights of way. <input type="checkbox"/> Delineation of all Areas of Environmental Concern including but not limited to federal jurisdictional wetlands. <input type="checkbox"/> For residential uses, the number of units, heights and a generalized location. For non-residential uses, the height, approximate footprint and location of all structures. <input type="checkbox"/> If a known use is proposed: Traffic impact report, parking and circulation plans illustrating dimensions, intersections and typical cross sections. <input type="checkbox"/> All proposed setbacks, buffers, screening and landscaping. <input type="checkbox"/> Phasing. <input type="checkbox"/> Signage. <input type="checkbox"/> Outdoor lighting. <input type="checkbox"/> Current zoning district designation and current land use status. <input type="checkbox"/> Other information deemed necessary by the Administrator, Planning Board, or Board of Commissioners, including but not limited to a Traffic Impact Analysis or other report from a subject matter expert.

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 PLANNING DEPT.

Office Use Only							
ZMA-CD Fees: (\$500.00 for first 5 acres; \$10/acre thereafter up to 1,000 acres; \$5/acre thereafter)	Total Fee Calculation: \$						
Attachments Included with Application: (Please include # of copies)							
CD /other digital version	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Plan Sets	# of large	# of 11X17	Other documents/Reports	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Payment Method:		<input type="checkbox"/> Cash: \$ _____	Credit Card:		Check:		
		<input type="checkbox"/> Master Card	<input type="checkbox"/> Visa		<input checked="" type="checkbox"/> Check # _____		
Application received by:		Jessica Frierster				Date:	6/21/16
Application completeness approved by:		Jessica Frierster				Date:	6/21/16
Dates scheduled for public hearing:		<input type="checkbox"/> Planning Board:		<input type="checkbox"/> Board of Commissioners:			
		8/2		9/15			

PARAMOUNTE

ENGINEERING, INC.

Date 14 July 2016

Sparrows Bend Narrative:

The proposed development on Pender County parcel #3293-01-5693-0000 is a site with distinguishing natural features located directly behind and north of the Hwy. 17 main commercial corridor through Hampstead. Specifically, the site access from Hwy 17 is located adjacent to the Bailey Shoppes and Hampstead United Methodist Church. The site also has access to Hoover Road, but is otherwise bordered by wetlands and deep ditches. The property is currently zoned RP (Residential Performance), and this proposed conditional rezoning requests a RM-CD (Residential Mixed Conditional). The proposed rezoning designation allows for a mix of lot sizes and multi-family uses as indicated on the attached site plan.

The County's Land Use Plan shows this parcel in a "Suburban Growth" designation, as is described in the following paragraph. This designation supports the type of development we propose with the RM-CD request. The site is capable of the medium to high density growth ascribed by this designation because the site has access to public water and sewer and is located immediately adjacent to an economic hub along the Hwy 17 corridor. Initial land suitability analysis information also supports this density and type of proposed development.

The following is the County's Land Use Plan definition of "Suburban Growth" further outlines the type of development already envisioned for this area of the County. The designation description reads as follows:

"The Suburban Growth land use classification identifies those areas of Pender County where significant residential growth is expected to occur within the planning horizon. Areas designated as Suburban Growth are located primarily adjacent to municipal planning jurisdictions and within or near high growth, unincorporated areas of the County, i.e., Hampstead/Scotts Hill, Rocky Point, and portions of US 421 South. Suburban Growth designates areas where public water and public sewer are available or are planned in the near future." The plan goes on to state, "Uses that would typically be allowed in Suburban Growth areas include medium-high density residential...and limited non-residential areas."

DRC Hampstead, LLC proposes development of this parcel as indicated on the Conditional Rezoning Site Plan and in keeping with the intended growth pattern of Pender County's suburban growth area designation. The project is being designed to integrate the site's existing natural beauty to further the developer's goal in achieving an exceptionally designed project with a medium-density single family neighborhood in the back of the parcel, adjacent to the existing single family homes and include a higher density section of apartments located behind the commercial corridor of Hwy. 17. The proposed development plans to integrate the site's dramatic topography and interesting natural features into the design by highlighting many of the specimen, large live oaks and other mature trees that are located along a ridge running parallel to Hwy. 17. In addition, other specimen oaks throughout the proposed single family neighborhood will guide the design of the layout to ensure the

natural features of the land are preserved. Great care will be taken to grade around these trees and impact them as little as possible. The vegetated ridge on which many of the trees sit will act as a natural buffer between the the lower density, 135 lot single family neighborhood and higher density apartment site.

The proposed 264 apartments are located in an existing, new growth pine flat just behind the commercial businesses that front Hwy 17. This site is well suited for higher density growth as is proposed because of the flatter topography, lower quality vegetation, and proximity to a primary commercial corridor. These apartments will conform to existing height limitations set by Pender County and will be no more than 3 stories tall. Apartment buildings will be well buffered from view by use of the site's natural ridge as well as existing and augmented landscape around the edges of the apartment site.

The proposed apartments do push the overall density for the tract in excess of Pender County's 5 unit/acre cap. However, in talking with planning staff and reading the comprehensive plan, we understand that a higher density, such as the 8 units/acre that we propose, has been considered in approved planning documents, but not updated in the UDO at this time. This higher density is recommended for consideration in the areas of the County that can support the growth, specifically those sites with sewer and water availability. This site does now have both water and sewer availability and is located in the growing Hwy 17 corridor of the County. Our understanding is that the UDO had not really considered apartments when it was adopted due to the fact that water and sewer was not readily available to support such density. Because this site is well suited in an area of the County and by supporting utilities, we respectfully request that the reviewing staff and boards consider this higher density for this conditional rezoning.

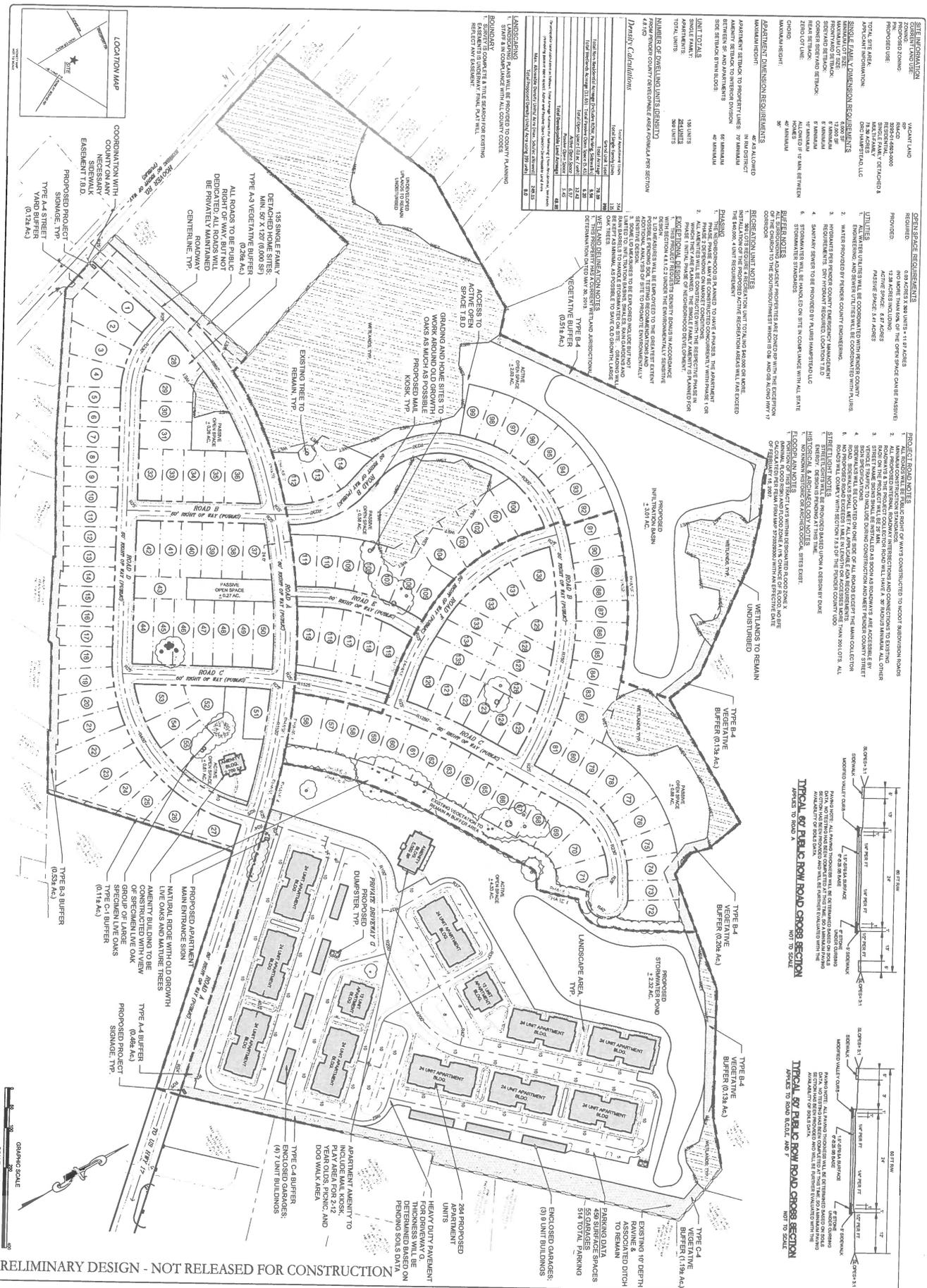
The site has access to Hwy. 17 between the Hampstead United Methodist Church and the Bailey Shoppes. The parcel also has access to Hoover Road through the proposed single family neighborhood. The County's collector street plan indicates that there is a need to connect Hwy 17 to Hoover Rd. Other recommended collector streets behind the commercial businesses are not practical due to topography, existing stormwater collection systems, and expansive tract of wetlands adjacent to the site and the commercial businesses.

Single family lot sizes range from approximately 6,000 sf to 12,000 sf. The current zoning for the site is RP and only allows lot sizes 12,000 sf and up as long as public water and sewer are available on the property. The proposed RM conditional zoning for the development allows the use of smaller lots. The proposed RM conditional zoning also allows greater flexibility in individual lot setbacks. Both the smaller lots and flexibility in setbacks help the applicant construct a development that largely leaves the wetlands and very nice old-growth live oaks in place.

To further describe the intended exceptional design practices for use in preserving much of the site's natural beauty, the developer will examine and employ site suitable low impact development practices (LID), such as swales, rain gardens, and infiltration basins, when possible, to handle the site's stormwater runoff on site. The majestic 108" live oak near the proposed single family amenity is one of the major natural features of this site that will be protected as part of the LID measures. Soils near the apartment site do not seem to support an infiltration basin, but the single family side of the project may support this stormwater treatment. The amenity areas will be further examined for the use of other LID practices such as pervious paving and rain barrels. In addition, approximately 30% or 24 acres of the site will be left undisturbed or as passive/active recreation areas. These areas will exceed the County's designated open space requirements and will further act as a vegetated buffer that mitigates impacts of the development on this site and surrounding land. At this time, soils suitability has not been studied for the site, but it is believed that the sandy site is a good candidate for implementation of the aforementioned LID practices, and therefore, a good site to integrate medium to high density development with these low impact development practices.

There is not a traffic analysis for the project at this time, but the study of traffic around the site and on Hoover Rd. and Hwy 17 is in process. Necessary traffic recommendations will be reviewed and implemented as necessary at completion of the traffic impact analysis. The scoping meeting to assess traffic near the project took place on May 18, 2016, and traffic counts were taken prior to the end of the 2015-16 school year.

When assessed for development, this site appears to have a healthy balance of being able to sustain the proposed development while still allowing the developer to protect many of the natural features. The location is well suited for access and density due to its proximity to Hwy 17 and Hoover Rd. and due to suitable utilities availability to the site. This land not only exhibits the physical capacity to handle the layout and density of the proposed plan, but the proposed design also fits well with the County's long range planning documents, and the site specific land planning as shown on the site plan.



ITEM	DESCRIPTION	QUANTITY	REMARKS
1	DETACHED HOME SITES	124	
2	TOWNHOME SITES	24	
3	MULTI-UNIT BUILDING SITES	6	
4	TOTAL UNITS	154	
5	284 PROPOSED APARTMENT UNITS	284	
6	284 PROPOSED PARKING SPACES	284	
7	514 TOTAL PARKING SPACES	514	
8	456 SURFACE SPACES	456	
9	55 GARAGES	55	

REVISIONS:	DATE	BY	DESCRIPTION
1			REVIEWS PER COMMENTS

CLIENT INFORMATION:
DRC HAMPSTEAD, LLC
 60 GREGORY RD., SUITE 1
 BELVILLE, NC 28451

CONTRACT INFORMATION:
PARAMOUNT ENGINEERING, INC.
 122 Clenna Drive
 Wilmington, North Carolina 28403
 (910) 791-6707 (C) (910) 791-6760 (F)
 NC License #: C-2846

PROJECT STATUS:
 DESIGN: LAYOUT
 PERMITTED: YES
 RELEASED FOR CONSTRUCTION: YES

DRAWING INFORMATION:
 DATE: 10/11/2024
 DRAWN BY: J. HARRIS
 CHECKED BY: J. HARRIS
 SCALE: AS SHOWN

PRELIMINARY DESIGN - NOT RELEASED FOR CONSTRUCTION

GRAPHIC SCALE
 SCALE: 1"=60'

LOCATION MAP

COORDINATION WITH COUNTY ON ANY SIDEWALK EASEMENT T.I.D.

PROPOSED PROPOSED TYPE A-4 STREET YARD BUFFER (0.123 AC.)

PROPOSED PROPOSED TYPE A-3 VEGETATIVE BUFFER (0.286 AC.)

ALL ROADS TO BE PUBLIC FINISHED ALL ROADS WILL BE PRIVATELY MAINTAINED

ROADWAY CENTERLINE, TYP.

10' SINGLE FAMILY DETACHED HOME SITES MIN. 57' X 127' (0.000 SF) TYPE A-3 VEGETATIVE BUFFER (0.286 AC.)

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Applicant:
DRC Hampstead, LLC

Owner:
Jesse F. Lea SR, et al

**Conditional
Map Amendment**

Case Number:
305-2016

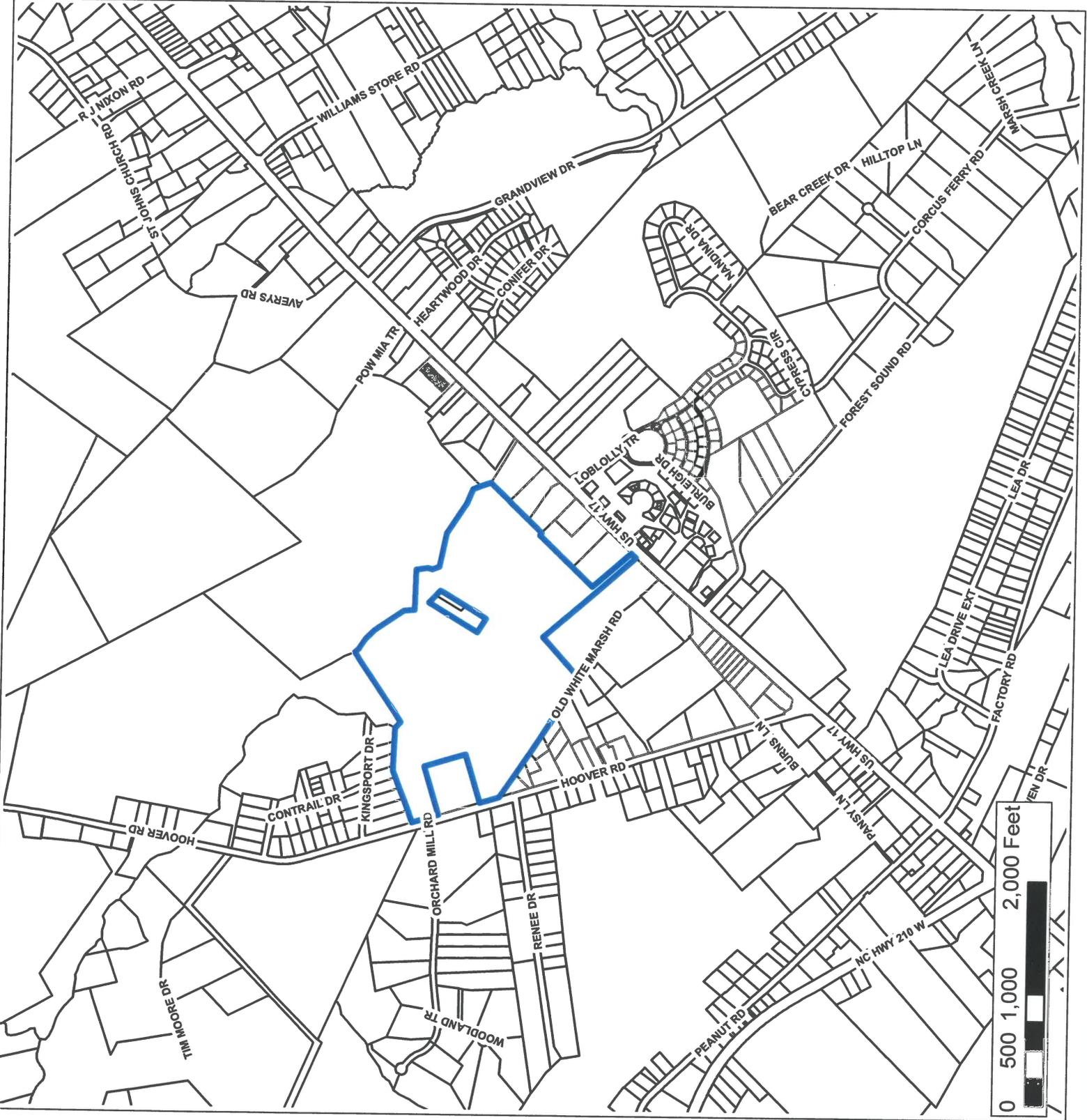
Legend



Subject Parcel



VICINITY





Applicant:
DRC Hampstead, LLC

Owner:
Jesse F. Lea SR, et al

**Conditional Zoning
Map Amendment**

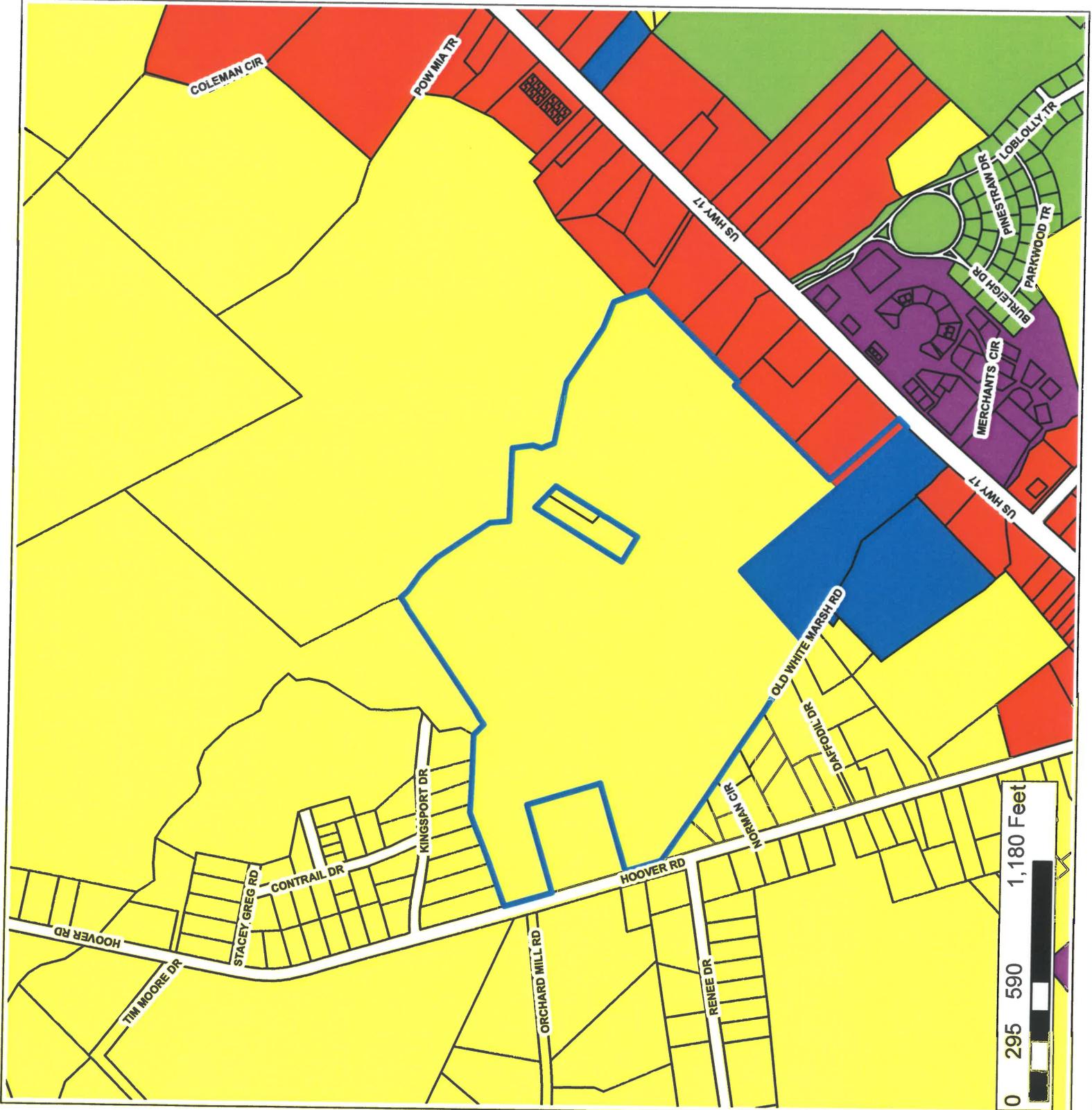
Case Number:
305-2016

Legend

-  Subject Property
-  GB
-  MH
-  O&I, Office & Institutional
-  PD, Planned Development
-  RP, Residential Performance



CURRENT ZONING





Applicant:
DRC Hampstead, LLC

Owner:
Jesse F. Lea SR, et al

**Conditional
Map Amendment**

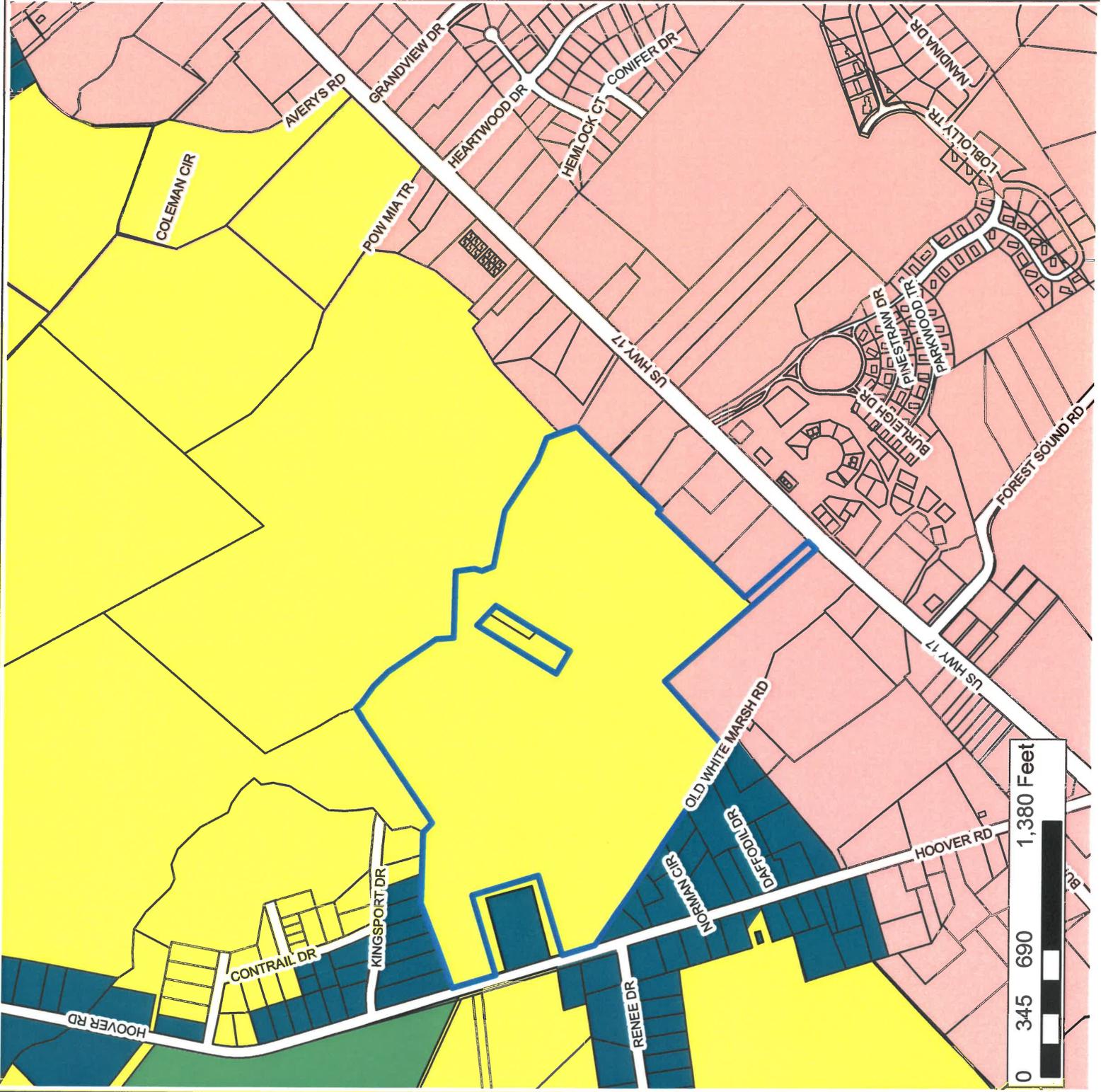
Case Number:
305-2016

Legend

-  Subject Property
-  Conservation
-  Mixed Use
-  Office, Institutional, Business
-  Rural Growth
-  Suburban Growth



Future Land Use





Applicant:
DRC Hampstead, LLC

Owner:
Jesse F. Lea SR, et al

**Conditional Zoning
Map Amendment**

Case Number:
305--2016

Legend



Subject Parcel



2012 AERIAL



Southern Environmental Group, Inc.

5315 South College Road, Suite E Wilmington, NC 28412
Phone: 910.452.2711 Fax: 910.452.2899 Email: office@segi.us

20 June 2016

Mr. D Logan
Logan Homes
60 Gregory Rd
Suite 1
Belville, NC 28451

**Re: Lea Tract
Access Road Wetlands and Permitting**

Dear Mr. Logan:

Southern Environmental Group, Inc. (SEGi) reviewed the feasibility of constructing an access road along the eastern property line of your Lea Tract Subdivision in Hampstead, Pender County, North Carolina. Specifically in regard to the constraints you may encounter due to wetlands (on-site and adjacent) and subsequent wetland permitting.

SEGi previously delineated the wetlands within the Lea Tract and obtained US Army Corps of Engineers (USACE) concurrence. This included the delineation of a cypress – gum swamp or bottomland system along the northern property line. This wetland system extends north onto the adjacent property and also runs east-west along the length of the property line. (see Exhibit)

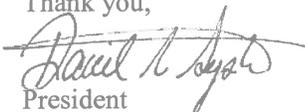
Based on the Pender County Collector Street Plan (CSP) the access road will require a USACE wetland permit or the construction of a pile supported bridge. It is my understanding that the size and construction of a bridge in this location is not economically practical and a traditional earthen filled wetland crossing would be more suitable. The wetland impact area for the roadway would be approximately 2.0 acres which is a significant impact for a road crossing and would require adequate justification. (see Exhibit)

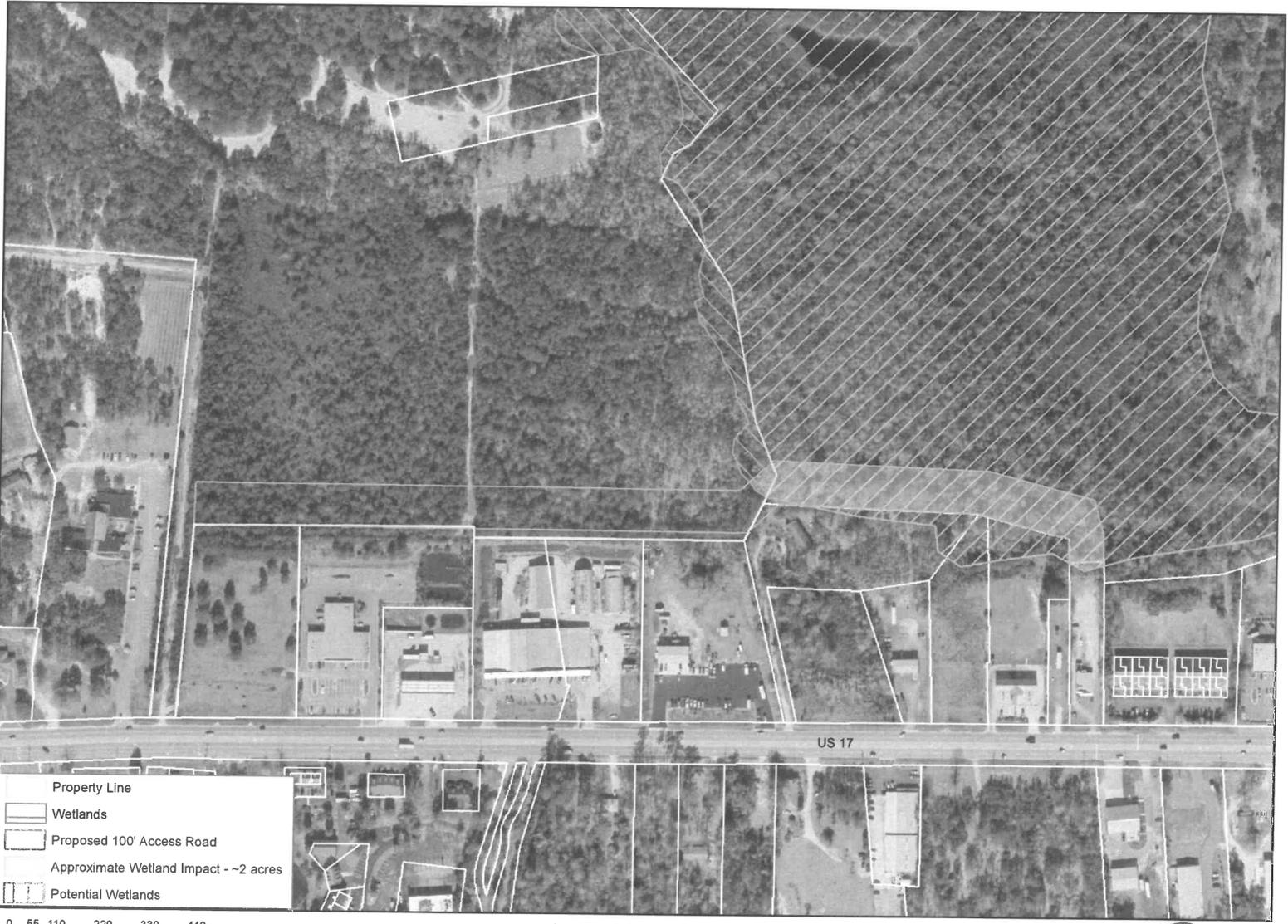
The USACE requirements for this type of road crossing require a purpose and need for the impact that is clearly definable and defensible. After reviewing the Pender Street Collector Plan the proposed access road would provide access to residents and businesses which are already accessed from Highway 17, which questions the need for additional access. Future development within the wetlands to the west of the proposed road (adjacent to the impact area) is also unlikely as both construction restrains and significant wetland impacts would be required. This also limits the need for the access road and therefore the purpose of the proposed wetland impact.

In summary, due to the significant size of the proposed impact and unclear need for additional access to existing and future residents and businesses; it is my opinion that the USACE would not issue a permit for the access road as proposed.

It is SEGi's hope the information found within and attached are adequate to address your questions regarding the access road feasibility. However, should you have questions or need additional information, please feel free to contact me at 910.452.2711.

Thank you,


President



- Property Line
- Wetlands
- Proposed 100' Access Road
- Approximate Wetland Impact - ~2 acres
- Potential Wetlands

0 55 110 220 330 440 Feet
 1 inch = 279 feet

Map source: NCOneMap Orthoimagery

Lea Tract Access Road
Jesse Lea Property
Hampstead, Pender County, NC
6/20/2016 Project #: 012-035.01





305 Chestnut Street
PO Box 1810
Wilmington, NC 28402
Ph: (910) 341-3258
Fax: (910) 341-7801
www.wmpo.org

June 8, 2016

Rynal Stephenson, PE
5805 Farringdon Place, Suite 100
Raleigh, NC 27609

**RE: Approval of the Traffic Impact Analysis (TIA) associated with the proposed
Lea Tract Development
Pender County, NC**

Dear Mr. Stephenson:

Based on the information provided, and conversations held to date, it is our understanding that the proposed development will consist of 130 single family homes and 264 apartments. This development is located west of Us 17 with frontage on Hoover Road and an access to US 17 via Arrow Wood Road in Pender County, North Carolina.

The site plan provided proposes access at the following points:

- US 17 and Arrow Wood Road
- Hoover Road and Neighborhood Access

Below please find the scope to be used for the Traffic Impact Analysis:

1. Data Collection - Analysis Parameters:

a. Existing Conditions

- i. Turning movement counts weekday AM (6:30 AM – 8:30 AM) and PM (4:00 PM – 6:00 PM) peak periods, Signal Timing (if applicable) and Lane Geometry;
 - US 17 and Hoover Road
 - US 17 and Arrow Wood Road
 - Hoover Road and Neighborhood Access

Wilmington Urban Area Metropolitan Planning Organization

-
- ii. Signal plans may be acquired by sending an email request to NCDOT Traffic Services: Ross Kimbro, rkimbrot@ncdot.gov or by calling (910) 341-0300
 - b. Site Trip Generation, Site Trip Distribution and Background Traffic Assumptions
 - i. Site Trip Generation Estimate
 - See attached (provided by Ramey Kemp & Associates)
 - ii. Site Trip Distribution
 - To be determined based on collected traffic count data. Trip distribution MUST be approved prior to use in the TIA.
 - iii. Adjacent Development (approved (but as of yet to be built)) development including but limited to;
 - N/A
 - iv. Planned Roadway Improvements
 - U-5732
 - v. Background Traffic Assumptions
 - Horizon year – 2019
 - Growth rate – 1% per year
 - vi. Other Information
2. **Capacity Analysis: Week day AM & PM Peak Hour (as listed and for locations per 1.a.i)**
- a. Existing – 2016
 - b. 2019 Future No-Build Conditions
[existing +1% background growth]
 - c. 2019 Full Build Conditions
[existing +1% background growth + site trips]
 - d. 2019 Future No-Build Conditions (with TIP)
[existing +1% background growth]
 - e. 2019 Full Build Conditions (with TIP)
[existing +1% background growth + site trips]
3. **Final Report Submittal:**
- a. Completed TIA Application
-

-
- b. Signed and sealed by a Professional Engineer
 - c. Four bound copies
 - d. Four Electronic copies to include PDF of TIA and Synchro files and Synchro analysis files in digital format

4. **Notes:**

- i. TIA's shall be prepared according to NCDOT Congestion Management Guidelines. Any deviations from such shall be approved prior to preparation of the TIA.
- ii. This scope shall remain valid for three months from the date of this letter.
- iii. Please note that if any changes occur (including but not limited to; land use, intensity, phasing, and/or site access) additional analysis may be required.
- iv.

Please contact me at 910-473-5130 with any questions regarding this scope.

Sincerely,



Amy Kimes, PE
Project Manager
Wilmington Metropolitan Planning Organization

Attachments: Trip Generation Summary (provided by Ramey Kemp & Associates)
Site Map (provided by Ramey Kemp & Associates)

Cc: Robert Vause, PE, Division Maintenance Engineer, NCDOT
Allen Hancock, Assistant Traffic Engineer, NCDOT
Kyle Breuer, Planning Director, Pender County
Megan O'Hare, Senior Planner, Pender County
Bill McDow, Transportation Planner, WMPO
Mike Kozlosky, Executive Director, WMPO

Summary of Multi-Use Trip Generation
Average Weekday Driveway Volumes (Unadjusted for Internal Trips)

Project:
Phase:

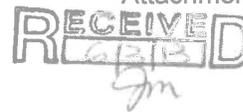
Open Date:
Analysis Date:

Description:

ITE:Land Use	24 Hour Two-Way Volume	AM Pk Hour		PM Pk Hour	
		Enter	Exit	Enter	Exit
210: Single Family Detached Housing 130 Dwelling Units [E]	1337	25	76	84	49
220: Apartments 264 Dwelling Units [E]	1723	27	106	106	57
Total Driveway Volume	3060	52	182	190	106
Total Peak Hour Pass-By Trips		0	0	0	0
Total Peak Hour Vol. Added to Adjacent Streets		52	182	190	106

Note: A zero indicates no data available.
Source: Institute of Transportation Engineers
Trip Generation Manual, 9th Edition, 2012

TRIP GENERATION 2013, TRAFFICWARE, LLC



**U.S. ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT**

Action Id. SAW-2005-00300 County: Pender U.S.G.S. Quad: NC-TOPSAIL

NOTIFICATION OF JURISDICTIONAL DETERMINATION

Property Owner:

Jesse Lea

Address:

PO Box 335

Hampstead, NC, 28443

Telephone Number:

910-520-4381

Size (acres) 79

Nearest Waterway Old Topsail Creek

USGS HUC 3030007

Nearest Town Hampstead

River Basin Northeast Cape Fear, North Carolina.

Coordinates Latitude: 34.3791430344578

Longitude: -77.705571029516

Location description: The site is located approximately 0.4 miles north of the intersection of Hoover Road with NC Hwy 210 in Hampstead, North Carolina (PIN# 3293-01-5484).

Indicate Which of the Following Apply:

A. Preliminary Determination

- Based on preliminary information, there may be wetlands on the above described property. We strongly suggest you have this property inspected to determine the extent of Department of the Army (DA) jurisdiction. To be considered final, a jurisdictional determination must be verified by the Corps. This preliminary determination is not an appealable action under the Regulatory Program Administrative Appeal Process (Reference 33 CFR Part 331). If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also, you may provide new information for further consideration by the Corps to reevaluate the JD.

B. Approved Determination

- There are Navigable Waters of the United States within the above described property subject to the permit requirements of Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- There are wetlands on the above described property subject to the permit requirements of Section 404 of the Clean Water Act (CWA)(33 USC § 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
 - We strongly suggest you have the wetlands on your property delineated. Due to the size of your property and/or our present workload, the Corps may not be able to accomplish this wetland delineation in a timely manner. For a more timely delineation, you may wish to obtain a consultant. To be considered final, any delineation must be verified by the Corps.
 - The wetlands on your property have been delineated and the delineation has been verified by the Corps. We strongly suggest you have this delineation surveyed. Upon completion, this survey should be reviewed and verified by the Corps. Once verified, this survey will provide an accurate depiction of all areas subject to CWA jurisdiction on your property which, provided there is no change in the law or our published regulations, may be relied upon for a period not to exceed five years.
 - The waters of the U.S. including wetlands have been delineated and surveyed and are accurately depicted on the plat signed by the Corps Regulatory Official identified below on _____. Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- There are no waters of the U.S., to include wetlands, present on the above described project area which are subject to the permit requirements of Section 404 of the Clean Water Act (33 USC 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

X The property is located in one of the 20 Coastal Counties subject to regulation under the Coastal Area Management Act (CAMA). You should contact the Division of Coastal Management in Wilmington, NC, at (910) 796-7215 to determine their requirements.

Placement of dredged or fill material within waters of the US and/or wetlands without a Department of the Army permit may constitute a violation of Section 301 of the Clean Water Act (33 USC § 1311). If you have any questions regarding this determination and/or the Corps regulatory program, please contact Crystal Amschler at 910-251-4170 or Crystal.C.Amschler@usace.army.mil.

C. Basis For Determination: Determination was based on review of aerial photography, USGS, soils and Lidar maps and from observations made during the site visit. Wetlands met criteria set forth in the Corps 1987 delineation manual and the Atlantic and Gulf Coastal Plain Region Supplement and are adjacent to a tributary of Godfrey Creek, which flows northwest, then southwest into Harrisons Creek, which flows northwest until it becomes a Section 10 Navigable water.

D. Remarks:

E. Attention USDA Program Participants

This delineation/determination has been conducted to identify the limits of Corps' Clean Water Act jurisdiction for the particular site identified in this request. The delineation/determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA Program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

F. Appeals Information (This information applies only to approved jurisdictional determinations as indicated in B. above)

This correspondence constitutes an approved jurisdictional determination for the above described site. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and request for appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the following address:

US Army Corps of Engineers
South Atlantic Division
Attn: Jason Steele, Review Officer
60 Forsyth Street SW, Room 10M15
Atlanta, Georgia 30303-8801

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by 7/29/2013.

****It is not necessary to submit an RFA form to the Division Office if you do not object to the determination in this correspondence.****

Corps Regulatory Official: 

Date: May 30, 2013

Expiration Date: May 30, 2018

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the attached customer Satisfaction Survey or visit <http://per2.nwp.usace.army.mil/survey.html> to complete the survey online.

Copy furnished:
Southern Environmental Group, Inc
Attn: David Scibetta
5315 South College Rd, Suite E
Wilmington, NC 28412

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND
REQUEST FOR APPEAL**

Applicant: Jesse Lea		File Number: SAW-2005-00300	Date: May 30, 2013
Attached is:		See Section below	
<input type="checkbox"/>	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)		A
<input type="checkbox"/>	PROFFERED PERMIT (Standard Permit or Letter of permission)		B
<input type="checkbox"/>	PERMIT DENIAL		C
<input checked="" type="checkbox"/>	APPROVED JURISDICTIONAL DETERMINATION		D
<input type="checkbox"/>	PRELIMINARY JURISDICTIONAL DETERMINATION		E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://www.usace.army.mil/inet/functions/cw/cecwo/reg> or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the district engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:
**District Engineer, Wilmington Regulatory Division,
 Attn: Crystal Amschler**

If you only have questions regarding the appeal process you may also contact:
 Mr. Jason Steele, Administrative Appeal Review Officer
 CESAD-PDO
 U.S. Army Corps of Engineers, South Atlantic Division
 60 Forsyth Street, Room 10M15
 Atlanta, Georgia 30303-8801
 Phone: (404) 562-5137

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

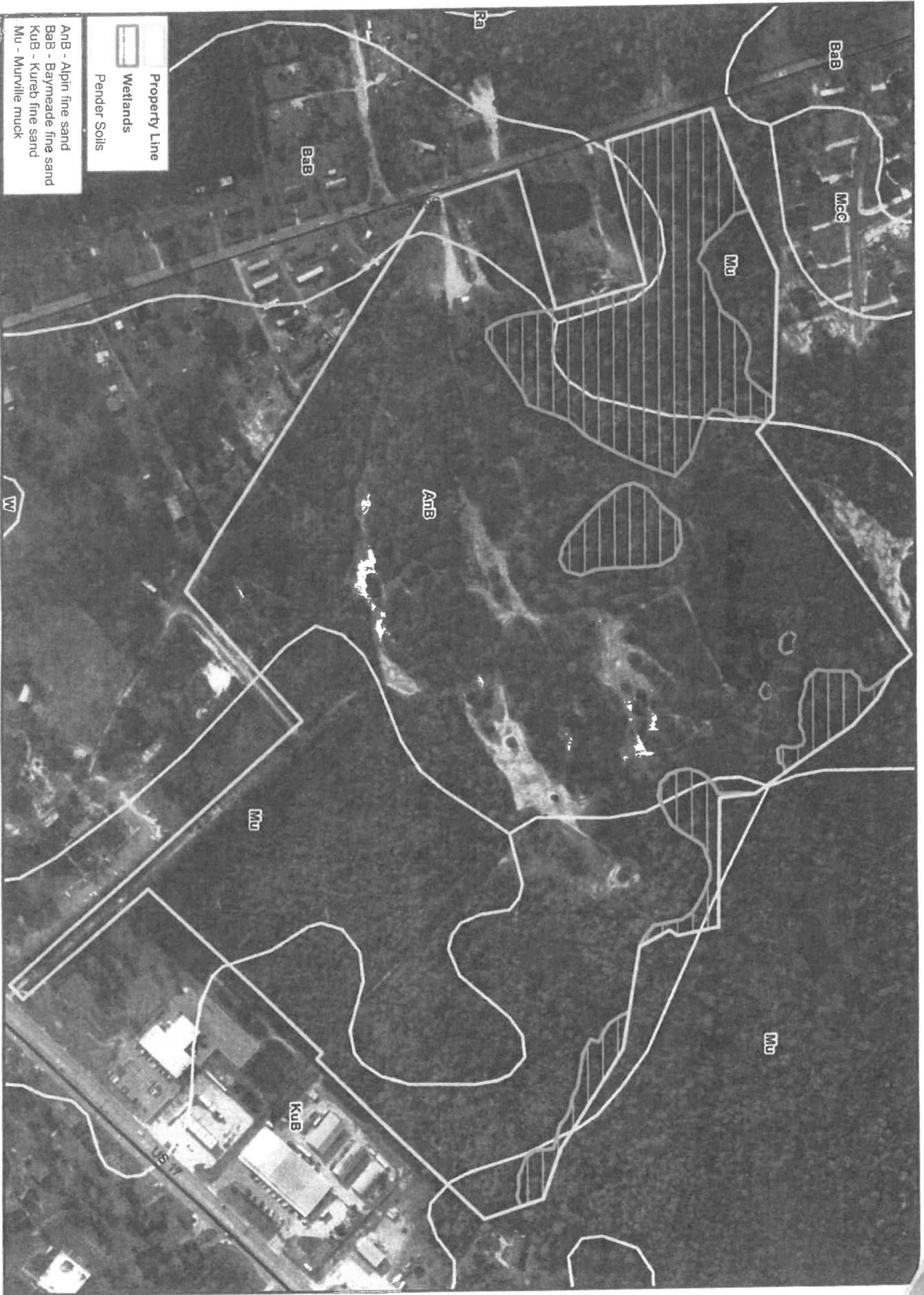
_____ Signature of appellant or agent.	Date:	Telephone number:
---	-------	-------------------

For appeals on Initial Proffered Permits send this form to:

District Engineer, Wilmington Regulatory Division, Attn: Crystal Amschler, 69 Darlington Avenue, Wilmington, North Carolina 28403

For Permit denials, Proffered Permits and approved Jurisdictional Determinations send this form to:

**Division Engineer, Commander, U.S. Army Engineer Division, South Atlantic, Attn: Mr. Jason Steele, Administrative Appeal Officer, CESAD-PDO, 60 Forsyth Street, Room 10M15, Atlanta, Georgia 30303-8801
 Phone: (404) 562-5137**



Soils Map
 Jesse Lea Property
 Hampstead, Pender County, NC
 10/2/2012 Project #: 012-035.01



**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

APPENDIX A

DOCKET NO. W-1305, SUB 0

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

PLURIS HAMPSTEAD, LLC

is granted this

CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY

to provide sewer utility service

in

BLAKE FARMS, OLDE POINTE VILLAGE, TOPSAIL HIGH SCHOOL, TOPSAIL
MIDDLE SCHOOL, TOPSAIL ELEMENTARY SCHOOL, AND HARDISON
DEVELOPMENT

Pender County, North Carolina,

subject to any orders, rules, regulations,
and conditions now or hereafter lawfully made
by the North Carolina Utilities Commission.

ISSUED BY ORDER OF THE COMMISSION.

This the 5th day of November, 2015.

NORTH CAROLINA UTILITIES COMMISSION



Jackie Cox, Deputy Clerk



Date: July 12, 2016

Re: Certificate of Public Convenience and Necessity

To Whom It May Concern:

Please be advised that Pluris Hampstead, LLC will accept the wastewater generated by the development or address listed below, as it is connected to our collection system.

Location: 78.39 acre tract; north side of US HWY 17 behind the Bailey Shops, also access off of east side of Hoover Rd.

Connected: Not Connected:

All fees will need to be paid for additions of bedrooms or habitable rooms.

If you have any questions concerning this matter, please feel free to call upon me at anytime at (910) 327-2880.

With kind regards,

A handwritten signature in black ink, appearing to read "Kaarin M. Willfams".

Kaarin M. Willfams

Sparrows Bend - Hampstead Community Meeting

July 12, 2016

	Name	Address	Phone	Email
1	Skip Williams	15395 Hwy 17N HNC 28443	910-270-4648	S.Williams@Hamstead.com.oh
2	Brenda Sellers	15395 Hwy 17N HNC 28443	910-264-5804	xbrendasellers@gmail.com
3	Joe Bridger	" " " "	910-515-5774	pratted17@aol.com
4	Judy Leiner	82 Daffodil Dr ²⁸⁴⁴³	910-617-3387	judy.leiner@yahoo.com
5	Kyle Brewer	805 S. Walker St. ^{Burgaw} 28425	259-1202	kbrewer@pendencountync.gov
6	Jim Cobb	181 Bow-Min Trail	270-3236	
7	Jessica Fiester	805 S. Walker St. ^{Burgaw} 28425	252-412-3094	Jfiester@pendencountync.gov
8	STEVE RICE	106 KINGSFORD DR	910-604-2501	srice@nhecgo.com
9	Joe Murphy	105 Kingsport P	910-270-6030	N/A
10	Dunard Bradshaw	1777 Kings Landing Rd	²⁰⁰⁻²³²⁰ 910-270-2637	
11	MIKE BUTT-HA	104 Kingsford Dr	910-471-2857	
12	TED FRIEDERIKSEN	202 CONTRAIL RD.	910-319-0706	
13	Vern Parish	181 Old White Horse Rd	910-795-7745	WA
14				
15				
16				



PENDER COUNTY UTILITIES

P.O. BOX 995
605 E. FREMONT STREET
BURGAW, NC 28425

June 15, 2016

Mr. D. Logan
Representative DRC Hampstead, LLC
60 Gregory Road, Suite 1
Belville, NC 28451

**RE: Water Capacity
Sparrows Bend Development**

Mr. Logan:

Please find this letter as written confirmation that, at this time, Pender County Utilities has sufficient water capacity to provide water service to the proposed Sparrows Bend Development, including up to 135 Single Family Residences, and up to 264 Apartment. Please note that capacity is allocated on a first come, first serve basis.

PCU must review preliminary design plans for the proposed waterline extensions required to serve this development, when they are complete and submitted for our review.

Please feel free to contact me should you have any questions pertaining to this matter.

Thank you,

A handwritten signature in cursive script that reads 'Bryan McCabe'.

Bryan McCabe, PE, Project Engineer
Pender County Utilities

PENDER COUNTY UTILITIES
PHONE: (910) 259-1570
FAX: (910) 259-1579

TRC COVER PAGE

Cape Fear Council of Governments RPO

No Attendance.

Four County Electric Company

No Attendance.

NC DENR Division of Coastal Management

No Attendance.

NC DENR Division of Forestry

No Attendance.

NC DENR, Division of Energy, Mineral, and Land Resources - Land Quality Section

No Attendance.

NC DENR Division of Waste Management

No Attendance.

NC DEQ Division of Water Quality

No Attendance.

NC DOT Division of Highways

No Attendance.

NC DOT Transportation Planning Branch

No Attendance.

NC Office of State Archaeology

No Attendance.

NC Wildlife Resources Commission

No Attendance.

Pender County Addressing Coordinator

No Attendance. See Comments.

Pender County Building Inspections

No Attendance. See Comments.

Pender County Emergency Management

No Attendance.

Pender County Environmental Health

Attended. No Comments Provided.

Pender County Fire Marshal

Attended. See Comments.

Pender County Flood Plain Management

Attended. Comments Provided.

Pender County Parks and Recreation

See Comments.

Pender County Public Library

No Attendance

Pender County Public Utilities

Attended. See Comments.

Pender County Schools

No Attendance.

Pender County Sheriff's Department

No Attendance.

Pender County Soil and Water Conservation District

Attended. No Comments.

Progress Energy Corporation

No Attendance.

Pluris

No Attendance.

US Army Corps of Engineers

No Attendance.

Wilmington Metropolitan Planning Organization

Attended. See Comments.



Pender County Emergency Management

Occupancy: **Sparrows Bend**
Address: **US Hwy 17 Building #US Hwy 17**
Hampstead NC 284432844

Inspection Type: **Tent**
Inspection Date: **7/6/2016** By: **Batson, Tommy (2342)**
Time In: **14:45** Time Out: **15:30**
Authorized Date: **07/06/2016** By: **Batson, Tommy (2342)**

Form: TRC

Inspection Topics:

Requirements

Street frontage

Every lot shall abut a public street or private street approved that is at least 20ft in width and to withstand an emergency vehicle of 80,000 lbs.

Status: INFORMATION

Notes: Prefer 26 foot roadway in front of the apartment building to allow setup and fire protection with the first in aerial fire apparatus truck

Dead Ends

Any dead ends 150 ft or more shall have an approved Fire Department turnaround

Status: INFORMATION

Notes: Cul-de-sac in place

Cul-De-Sacs

Shall have a min. of 40ft radius (DOT Approved)

Status: INFORMATION

Notes: Cul-de-sac at the end of C-street is recommended to be 40 foot radius.

Curb radius into the cul-de-sac needs to minimum of 28 foot radius

Hammer heads

Hammer head shall be a min of 60' in both direction from the center of the end of the roadway with a min. of 120' total. Alternate Hammer head will be required to be 70' deep counting the roadway.

Status: N/A

Notes:

Median Strips

Where a sub divider elects to construct a street divided with a median strip, the one way roadway shall not be less than 10 ft width.

Status: N/A

Notes:

Street signs

Shall be installed as soon as roadways are accessible by vehicle traffic to include during construction and meet the Pender County Street Sign Specifications

Status: INFORMATION

Notes:

Alleys

Shall be a min. of 12' ft. wide

Status: N/A

Notes:

Fire Hydrants

Fire Hydrants are required when a sub division or other development with four or more proposed lots/units derived from the same parent tract as of the date of his ordinance and when subject to the provisions of this ordinance or the County Zoning Ordinance is to be served by extension of extension of a public water system where the provider is capable of supplying sufficient water pressure to operate the hydrants. The following are the minimum standards for hydrant installation: 1. Fire Hydrants shall be located no more than 1,000 feet apart and at a maximum of 500 feet from any lot or unit; 2. Each fire hydrant shall have a minimum main supply line as required by the provider to adequately provide the appropriate amount of pressure to the hydrant; 3. Fire hydrants shall be maintained by the entity supplying water thereto; and 4. Standard hydrant design (Nation Standards Thread, 4 2 ½-inch steamer, (2) 2 ½ inch discharge connections, etc.) and proper maintenance shall be utilized.

Status: INFORMATION**Notes:** Additional hydrants may be required for the FDC's on sprinkler systems to meet NFPA sprinkler code.**Dry Hydrant**

In developments with natural or manmade water sources such as ponds and/or bodies of water a dry hydrant may be required to assist in fire protection for fire services.

Status: INFORMATION**Notes:** Dry hydrant at the end of C-street in the pond will assistance in fire protection for the development.**Gates**

Gates for any private roads shall be installed to a siren activated opener.

Status: N/A**Notes:****Building Heights**

Building heights shall be limited to 35 ft. unless the fire districts has the proper equipment to access anything over 35 ft.

Status: INFORMATION**Notes:** 105' Aerial Fire apparatus from Pender EMS & Fire responses first to this site.**Set Backs**

Setback preferred to be 5 ft from the property line and if 3 ft or closer see NC Building Code Requires

Status: N/A**Notes:****Note****Status:** NOT OBSERVED**Notes:** Addressing of the apartments complex is unknown but meeting with Jan Dawson (Addressing Coordination) will complete this.

Add an additional ingress and egress to support the 260 apartment units. The best location would be in the south east corner of the property.

Additional Time Spent on Inspection:

Category	Start Date / Time	End Date / Time
----------	-------------------	-----------------

Notes: No Additional time recorded**Total Additional Time: 0 minutes****Inspection Time: 45 minutes****Total Time: 45 minutes****Summary:****Overall Result:** Passed with Comments**Inspector Notes:**

Inspector:

Name: Batson, Tommy
Rank: Fire Marshal
Mobile Phone(s): 910-470-4721
Email(s): tbatson@pendercountync.gov

Signature

Date



Technical Review Committee Review and Response

Date: 06/27/2016

Name: Josh Norwood

Phone: 910-259-0129

Case Name: Sparrows Bend/Nest

Agency: GIS & Addressing

Email: jnorwood@pendercountync.gov

Requirements:

Please submit a list of road names that you would like to reserve. You will also need to submit alternate names as well. Duplicate or phonetically similar street names are not permitted. Please contact Jan Dawson, E911 Addressing Coordinator, to submit these street names as well as any other questions you may have. Her number is 910-259-1442.

Recommendations:

Comments:

Please refer to the Pender County UDO and review our addressing and display regulations as well as our street sign requirements. They can be found in Article 11 of the UDO. These regulations shall be followed as they are not just suggestions. Once all requirements are met we can then approve the necessary documents.

Information Requested:

Need to know where the main entrance is going to be. You have access on HWY 17 and Hoover Rd.

Please Follow Up Prior to Meeting: Yes/No



Technical Review Committee Review and Response

Date: 06 22 16

Name: Tommy Garriss Agency: Building inspection

Phone: 259-1275 Email: _____

Requirements:

Recommendations:

Comments:

I have no comments on the items listed for the July 6 TRC meeting

Information Requested:

Please Follow Up Prior to Meeting: Yes/No



Technical Review Committee Review and Response

Date: 7/6/16

Name: Dee Turner

Agency: Pender County Parks and Recreation

Phone: 910-259-1330

Email: dturner@pendercountync.gov

Project: Sparrows Nest

Requirements:

Meets the open space requirements

Recommendations:

Install a playground unit for ages 2-12

Comments:

Information Requested:

Please Follow Up Prior to Meeting: Yes/No

No



Technical Review Committee Review and Response

Date: TRC 07/06/16

Name: Margaret/Bryan

Phone: 259-1521

Agency: PCU

Email: mgray@pendercountync.gov

Case 305 – 2016 Major Site Plan – Conditional Zoning Map Amendment Sparrows Bend

- Final utility plans are not required at this stage of design but please be advised that a watermain interconnection between Hoover Rd. and the existing 8" water main located at the rear of Bailey Shoppes will be required.
- Formal Public Water Supply submittal documents must be submitted to PCU for review/approval.
- PCU standard specifications and details can be found on the PCU web page.



Technical Review Committee Review and Response

Date: July 1, 2016

Name: Bill McDow Agency: WMPO

Phone: (910) 341-7819 Email: Bill.mcdow@wilmingtonnc.gov

Requirements: **Sparrows Bend**

1. The Sparrows Bend Subdivision has started a TIA for this development project.
2. A project scope for this project listed 130 Single Family Houses and 264 Apartment, which is different from the 135 SF homes shown in this submission. Please contact Amy Kimes, PE at (910) 473-5130 amy.kimes@wilmingtonnc.gov to discuss these changes and provide an updated Trip Generation for the project.
3. The proposed site plan does not show approved street names for this development.
4. Increase the pavement cross section of the proposed streets. The proposed Road A appears to be operating as a Collector Street for the Site and the Pender County Collector Street Plan. Greater thickness of asphalt and base stone is required for collector streets.
5. Provide a Cul-De-Sac cross section for the end of proposed Road C Cul-de Sac.
6. Add typical roadway geometry dimensions to the plans, such as Horizontal Centerline Radius, Street Corner Radius, etc.
7. Provide sidewalk for the missing section of Road B, from the intersection of Road D to Road A.
8. Provide Sidewalk along Road A from Road D to the entrance to the subdivision.
9. Provide a public street into the apartments for Phase 4. The current design has a single driveway entrance and an internal parking lot network. There is over 1330' from the Road A intersection to the last two apartment buildings in the phase.
10. Provide the sidewalk and pedestrian access to the active recreation areas.
11. Provide pedestrian amenities in the subdivision and wheel chair ramps at each street intersection, where sidewalk is shown.
12. Show internal sidewalk network for the Apartments, along with Handicap spaces, handicap ramps, wheel chair ramps, and Tactile Mats and ADA accommodations.
13. Does the site have a Pool and Pool House?
14. Please show the Parking configuration for the proposed Amenity Building in Phase 1 and the Amenity building in Phase 4.
15. Show parking for the apartments and garages.

Recommendations:

1. Please increase intersection spacing between subdivision streets, numerous streets have centerline spacing of less than 300' between streets.

2. Provide Sidewalk along property frontage on Hoover Road. Coordinate sidewalk with Pender County Planning Pedestrian plans.
3. Show the location of Fire Hydrants and Street Lights for each phase.
4. Show the location of any proposed Lift Stations.
5. Show the location of required Regulatory signs and pavement markings, (Stop Signs, Yield Signs, Stop Bars, Cross Walks, Handicap Parking Signs, etc).
6. Show the landscape plan and street light plans for the site.

Comments:

Information Requested: No

Please Follow Up Prior to Meeting: Yes/ No



Technical Review Committee Review and Response

Date: 7/6/2016

Name: Megan O'Hare

Phone: 910 259 2110

Agency: Floodplain Administrator

Email: mohare@pendercountync.gov

Sparrows Nest

Comments:

The subject property is not located within a regulatory Special Flood Hazard Area, according to the FIRM 3720329300J effective February 16, 2007. The Preliminary DFIRMS show the subject property to contain a portion of AO, with a depth of 2ft. All development within the Special Flood Hazard Areas requires compliance with the Flood Damage Prevention Ordinance

Sparrows Bend Community Meeting
Location: Pender County Hampstead Annex
Date: July 12, 2016 Time: 4:00-5:30 PM

Paramounte Engineering and applicant held an open house with five boards showing aerials, image boards, and the site plan for public viewing and comment. Comments and discussions from the open house are as follows:

- Pastor Skip Williams of Hampstead Methodist Church stated his support for the project and shared his church's plans for future building on the tract abutting our proposed project.
 - Fellowship hall to be built on the church tract closest to our proposed project. Possible Fall construction beginning
 - Two adjacent property owners discussed the church's plans and access to the adjacent properties through the church's land. Just to be sure, Paramounte and applicant will search records/deeds to be sure no easements or access issues affect the Sparrows Bend property.
- Nearly every attendee asked the price range of the single family homes. The applicant stated that he intended to provide homes in the \$275,000-\$325-350,000 range.
- Very few questions were asked about the apartments, but those that did ask wanted to know if they were for rent or for sale. They will be for rent.
 - Some discussion about schools and that children/families would likely be in the apartments – there was concern about school overcrowding. We pointed out the recent \$75 million school bond was in place to address school concerns.
- Bypass discussion – Several open house attendees asked about the bypass location as it relates to this property, and then stated that that bypass would help traffic concerns along 17 and Hoover Rd.
- One pair of adjacent neighbors prefer fence or berm on Sparrows Bend property to prevent kids from walking onto their property. It was explained that lots will now be backing up to the property line with at least a 20' vegetated buffer along that property line. Applicant stated that he had not made up his mind on the type of buffer he would construct, but he assured the neighbors that the buffer would be county compliant. Applicant offered to share the cost of a fence at that location, but the adjacent owners did not want to share the cost.
- There were questions about traffic movements into and around the site. Recent NCDOT superstreet plans along Hwy 17 were discussed, anticipated construction to begin in 2019. There were concerns about amount of traffic on Hoover Rd. and turning movements on Hwy 17. Traffic concerns about left turn onto 17 from Hoover Rd. One attendee requested that the County planning staff reach out to DOT for speed study to lower the speed to 35mph on Hoover Rd. The project TIA is underway and will determine the necessary traffic improvements.
- The adjacent neighbor to the northeast of the property asked questions about development and determined the existing wetlands provided good buffer between the proposed development and his property. However, when told the county wanted to impose a collector street connection across Sparrows Bend and connect to his property, the adjacent owner was unwilling

to comply and expressed a willingness to voice his concern about collector street connection at the board meeting.

- Adjacent neighbor to the north discussed his property being largely wetland except a dirt road that he is working on. He expressed no problems with proposed development.
- Adjacent neighbors in Kingsport expressed concern about drainage, but it was determined that the wetlands adjacent to their site would not be disturbed. No construction will occur on this piece of Sparrows Bend property. It is suspected that their neighborhood HOA is responsible for maintaining a ditch on their properties. It does not appear that ditches they referred to are on Sparrows Bend property, but Sparrows Bend applicant will comply with all applicable laws.

Date: July 13, 2016

Sparrows Bend Pender County Recreation Units Preliminary Order of Magnitude Phasing Cost Estimate

This estimate is based on the conditional rezoning site plan as submitted for Planning Board review July 14, 2016 and is provided to prove the project will comply with **the required 4 recreation units totaling at least \$40,000.**

This estimate reflects our current understanding of construction cost and is the result of prices included in recent bids received by this office and in discussions with contractors and product representatives. Prices may vary somewhat from this estimate at the time the bids are let due to design development and revision of the design, material availability, contractor workload and site conditions. Actual quantities shown below may vary upon completion of construction documentation. This estimate is based on current 2015-2016 dollars and recent construction costs received or researched in this office and does not take into account the cost of financing and/or interest expense. All quantities are preliminary. If necessary, plans should be reviewed by the any boards or regulatory authorities for approval and/or permitting prior to bidding.

Apartment Amenity Site

Item	Qty.	Unit	Unit Price	Total
2-12 year playground with site preparation, play equipment, and surfacing; installed		ls	\$16,000.00	\$16,000.00
Seeded multi-use area	20,000	sf	\$0.11	\$2,200.00
Apartment Amenity Site				\$18,200.00

Single Family Amenity Site

Item	Qty.	Unit	Unit Price	Total
Pervious paver patio for active recreation; group gatherings	1350	sf	\$15.00	\$20,250.00
Seeded multi-use area	15,000	sf	\$0.11	\$1,650.00
Single Family Amenity Site				\$21,900.00
Grand Total				\$40,100

General Notes:

1. Unless otherwise noted, no plans have been completed for these areas beyond conditional rezoning plans. Developer and builder may change components of recreation units, but cost of provided recreation units will not be less than the Pender County required recreation units.

- **Factory Road/Peanut Road** — full median would be constructed restricting all left-turn movements. Only right-turns to and from side streets would be allowed. A paved U-turn bulb would be built 600 feet to the north to accommodate vehicles wishing to go south from Factory Road. A southbound right-turn would be constructed.
- **Atlantic Seafood** — a U-turn bulb is recommended in the vicinity of a platted, but unpaved, road adjacent to the Atlantic Seafood site.
- **Hoover Road** — full median opening maintaining existing traffic signal.
- **Forest Sound Road** — full median would be constructed restricting all left-turn movements. U-turn bulbs are recommended approximately 250 feet north of Forest Sound Road to serve northbound and southbound U-turns from the paired left-turn median opening located just north of this intersection.
- **Hampstead United Methodist Church** — a future collector street is planned just north of Hampstead United Methodist Church. The street could serve one parcel, in which case it would intersect US 17 with a right-in / right-out only configuration. The collector street could however be extended by private property owners to serve multiple parcels; by doing so, sufficient traffic volume may be served such that a traffic signal on US 17 or a superstreet type median opening may be warranted. If approved by NCDOT, then the collector street, median opening and/or traffic signal would be funded by private sources.
- **Loblolly Trail** — U-turn bulbs are recommended approximately 800 to 1,000 feet north of the intersection of US 17 and Loblolly Trail. A bulb would be built on both sides of US 17, to serve northbound and southbound U-turns.
- **Grandview Drive** — a leftover type median opening that provides southbound left-turn movements from US 17, but does not serve left-turns from Grandview Drive onto southbound US 17.
- **William Store Road** — full median would be constructed restricting all left-turn movements. U-turn bulbs are recommended approximately 700 feet north of the intersection of US 17 and William Store Road to serve northbound and southbound U-turns from the paired left-turn median opening located just north of this intersection.
- **Country Club Drive/Jenkins Road** — full median opening maintaining existing traffic signal. No widening for u-turns. U-turn bulbs are recommended approximately 1,300 feet north of the intersection of US 17 and Country Club Drive/Jenkins Road to serve northbound and southbound U-turns from the paired left-turn median opening located north of this intersection. Topsail Middle/Topsail Elementary Schools — full median opening maintaining existing traffic signal. No widening for U-turns.
- **Transfer Station Road** — a leftover type median opening that provides southbound left-turn movements from US 17. Superstreet or full median opening and traffic signal if warranted and approved by NCDOT, to be funded by private sources.
- **Leeward Lane** — full median would be constructed restricting all left-turn movements. U-turn bulbs are recommended approximately 1,000 feet north of the intersection to serve northbound and southbound U-turns from the paired left-turn median opening located north of this intersection.
- **Long Leaf Drive** — leftover median opening for southbound left turns. Only right-turn movements would be allowed to and from Long Leaf Drive.
- **Sloop Point Loop Road** — full median opening maintaining existing traffic signal. No widening for U-turns.

It should be noted that in addition to the specific median openings listed above, median crossings and openings for emergency services such as fire stations and EMS stations will be considered during the design phase of the project. Coordination with people such as the fire chief will be important during this phase of the process.

TRAFFIC IMPACT ANALYSIS

FOR

LEA TRACT

LOCATED

IN

HAMPSTEAD, NC

Prepared For:
Paramounte Engineering, Inc
122 Cinema Drive
Wilmington, NC

Prepared By:
Ramey Kemp & Associates, Inc.
Address
City, State Zip Code
License #C-0910

July 2016

RKA Project No. 16132

Prepared By: CB

Reviewed By: JR

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TRAFFIC IMPACT ANALYSIS
LEA TRACT
HAMPSTEAD, NORTH CAROLINA

1. INTRODUCTION

The contents of this report present the findings of the Traffic Impact Analysis (TIA) conducted for the proposed Lea Tract to be located north of US 17 and west of Hoover Road in Hampstead, North Carolina. The purpose of this study is to determine the potential impacts to the surrounding transportation system created by traffic generated by the proposed development, as well as recommend improvements to mitigate the impacts.

The proposed development, anticipated to be completed in 2019, is expected to consist of 135 single-family homes and 264 apartments.

Site access is proposed via one full movement site access on Hoover Road, and one full movement site access to Arrow Wood Road that connects to US 17. The study analyzes traffic conditions during the weekday AM and PM peak hours for the following scenarios:

- Existing (2016) Traffic Conditions
- Background (2019) Traffic Conditions with TIP U-5732
- Background (2019) Traffic Conditions without TIP U-5732
- Combined (2019) Traffic Conditions with TIP U-5732
- Combined (2019) Traffic Conditions without TIP U-5732

1.1. Site Location and Study Area

The development is proposed to be located north of US 17 and west of Hoover Road in Hampstead, North Carolina. Refer to Figure 1 for the site location map.

The study area for the TIA was determined through coordination with the North Carolina Department of Transportation (NCDOT) and the Wilmington Metropolitan Planning Organization (WMPO) and consists of the following existing intersections:

- US 17 and Hoover Road
- US 17 and Arrow Wood Road

Scoping for the project was coordinated with the WMPO. It should be noted that the existing section of US 17 within the study area is planned to become a superstreet with the completion of the NCDOT State Transportation Improvement Program (STIP or TIP) U-5732. To analyze the future roadway geometry of US 17, the background and combined conditions consider US 17 both with and without the TIP U-5732 project. In addition to analyzing the main intersection, the subsequent U-turn locations are also analyzed.

1.2. Proposed Land Use and Site Access

The proposed development, anticipated to be completed in 2019, is expected to consist of 135 single-family homes and 264 apartments.

Site access is proposed via one full movement site access on Hoover Road, and one full movement site access to Arrow Wood Road that connects to US 17. Refer to Figure 2 for a copy of the preliminary site plan.

1.3. Adjacent Land Uses

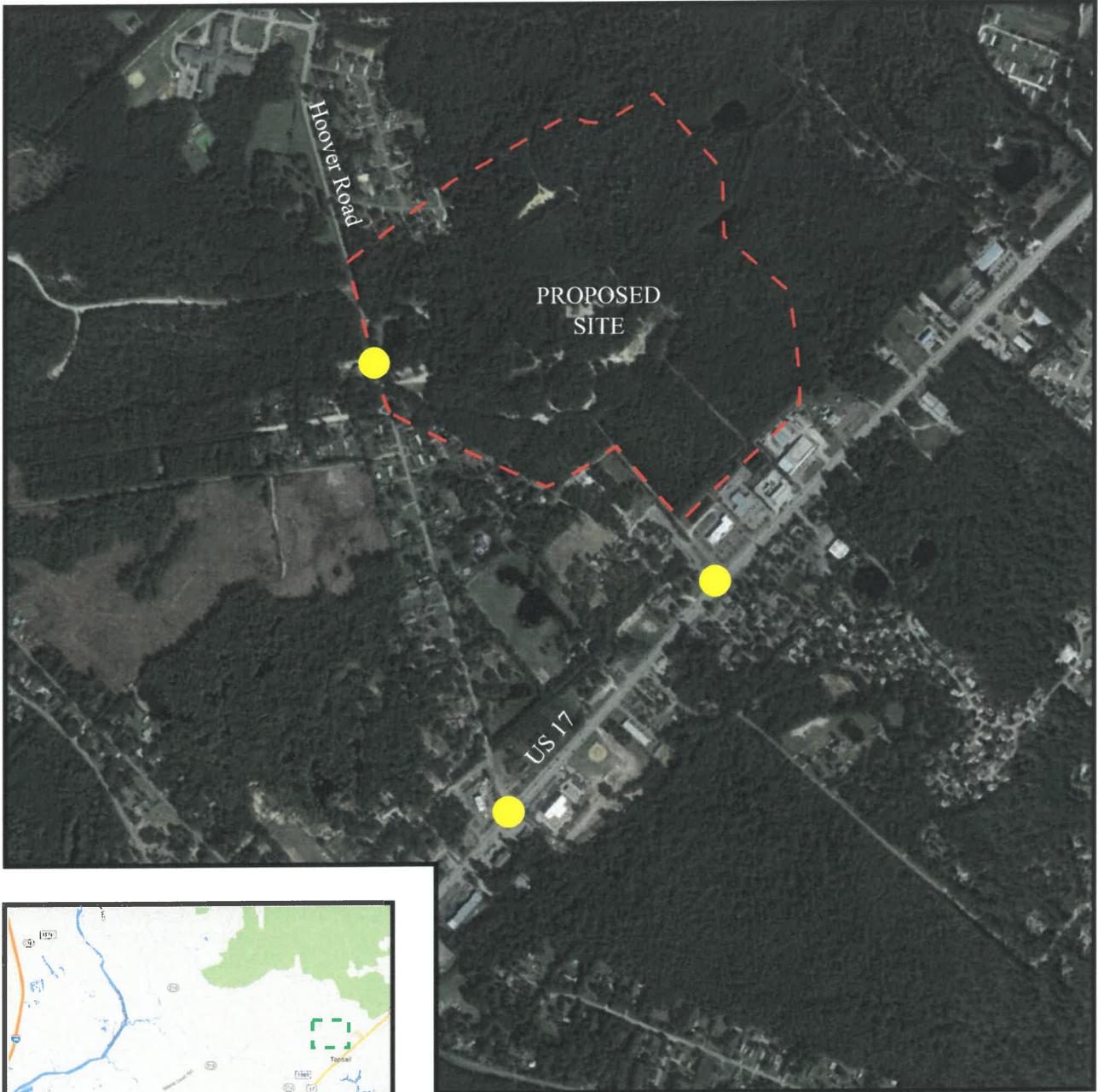
Based on coordination with the NCDOT and the WMPO, there are no adjacent land uses to consider for the proposed development.

1.4. Existing Roadways

NC 17 is a four-lane roadway running in an east-west direction with a posted speed limit of 45 miles per hour (mph) within the study area. Based on the most recent data (2013) from the NCDOT, US 17 had an AADT volume of 37,000 vehicles per day (vpd) within the study area.

Hoover Road is a two-lane roadway running in a north-south direction with a posted speed limit of 45 mph within the study area. Based on the most recent data (2013) from the NCDOT, Hoover Road had an AADT volume of 3,700 vpd within the study area.

Arrow Wood Road is a two-lane roadway running in a north-south direction with no posted speed limit in the study area. For the purpose of this study, it was analyzed to have a speed limit of 35 mph. Based on the current traffic counts from 2016, and assuming that the peak hour volume is 10% of the average daily traffic, Arrow Wood Road has a daily volume of approximately 1,200 vpd within the study area.



LEGEND

-  Proposed Site Location
-  Study Intersection
-  Study Area

	<p>Lea Tract Hampstead, NC</p>	<p>Site Location Map</p>	
		<p>Scale: Not to Scale</p>	<p>Figure 1</p>

2. EXISTING (2016) PEAK HOUR CONDITIONS

2.1 Existing (2016) Peak Hour

Existing peak hour traffic volumes were determined based on traffic counts conducted at the study intersections listed below, in June of 2016 by RKA during a typical weekday AM (6:30 AM – 8:30 AM) and PM (4:00 PM – 6:00 PM) peak periods:

- US 17 and Hoover Road
- US 17 and Arrow Wood Road

Traffic volumes were balanced between intersections, where appropriate. Refer to Figure 4 for existing (2016) weekday AM and PM peak hour traffic volumes. A copy of the count data is located in Appendix A of this report.

2.1. Analysis of Existing (2016) Peak Hour Traffic

The existing (2016) weekday AM and PM peak hour traffic volumes were analyzed to determine the current levels of service at the study intersections under existing roadway conditions. Signal information was obtained from NCDOT and is included in Appendix B. The results of the analysis are presented in Section 7 of this report.

LEGEND



Signalized Intersection

X / Y → AM / PM Peak Hour Traffic



Lea Tract
Hampstead, NC

Existing (2016)
Peak Hour Traffic

Scale: Not to Scale

Figure 4

3. BACKGROUND (2019) PEAK HOUR CONDITIONS

In order to account for growth of traffic and subsequent traffic conditions at a future year, background traffic projections are needed. Background traffic is the component of traffic due to the growth of the community and surrounding area that is anticipated to occur regardless of whether or not the proposed development is constructed. Background traffic is comprised of existing traffic growth within the study area and additional traffic created as a result of adjacent approved developments.

3.1. Ambient Traffic Growth

Through coordination with the WMPO and NCDOT, it was determined that an annual growth rate of 1% would be used to generate projected (2019) weekday AM and PM peak hour traffic volumes.

3.2. Adjacent Development Traffic

Through coordination with the WMPO, it was determined that no adjacent developments are to be considered in the study.

3.3. Future Roadway Improvements

Based on coordination with the NCDOT and the WMPO, the NCDOT TIP U-5732 project is to be considered as a future roadway improvement. TIP U-5732 is planned to convert US 17 to a superstreet from Washington Acres Road to Sloop Point Loop Road, adding a median along US 17 through the study area and providing corresponding U-turns for left-turn movements. Refer to Appendix C for the current concept plans for TIP U-5732.

3.4. Background (2019) Peak Hour Traffic Volumes

Background traffic conditions consider two scenarios. The first background scenario considers the TIP U-5732 project, which is expected to be completed at the same time as Lea Tract. The second scenario does not consider the TIP U-5732 project. The same analysis year was used for both scenarios.

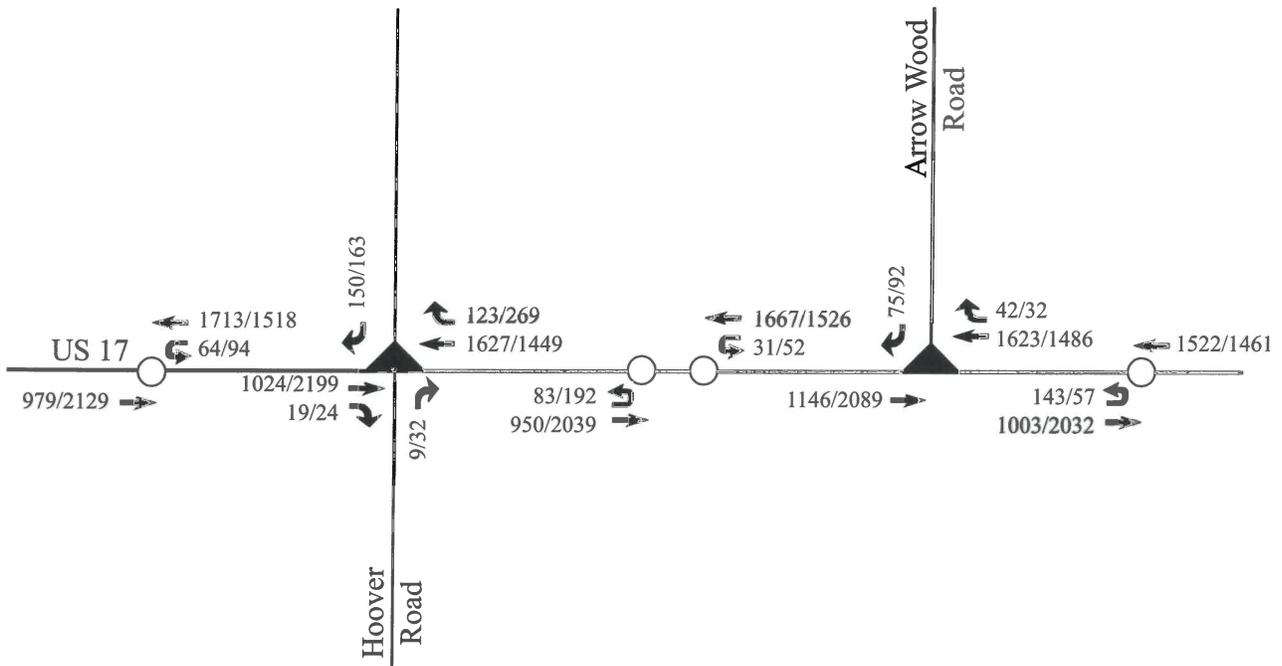
The background (2019) traffic volumes were determined by projecting the existing (2016) peak hour traffic to the year 2019. Refer to Figures 5 (with TIP U-5732) and 6 (without TIP U-5732) for an illustration of the background (2019) peak hour traffic volumes at the study intersections.

3.5. Analysis of Background (2019) Peak Hour Traffic Conditions

The background (2019) weekday AM and PM peak hour traffic volumes at the study intersections were analyzed both with and without signal, lane, and volume changes associated with the TIP U-5732 project. The analysis results are presented in Section 7 of this report.

LEGEND

- Unsignalized Intersection
- ▲ Right-In/Right-Out Intersection
- X/Y → AM / PM Peak Hour Traffic



Lea Tract
Hampstead, NC

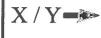
Background (2019)
Peak Hour Traffic
with TIP U-5732

Scale: Not to Scale Figure 5

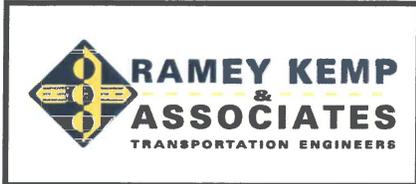
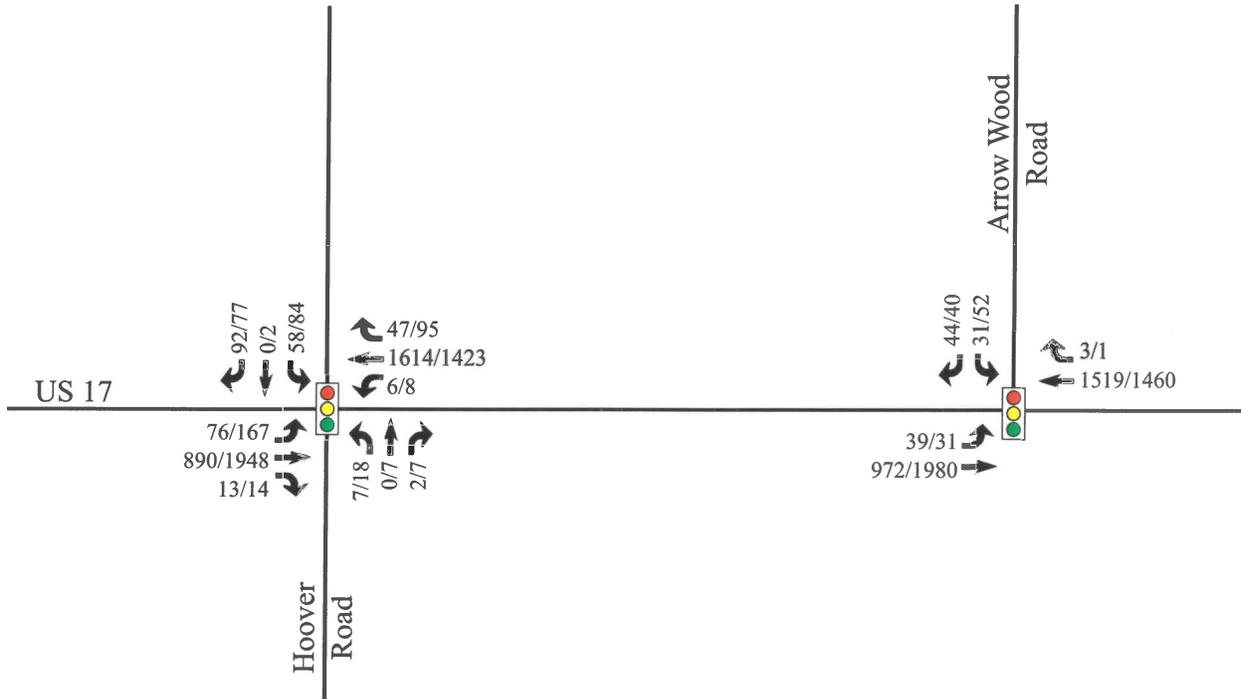
LEGEND



Signalized Intersection



X / Y → AM / PM Peak Hour Traffic



Lea Tract
Hampstead, NC

Background (2019)
Peak Hour Traffic
without TIP U-5732

Scale: Not to Scale

Figure 6

4. SITE TRIP GENERATION AND DISTRIBUTION

4.1. Trip Generation

The proposed development is expected to consist of approximately 135 single-family detached homes and 264 apartment units. 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. Table 1 provide a summary of the trip generation potential for the sites.

Table 1: Trip Generation Summary

Land Use (ITE Code)	Intensity	Daily Traffic (vpd)	AM Peak Hour Trips (vph)		PM Peak Hour Trips (vph)	
			Enter	Exit	Enter	Exit
Single Family Homes (210)	135 dwellings	1,290	25	76	85	50
Apartments (220)	264 dwellings	1,730	27	106	106	57
Total Trips		3,020	52	182	191	107

It is estimated that the proposed development will generate 3,020 total site trips on the roadway network during a typical 24-hour weekday period. Of the daily traffic volume, it is anticipated that 234 trips (52 entering and 182 exiting) will occur during the AM peak hour and 298 (191 entering and 107 exiting) will occur during the PM peak hour.

4.2. Diverted Traffic

Diverted traffic volumes must be considered to better estimate the future traffic volumes. The current concept plans for TIP U-5732 project show the intersections of US 17 and Hoover Road, and US 17 and Arrow Wood Road as restricted unsignalized right-in / right-out intersections. A median will be installed with two eastbound and two westbound unsignalized U-turn intersections within the study area. Background traffic volumes will be diverted to use the U-turn intersections where appropriate. Refer to Figure 5 for an illustration of the background (2019) peak hour traffic with TIP U-5732. Refer to Appendix C for the current concept plans of TIP U-5732.

4.3. Site Trip Distribution and Assignment

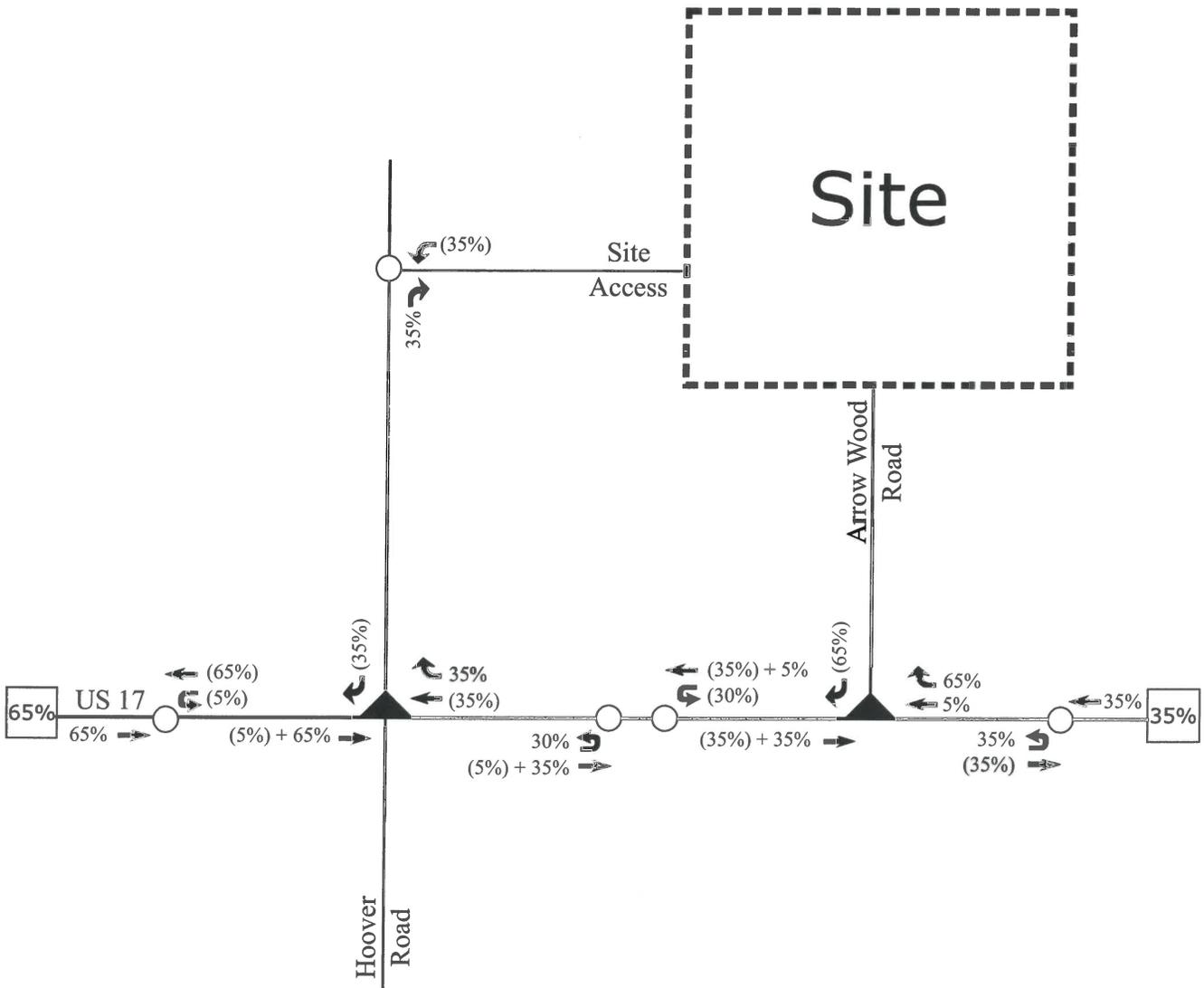
Trip distribution percentages used in assigning site traffic for this development were estimated based on a combination of existing traffic patterns, population centers adjacent to the study area, and engineering judgment. It is estimated that residential trips will be distributed as follows:

- 65% to/from the west via US 17
- 35% to/from the west via US 17

The site trip distributions are shown in Figure 7 (with TIP U-5732) and Figure 8 (without TIP U-5732). Refer to Figure 9 (with TIP U-5732) and Figure 10 (without Tip U-5732) for the site trip assignments.

LEGEND

- Unsignalized Intersection
- ▲ Right-In/Right-Out Intersection
- X% → Entering Trip Distribution
- (Y%) → Exiting Trip Distribution
- XX% Regional Trip Distribution



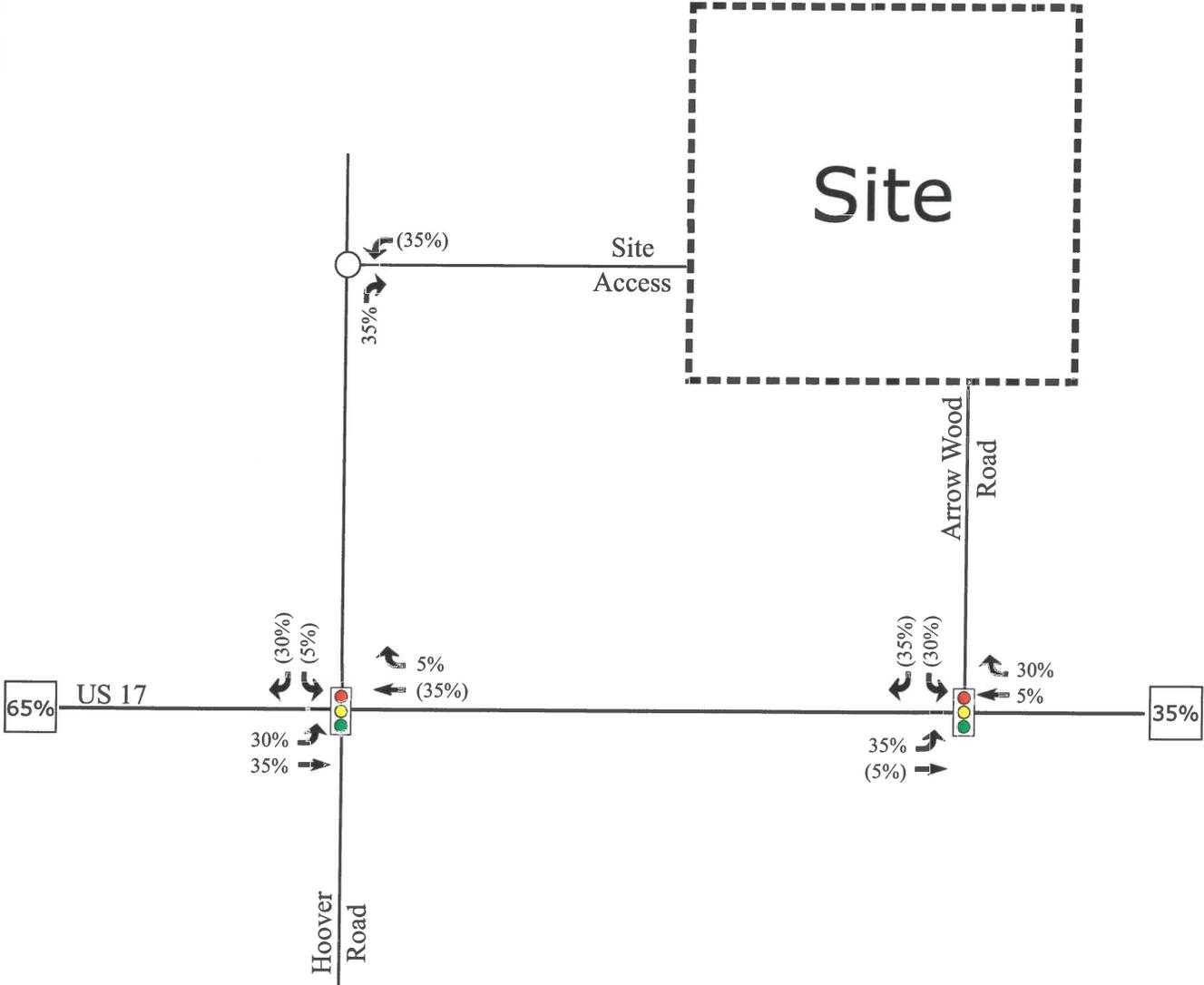
Lea Tract
Hampstead, NC

Site Trip Distribution
with TIP U-5732

Scale: Not to Scale Figure 7

LEGEND

- Unsignalized Intersection
- 🚦 Signalized Intersection
- X% → Entering Trip Distribution
- (Y%) → Exiting Trip Distribution
- ▭ XX% Regional Trip Distribution



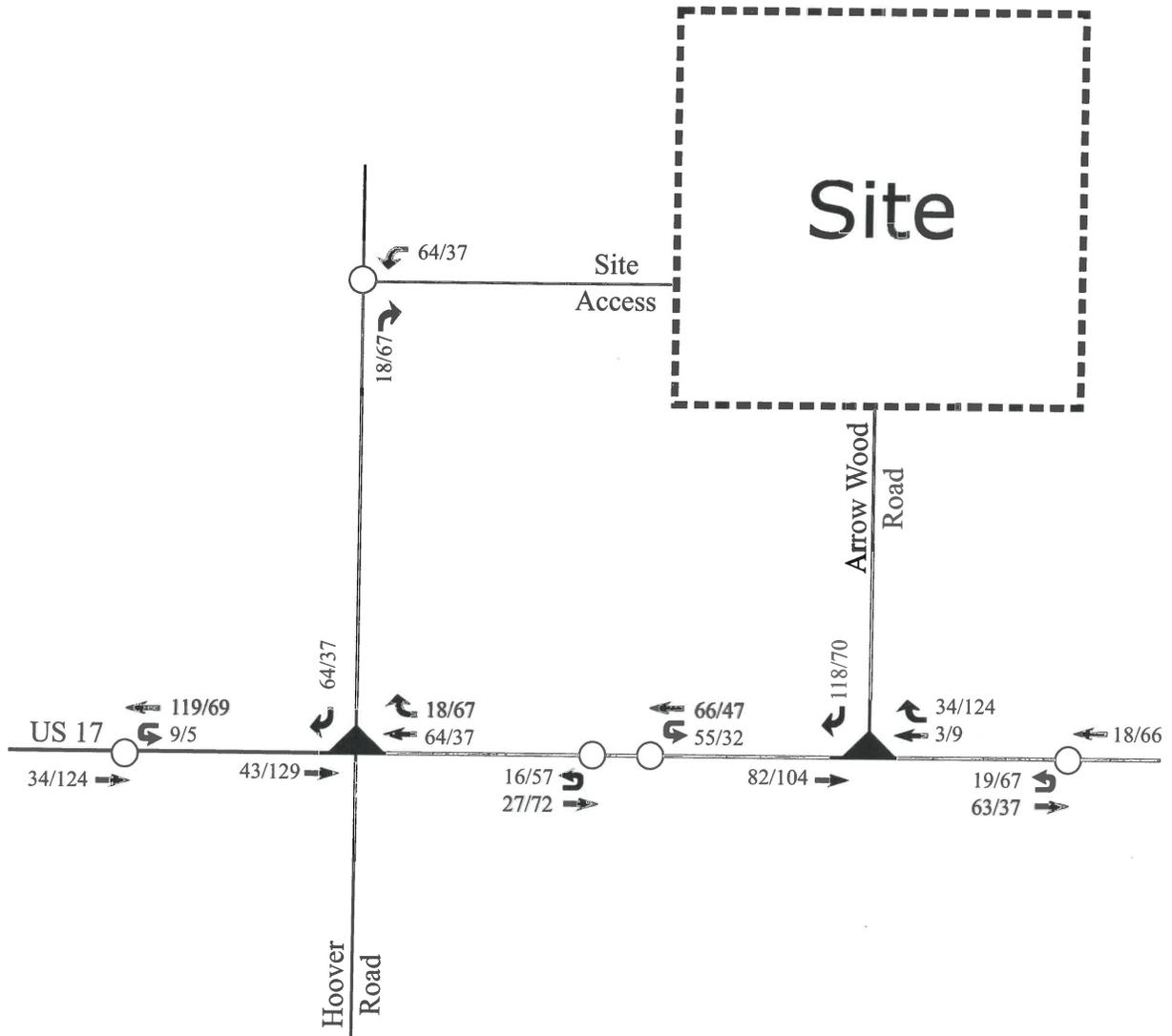
Lea Tract
Hampstead, NC

Site Trip Distribution
without TIP U-5732

Scale: Not to Scale Figure 8

LEGEND

- Unsignalized Intersection
- ▲ Right-In/Right-Out Intersection
- X/Y → AM / PM Site Trips



Lea Tract
Hampstead, NC

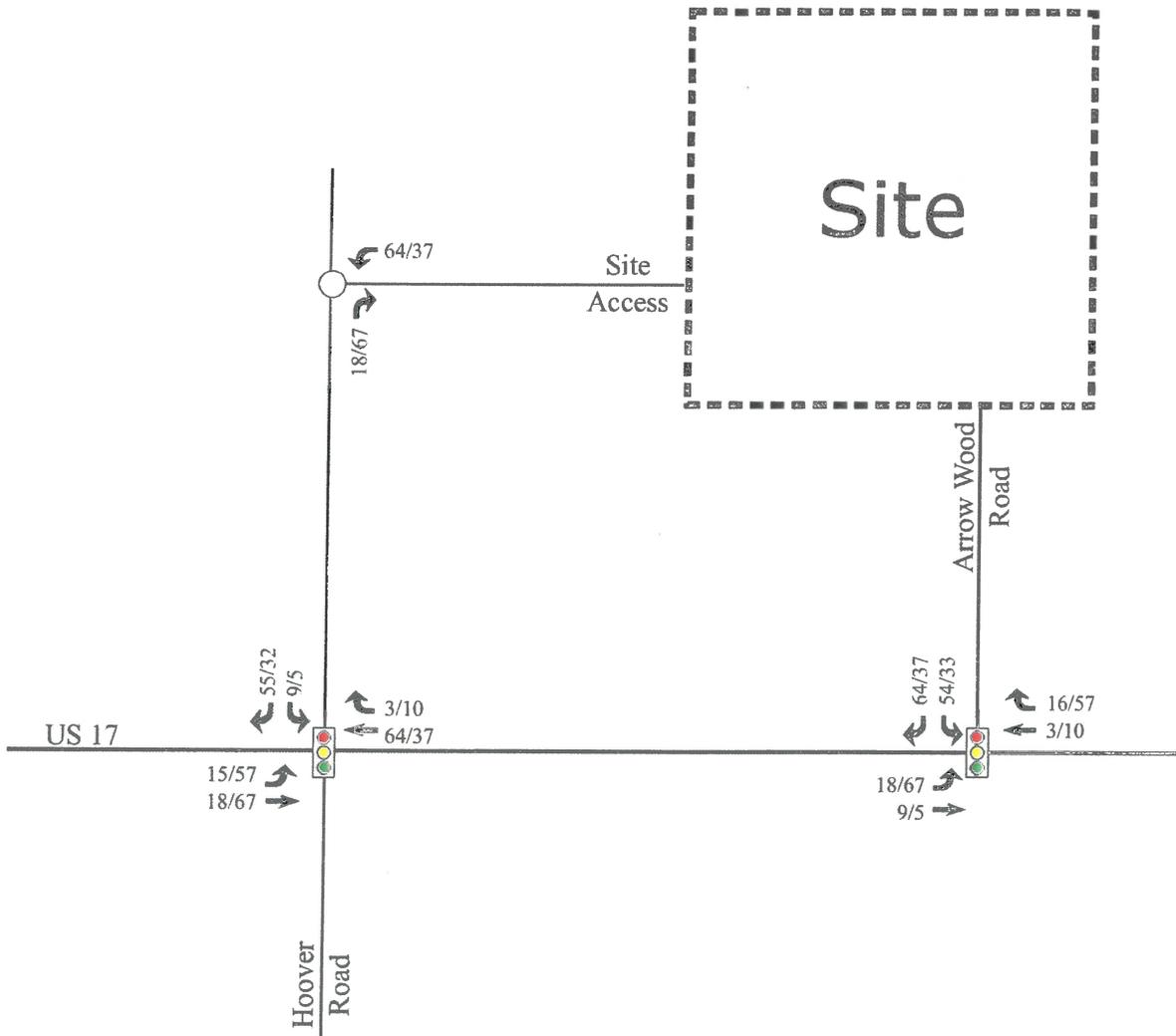
Site Trip Assignment
with TIP U-5732

Scale: Not to Scale

Figure 9

LEGEND

- Unsignalized Intersection
- 🚦 Signalized Intersection
- X/Y → AM / PM Site Trips



 RAMEY KEMP & ASSOCIATES <small>TRANSPORTATION ENGINEERS</small>	Lea Tract Hampstead, NC	Site Trip Assignment without TIP U-5732	
			Scale: Not to Scale

5. COMBINED (2019) TRAFFIC CONDITIONS

5.1. Combined (2019) Peak Hour Traffic Volumes

To estimate traffic conditions with the site developed and with the TIP U-5732 project completed, the total site trips were added to the background (2019) traffic volumes with the TIP U-5732 project to determine the combined (2019) traffic volumes with the TIP U-5732 project. Refer to Figure 11 for an illustration of the combined (2019) peak hour traffic volumes with the TIP U-5732 project.

To estimate traffic conditions with the site developed without the TIP U-5732, the total site trips were added to the background (2019) traffic volumes without the TIP U-5732 project to determine the combined (2019) traffic volumes without the TIP U-5732 project. Refer to Figure 12 for an illustration of the combined (2019) peak hour traffic volumes without the TIP U-5732 project.

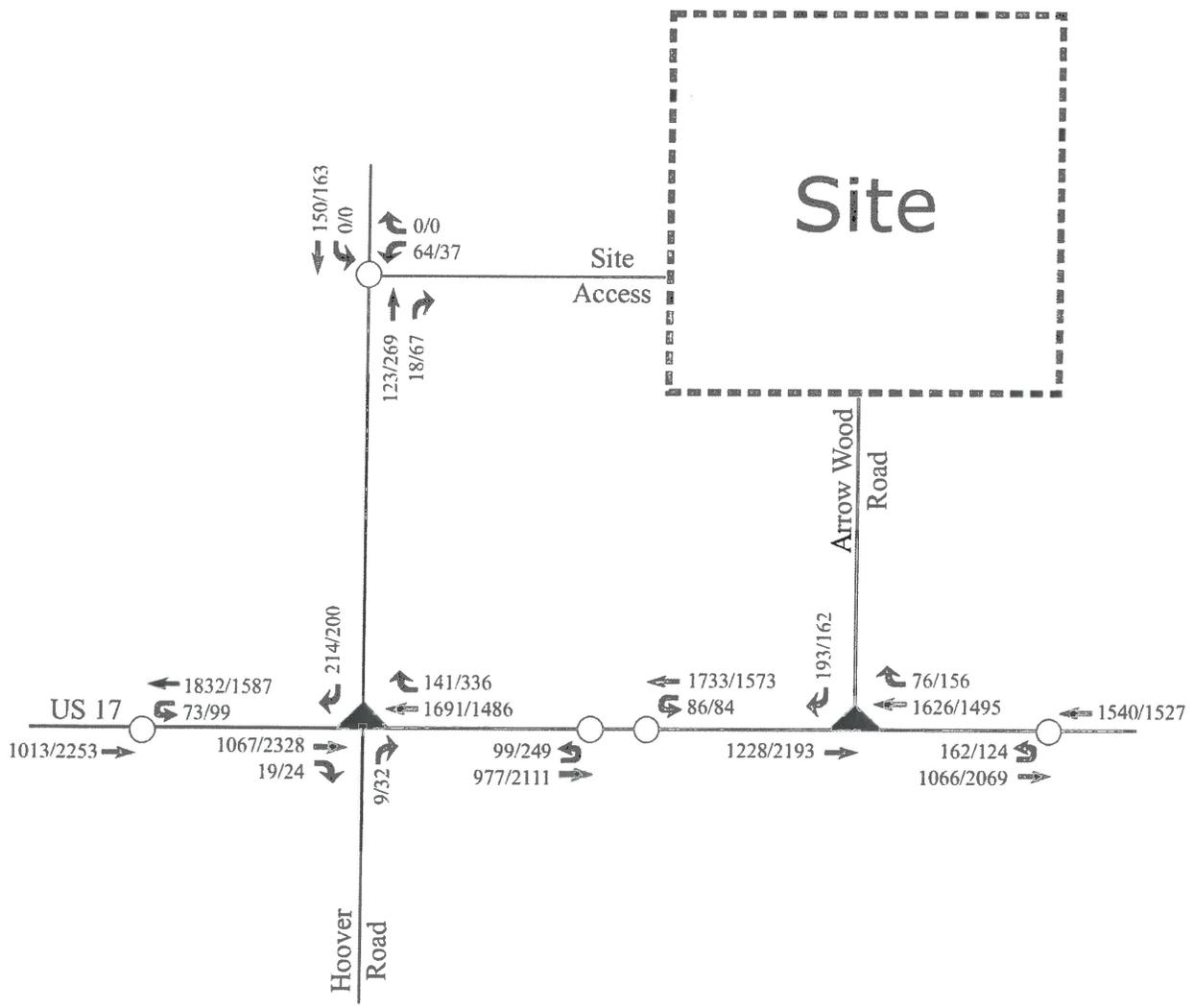
5.2. Analysis of Combined (2019) Peak Hour Traffic

Study intersections were analyzed with both the combined (2019) traffic volumes with and without the TIP U-5732 project using the same methodology previously discussed for existing and background traffic conditions.

The analysis results are presented in Section 7 of this report. Refer to Appendices E-I for the detailed capacity results at each intersection.

LEGEND

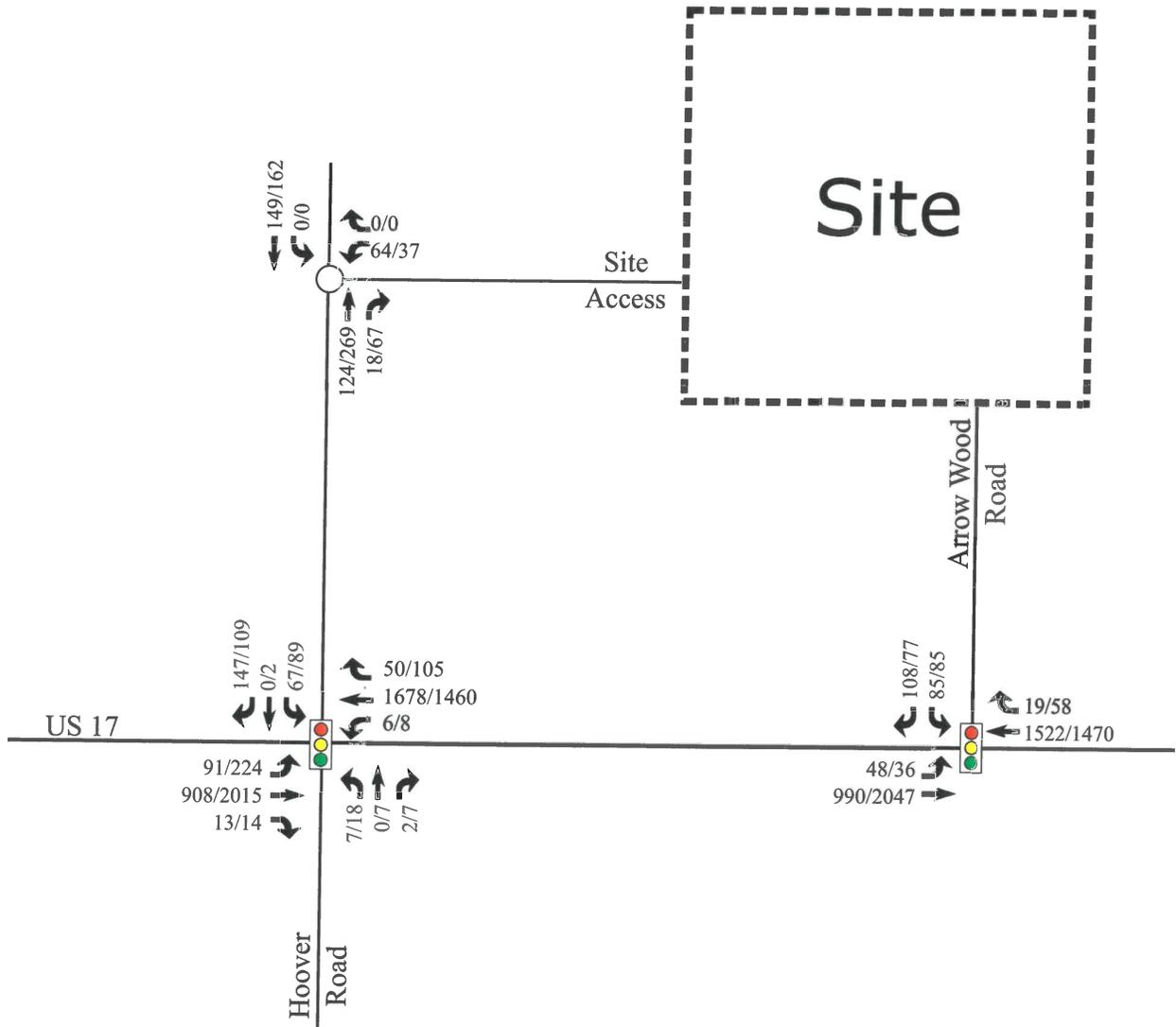
- Unsignalized Intersection
- ▲ Right-In/Right-Out Intersection
- X/Y → AM / PM Peak Hour Traffic



 RAMEY KEMP & ASSOCIATES TRANSPORTATION ENGINEERS	Lea Tract Hampstead, NC	Combined (2019) Peak Hour Traffic with TIP U-5732	
		Scale: Not to Scale	Figure 11

LEGEND

- Unsignalized Intersection
- 🚦 Signalized Intersection
- X/Y → AM / PM Peak Hour Traffic



 <p>RAMEY KEMP & ASSOCIATES TRANSPORTATION ENGINEERS</p>	<p>Lea Tract Hampstead, NC</p>	<p>Combined (2019) Peak Hour Traffic without TIP U-5732</p>	
	<p>Scale: Not to Scale Figure 12</p>		

6. TRAFFIC ANALYSIS PROCEDURE

Study intersections were analyzed using the methodology outlined in the 2010 Highway Capacity Manual (HCM) published by the Transportation Research Board. Capacity and level of service are the design criteria for this traffic study. A computer software package, Synchro (Version 9.1), was used to complete the analyses for most of the study area intersections. Please note that the unsignalized capacity analysis does not provide an overall level of service for an intersection; only delay for an approach with a conflicting movement.

The HCM defines capacity as “the maximum hourly rate at which persons or vehicles can reasonably be expected to traverse a point or uniform section of a lane or roadway during a given time period under prevailing roadway, traffic, and control conditions.” Level of service (LOS) is a term used to represent different driving conditions, and is defined as a “qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers.” Level of service varies from Level “A” representing free flow, to Level “F” where breakdown conditions are evident. Refer to Table 3 for HCM levels of service and related average control delay per vehicle for both signalized and unsignalized intersections. Control delay as defined by the HCM includes “initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay”. An average control delay of 50 seconds at a signalized intersection results in LOS “D” operation at the intersection.

Table 2: Highway Capacity Manual – Levels-of-Service and Delay

UNSIGNALIZED INTERSECTION		SIGNALIZED INTERSECTION	
LEVEL OF SERVICE	AVERAGE CONTROL DELAY PER VEHICLE (SECONDS)	LEVEL OF SERVICE	AVERAGE CONTROL DELAY PER VEHICLE (SECONDS)
A	0-10	A	0-10
B	10-15	B	10-20
C	15-25	C	20-35
D	25-35	D	35-55
E	35-50	E	55-80
F	>50	F	>80

6.1. Adjustments to Analysis Guidelines

Capacity analysis at all study intersections was completed according to the NCDOT Congestions Management Guidelines.

7. CAPACITY ANALYSIS

7.1. US 17 and Hoover Road

The signalized intersection of US 17 and Hoover Road was analyzed under existing (2016) traffic conditions with existing (2016) lane configurations and traffic control. Background (2019) and combined (2019) traffic conditions were analyzed both with and without signal, lane, and volume changes associated with the TIP U-5732 project. Refer to Table 3 for a summary of the analysis results. Refer to Appendix D for the Synchro capacity analysis reports.

Table 3: Analysis Summary of US 17 and Hoover Road

ANALYSIS SCENARIO	APPROACH	LANE CONFIGURATIONS	WEEKDAY AM PEAK HOUR LEVEL OF SERVICE		WEEKDAY PM PEAK HOUR LEVEL OF SERVICE	
			Approach	Overall (sec)	Approach	Overall (sec)
Existing (2016) Conditions	EB	1 LT, 1 TH, 1 TH-RT	A	B (16)	B	B (16)
	WB	1 LT, 2 TH, 1 RT	B		B	
	NB	1 LT-TH, 1 RT	D		D	
	SB	1 LT-TH, 1RT	D		D	
Background (2019) Conditions (without TIP U-5732)	EB	1 LT, 1 TH, 1 TH-RT	A	B (16)	B	B (17)
	WB	1 LT, 2 TH, 1 RT	B		B	
	NB	1 LT-TH, 1 RT	D		D	
	SB	1 LT-TH, 1RT	D		D	
Combined (2019) Conditions (without TIP U-5732)	EB	1 LT, 1 TH, 1 TH-RT	A	B (18)	B	B (20)
	WB	1 LT, 2 TH, 1 RT	C		B	
	NB	1 LT-TH, 1 RT	D		D	
	SB	1 LT-TH, 1RT	D		D	
Background (2019) Conditions (with TIP U-5732)	EB	1 TH, 1 TH-RT	--	N/A	--	N/A
	WB	2 TH, 1 RT	--		--	
	NB	1 RT	B ¹		D ¹	
	SB	1 RT	E ¹		D ¹	
Combined (2019) Conditions (with TIP U-5732)	EB	1 TH, 1 TH-RT	--	N/A	--	N/A
	WB	2 TH, 1 RT	--		--	
	NB	1 RT	B ¹		E ¹	
	SB	1 RT	F ¹		E ¹	
Combined (2019) Conditions with Signalization (with TIP U-5732)	EB	1 TH, 1 TH-RT	--	B (15)	--	B (13)
	WB	2 TH, 1 RT	B		B	
	NB	1 RT	--		--	
	SB	1 RT	D		C	

1. Level of service for minor-street approach

TIP U-5732 improvements to lane configurations and recommended signalizations are shown in bold.

Capacity analysis of existing (2016) conditions indicates the intersection of US 17 and Hoover Road currently operates at an overall LOS B in both the weekday AM and PM peak hours. Under background (2019) and combined (2019) conditions (without TIP U-5732) the intersection is expected to continue operating at an overall LOS B during both weekday peak hours.

Under background (2019) conditions (with TIP U-5732) the southbound approach is expected to operate at LOS E during the weekday AM peak hour and LOS D during the PM peak hour. Under combined (2019) conditions (with TIP U-5732) the southbound approach is expected to drop to LOS F during the AM peak hour and LOS E during the PM peak hour. With the addition of a signal, the intersection is expected to operate at an overall LOS B during the weekday AM peak hour, under combined (2019) conditions (with TIP U-5732).

The current TIP U-5732 plans show the intersection of US 17 and Hoover Road to be an unsignalized right-in / right-out intersection. Due to the delays expected under these conditions, signalization was considered and combined traffic volumes were analyzed utilizing the criteria contained in the *Manual on Uniform Traffic Control Devices* (MUTCD). Under combined (2019) traffic volumes, both weekday AM and PM peak hours warrant a signal. It should be noted that under background (2019) traffic volumes both weekday peak hours warrant a signal. The intersection should be monitored with the completion of TIP U-5732 and a signal should be installed when warranted.

7.2. US 17 and Arrow Wood Road

The signalized intersection of US 17 and Arrow Wood Road was analyzed under existing (2016) traffic conditions with the existing lane configurations and traffic control. Background (2019) and combined (2019) traffic conditions were analyzed both with and without signal, lane, and volume changes associated with the TIP U-5732 project. Refer to Table 4 for a summary of the analysis results. Refer to Appendix E for the Synchro capacity analysis reports.

Table 4: Analysis Summary of US 17 and Arrow Wood Road

ANALYSIS SCENARIO	A P P R O A C H	LANE CONFIGURATIONS	WEEKDAY AM PEAK HOUR LEVEL OF SERVICE		WEEKDAY PM PEAK HOUR LEVEL OF SERVICE	
			Approach	Overall (sec)	Approach	Overall (sec)
Existing (2016) Conditions	EB WB SB	1 LT, 3 TH* 2 TH, 1 RT 1 LT, 1 RT	A B D	A (10)	A B D	A (10)
Background (2019) Conditions (without TIP U-5732)	EB WB SB	1 LT, 3 TH* 2 TH, 1 RT 1 LT, 1 RT	A B D	A (10)	A B D	A (10)
Combined (2019) Conditions (without TIP U-5732)	EB WB SB	1 LT, 3 TH* 2 TH, 1 RT 1 LT, 1 RT	A B E	B (12)	A B D	B (11)
Background (2019) Conditions (with TIP U-5732)	EB WB SB	2 TH 1 TH, 1 TH-RT 1 RT	-- -- C ¹	N/A	-- -- C ¹	N/A
Combined (2019) Conditions (with TIP U-5732)	EB WB SB	2 TH 1 TH, 1 TH-RT 1 RT	-- -- F ¹	N/A	-- -- E ¹	N/A
Combined (2019) Conditions with Signalization (with TIP U-5732)	EB WB SB	1 TH, 1 TH-RT 2 TH 1 RT	-- C D	C (23)	-- C C	C (23)

1. Level of service for minor-street approach.

* A right-turn lane extends ~900 feet past study intersection and is analyzed as an additional through lane.

TIP U-5732 improvements to lane configurations and recommended signalizations are shown in bold.

Capacity analysis of existing (2016) conditions indicates the intersection of US 17 and Arrow Wood Road currently operates at an overall LOS A in both the weekday AM and PM peak hours. Under background (2019) and combined (2019) conditions (without TIP U-5732) intersection LOS is expected to operate at an overall LOS B or better during both weekday peak hours. Under background (2019) conditions (with TIP U-5732) the southbound approach is expected to operate at LOS C during both weekday peak hours.

Under combined conditions (with TIP U-5732) the southbound approach is expected to operate at LOS F during the AM peak hour and LOS E during the PM peak hour. With the addition of a signal, the intersection is expected to operate at an overall LOS C during both weekday peak hours under combined (2019) conditions (with TIP U-5732).

The current TIP U-5732 plans show the intersection of US 17 and Arrow Wood Road to be an unsignalized right-in / right-out intersection. Due to the delays expected under these conditions, signalization was considered and combined (2019) traffic volumes were analyzed utilizing the criteria contained in the Manual on Uniform Traffic Control Devices (MUTCD). Under combined (2019) traffic volumes, both weekday AM and PM peak hours warrant a signal. It should be noted that under background (2019) traffic volumes both weekday peak hours warrant a signal. The intersection should be monitored with the completion of TIP U-5732 and a signal should be installed when warranted.

7.3. Hoover Road and Site Drive 1

The proposed full movement site access on Hoover Road was analyzed under combined (2019) conditions with the proposed lane configuration and traffic control. Refer to Table 5 for a summary of the analysis results. Refer to Appendix F for the Synchro capacity analysis reports.

Table 5: Analysis Summary of Hoover Road and Site Drive 1

ANALYSIS SCENARIO	A P P R O A C H	LANE CONFIGURATIONS	WEEKDAY AM PEAK HOUR LEVEL OF SERVICE		WEEKDAY PM PEAK HOUR LEVEL OF SERVICE	
			Approach	Overall (sec)	Approach	Overall (sec)
Combined (2019) Conditions (with TIP U-5732)	WB	1 LT-RT	B ¹	N/A	B ¹	N/A
	NB	1 TH-RT	--		--	
	SB	1 TH-LT	--		--	
Combined (2019) Conditions (without TIP U-5732)	WB	1 LT-RT	B ¹	N/A	B ¹	N/A
	NB	1 TH-RT	--		--	
	SB	1 TH -LT	--		--	

1. Level of service for minor-street approach.

Capacity analysis of combined (2019) conditions indicates the westbound approach of the intersection of Hoover Road and Site Drive 1 is expected to operate at LOS B during the weekday AM and PM peak hours both with and without TIP-5732.

7.4. U-Turn Intersections for Hoover Road

The proposed U-turn locations for Hoover Road were analyzed under background (2019) and combined (2019) traffic conditions with the lane configurations and volume changes associated with the TIP U-5732 project. Refer to Table 6 for a summary of the analysis results. Refer to Appendix G for the Synchro capacity analysis reports.

Table 6: Analysis Summary of U-Turns for Hoover Road

ANALYSIS SCENARIO	A P P R O A C H	LANE CONFIGURATIONS	WEEKDAY AM PEAK HOUR LEVEL OF SERVICE		WEEKDAY PM PEAK HOUR LEVEL OF SERVICE	
			Approach	Overall (sec)	Approach	Overall (sec)
Westbound U-Turn Background (2019) Conditions (with TIP U-5732)	EB WBU	2 TH 1 U, 2 TH*	-- B ¹	N/A	-- E ¹	N/A
Westbound U-Turn Combined (2019) Conditions (with TIP U-5732)	EB WBU	2 TH 1 U, 2 TH*	-- B ¹	N/A	-- F ¹	N/A
Eastbound U-Turn Background (2019) Conditions (with TIP U-5732)	EBU WB	1 U, 2 TH** 2 TH	C ¹ --	N/A	E ¹ --	N/A
Eastbound U-Turn Combined (2019) Conditions (with TIP U-5732)	EBU WB	1 U, 2 TH** 2 TH	D ¹ --	N/A	F ¹ --	N/A

*Westbound U-turn was analyzed as a southbound left-turn in the synchro analysis

**Eastbound U-turn was analyzed as a northbound left-turn in the synchro analysis

1. Level of service for minor-street approach

TIP U-5732 improvements to lane configurations are shown in bold.

Under background (2019) conditions (with TIP U-5732) the westbound U-turn approach from Hoover Road is expected to operate at LOS B during the weekday AM peak hour and LOS E during the weekday PM peak hour. Under combined (2019) conditions (with TIP U-5732) the westbound U-turn approach is expected to operate at LOS B during the AM peak hour and LOS F during the weekday PM peak hour.

Under background (2019) conditions (with TIP U-5732) the eastbound U-turn approach for Hoover Road is expected to operate at LOS C during the weekday AM peak hour and LOS E during the weekday PM peak hour. Under combined (2019) conditions (with TIP U-5732) the eastbound U-turn approach is expected to operate at LOS D during the weekday AM peak hour and LOS F during the weekday PM peak hour.

It should be noted that with completion of the TIP U-5732 project the SimTraffic simulation displays significant queuing at the westbound U-turn under background (2019) and combined (2019) traffic conditions during weekday PM peak hour. The proposed development is expected to add fewer than 10 vehicles to the westbound U-turn during either weekday peak hour, and is not expected to have a significant contribution to the queuing. In order to mitigate queuing at the westbound U-turn location, a signal may need to be installed with the completion of the TIP U-5732 project, when warranted. It should be noted if a signal is installed at this intersection, it would alleviate the need for a signal at the intersection of US 17 and Hoover Road from a capacity standpoint.

7.5. U-Turn Intersections for Arrow Wood Road

The proposed U-turn locations for Arrow Wood Road were analyzed under background (2019) and combined (2019) traffic conditions were analyzed with the lane and volume changes associated with the TIP U-5732 project. Refer to Table 7 for a summary of the analysis results. Refer to Appendix H for the Synchro capacity analysis reports.

Table 7: Analysis Summary of Westbound U-Turn for Arrow Wood Road

ANALYSIS SCENARIO	A P P R O A C H	LANE CONFIGURATIONS	WEEKDAY AM PEAK HOUR LEVEL OF SERVICE		WEEKDAY PM PEAK HOUR LEVEL OF SERVICE	
			Approach	Overall (sec)	Approach	Overall (sec)
Westbound U-Turn Background (2019) Conditions (with TIP U-5732)	EB WBU	2 TH 1 U, 2 TH*	-- B ¹	N/A	-- D ¹	N/A
Westbound U-Turn Combined (2019) Conditions (with TIP U-5732)	EB WBU	2 TH 1 U, 2 TH*	-- C ¹	N/A	-- E ¹	N/A
Eastbound U-Turn Background (2019) Conditions (with TIP U-5732)	EBU WB	1 U, 2 TH** 2 TH	D ¹ --	N/A	C ¹ --	N/A
Eastbound U-Turn Combined (2019) Conditions (with TIP U-5732)	EBU WB	1 U, 2 TH** 2 TH	D ¹ --	N/A	C ¹ --	N/A

*Westbound U-turn was analyzed as a southbound left-turn in the synchro analysis

**Eastbound U-turn was analyzed as a northbound left-turn in the synchro analysis

1. Level of service for minor-street approach

TIP U-5732 improvements to lane configurations are shown in bold.

Under background (2019) conditions (with TIP U-5732) the westbound U-turn approach for Arrow Wood Road is expected to operate at LOS B during the weekday AM peak hour and LOS D during the weekday PM peak hour. Under combined (2019) conditions (with TIP U-5732) the westbound U-turn approach is expected to operate at LOS C during the weekday AM peak hour and LOS E during the weekday PM peak hour.

Under background (2019) and combined (2019) conditions (with TIP U-5732) the eastbound U-turn approach is expected to operate at LOS D or better during both weekday peak hours.

It should be noted that with completion of the TIP U-5732 project the SimTraffic simulation displays significant queuing at the westbound U-turn under background (2019) and combined (2019) traffic conditions during weekday PM peak hour. In order to mitigate queuing at the westbound U-turn location, a signal may need to be installed with the completion of the TIP U-5732 project, when warranted. It should be noted if a signal is installed at this intersection, it would alleviate the need for a signal at the intersection of US 17 and Arrow Wood Road from a capacity standpoint.

8. CONCLUSIONS

This Traffic Impact Analysis was conducted to determine the potential traffic impacts of the proposed Lea Tract, located north of US 17, and east of Hoover Road in Hampstead, North Carolina. The proposed development is expected to have residential development and be built out in 2019.

Site access is proposed via one full movement site access on Hoover Road, and one full movement site access to Arrow Wood Road that connects to US 17.

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

- Existing (2016) Traffic Conditions
- Background (2019) Traffic Conditions with TIP U-5732
- Background (2019) Traffic Conditions without TIP U-5732
- Combined (2019) Traffic Conditions with TIP U-5732
- Combined (2019) Traffic Conditions without TIP U-5732

It is estimated that the proposed development will generate 3,020 total site trips on the roadway network during a typical 24-hour weekday period. Of the daily traffic volume, it is anticipated that 234 trips (52 entering and 182 exiting) will occur during the AM peak hour and 298 (191 entering and 107 exiting) will occur during the PM peak hour.

The TIA report indicates the Lea Tract development could cause minor impacts to the adjacent roadway network in comparison to the impacts anticipated by the background growth. Under the scenario with the current planned TIP U-5732 project, it is recommended that the following intersections are monitored for signalization:

- US 17 and Hoover Road
- US 17 and Arrow Wood Road
- US 17 and westbound U-Turn for Hoover Road
- US 17 and westbound U-turn for Arrow Wood Road

9. RECOMMENDATIONS

Based on the findings of this study, specific geometric roadway improvements have been identified and are recommended to accommodate future traffic conditions. See a more detailed description of the recommended improvements below. Refer to Figures 13 and 14 for illustrations of the recommended lane configuration.

Background Improvements:

Improvements at the Westbound U-turn from Hoover Road intersection are recommended in background (2019) conditions (with TIP U-5732), regardless if whether the proposed site is built or not.

US 17 and Westbound U-Turn from Hoover Road

- Monitor the intersection for signalization. Install a traffic signal when warranted and coordinate the signal timings with the signal at the intersection of US 17 and NC 210.

Improvements by NCDOT TIP U-5732:

US 17 and Hoover Road

- Restrict intersection to right-in / right-out with stop sign control.
- Construct an unsignalized U-turn location roughly 700 ft west of the intersection of US 17 and Hoover Road. Provide an exclusive U-turn lane on the westbound approach of US 17 with 500 ft of storage and appropriate taper.
- Construct an unsignalized U-turn location roughly 700 ft east of the intersection of US 17 and Hoover Road with stop sign control. Provide an exclusive U-turn lane on the eastbound approach of US 17 with 900 ft of storage and appropriate taper.

US 17 and Arrow Wood Road

- Restrict intersection to right-in / right-out with stop-sign control.
- Construct an unsignalized U-turn location roughly 800 ft west of the intersection of US 17 and Arrow Wood Road. Provide an exclusive U-turn lane on the westbound approach of US 17 with 500 ft of storage and appropriate taper.

- Construct an unsignalized U-turn location roughly 1,500 ft east of the intersection of US 17 and Arrow Wood Road. Provide an exclusive U-turn lane on the eastbound approach of US 17 with 500 ft of storage and appropriate taper.

Recommended Improvements by Lea Tract with TIP U-5732:

Hoover Road and Site Drive 1

- Construct a westbound approach to provide site access with one ingress lane and one egress lane.
- Provide stop-sign control on the westbound approach of Site Drive 1.

US 17 and Hoover Road

- Monitor the intersection for signalization. Install a traffic signal when warranted and coordinate the signal timings with the signal at the intersection of US 17 and NC 210. *
- * This signal will no longer be necessary from a capacity standpoint if the US 17 and westbound U-turn from Hoover Road intersection is signalized.

US 17 and Arrow Wood Road

- Provide site access by tying into existing Arrow Wood Road providing one ingress lane and one egress lane.
- Monitor the intersection for signalization. Install a traffic signal when warranted and coordinate the signal timings with the signal at the intersection of US 17 and NC 210. **
- ** This signal will no longer be necessary from a capacity standpoint if the US 17 and westbound U-turn from Arrow Wood Road intersection is signalized.

US 17 and Westbound U-Turn from Arrow Wood Road

- Monitor the intersection for signalization. Install a traffic signal when warranted and coordinate the signal timings with the signal at the intersection of US 17 and NC 210.

Recommended Improvements by Lea Tract without TIP U-5732:

Hoover Road and Site Drive 1

- Construct a westbound approach to provide site access with one ingress lane and one egress lane.
- Provide stop-sign control on the westbound approach of Site Drive 1.

US 17 and Arrow Wood Road

- Provide site access by tying into existing Arrow Wood Road providing one ingress lane and two egress lanes. It should be noted that the pavement provided for the left-turn lane has adequate storage for the expected traffic volumes and the second egress lane can be tapered.

LEGEND

- Unsignalized Intersection
- 🚦 Signalized Intersection
- ▲ Right-In/Right-Out Intersection
- ➡ Existing Lane
- ➡ Improvements by NCDOT STIP U-5732
- ➡ Background Improvements
- ➡ Improvements by Developer
- X' Storage (In Feet)

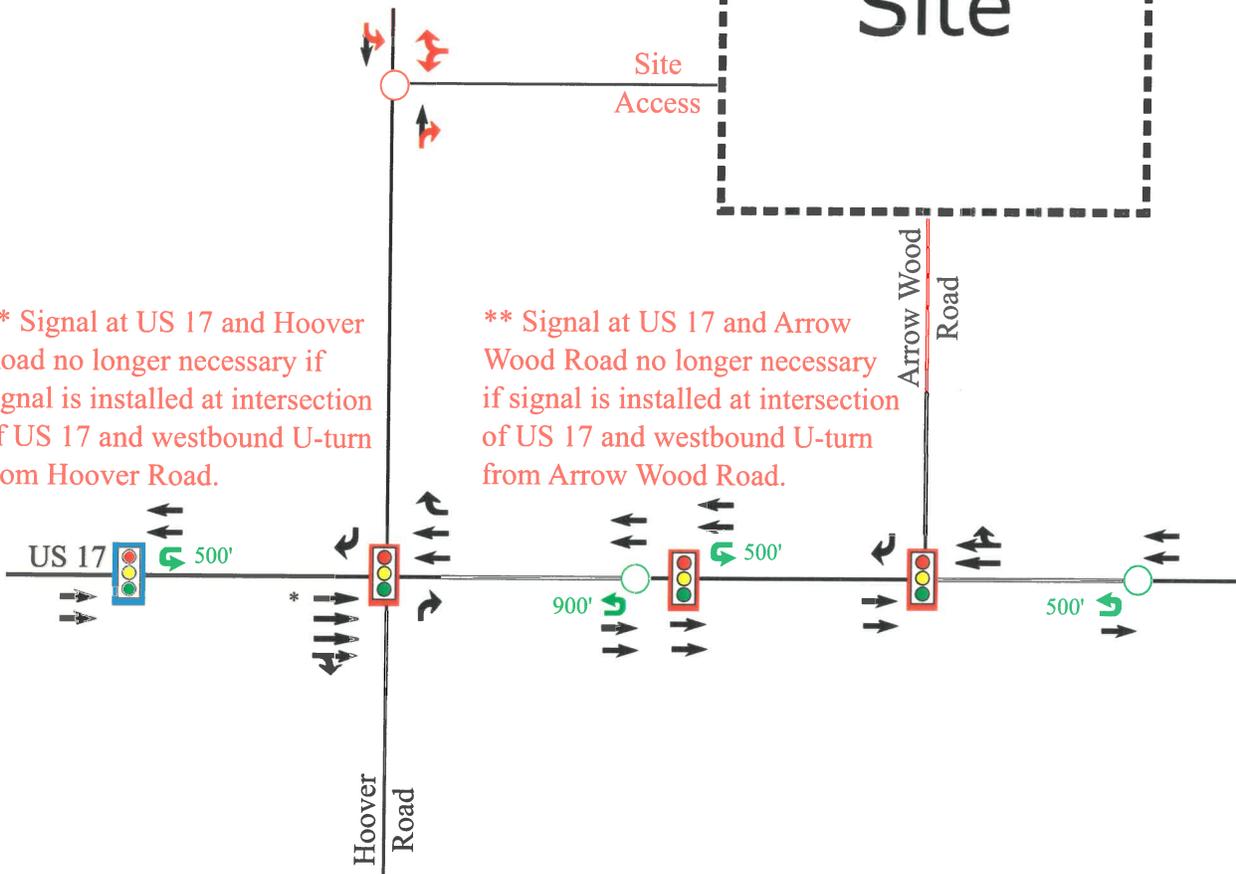


* U-turn storage that extends ~200 feet past intersection is illustrated as through lane



** Signal at US 17 and Hoover Road no longer necessary if signal is installed at intersection of US 17 and westbound U-turn from Hoover Road.

** Signal at US 17 and Arrow Wood Road no longer necessary if signal is installed at intersection of US 17 and westbound U-turn from Arrow Wood Road.



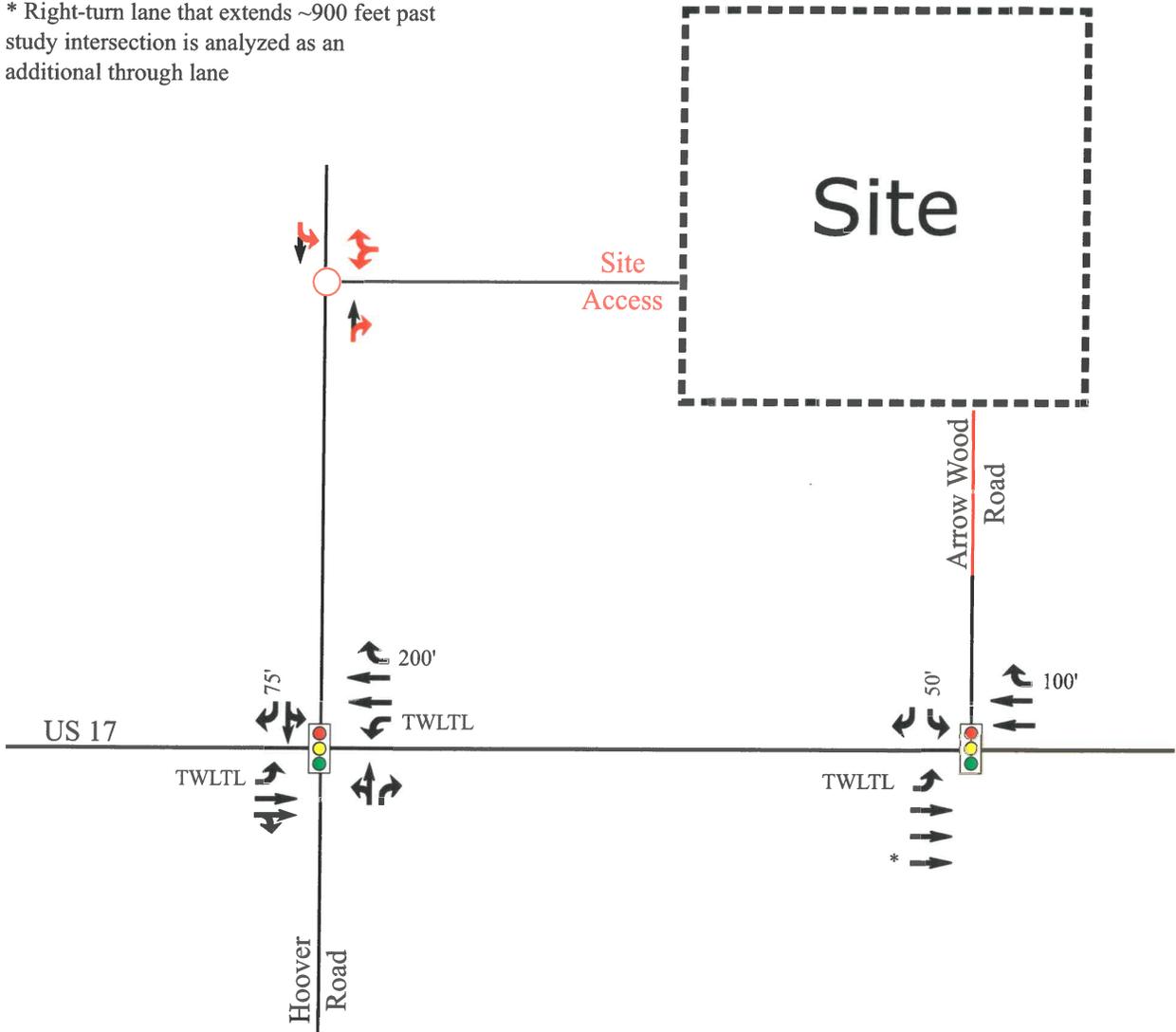
	Lea Tract Hampstead, NC	Recommended Lane Configurations with TIP U-5732	
		Scale: Not to Scale	Figure 13

LEGEND

- Unsignalized Intersection
- 🚦 Signalized Intersection
- ➡ Existing Lane
- x' Storage (In Feet)
- ➡ Improvements by Developer



* Right-turn lane that extends ~900 feet past study intersection is analyzed as an additional through lane



Lea Tract
Hampstead, NC

Recommended Lane Configuration without TIP U-5732	
Scale: Not to Scale	Figure 14

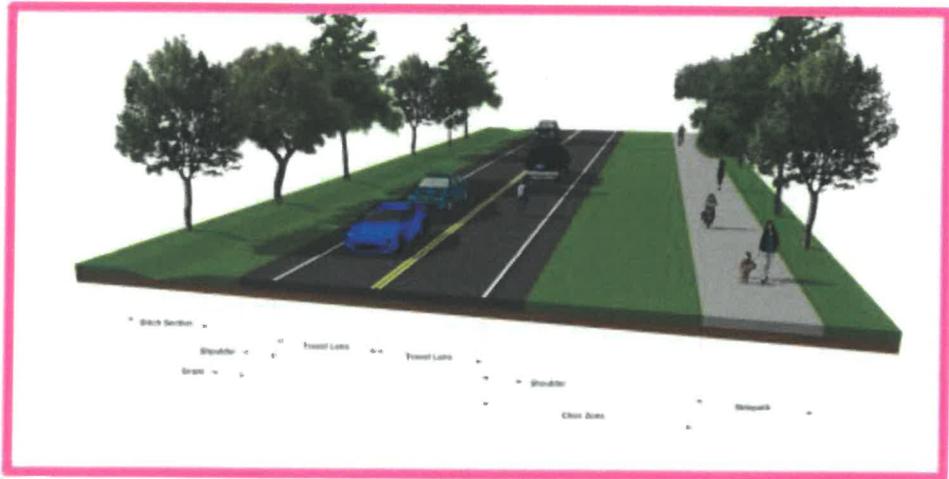


Figure 20: Baseline with Sidepath

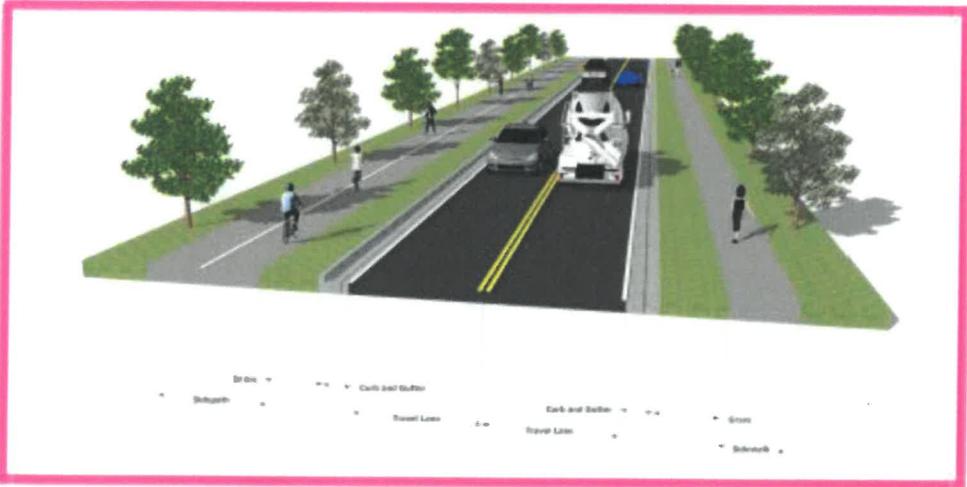


Figure 25: Residential with Sidepath (one side) or Sidewalks (both sides)

Group 3

Residential with Sidepath (one side) <u>or</u> Sidewalk (both sides)	This facility will include: <ul style="list-style-type: none">• two travel lanes and• either a sidepath on one side <u>or</u>• sidewalks on both sides.
Baseline with Sidepath	This facility will include: <ul style="list-style-type: none">• two travel lanes and• one separated sidepath.

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MEMORANDUM

To: Pender County Planning Board

From: Planning Staff

Date: August 2, 2016

RE: Upcoming Public Hearing on UDO Section 7.5 Street Design

After months of reviewing various standards and drafting a variety of options, planning staff has teamed with Pender County Emergency Management to generate a draft of updates to the County's regulations on dead end streets and subdivision requirements. This draft is provided to generate conversation regarding the development of dead end streets in the future. Staff from Emergency Management will join this discussion at the August 2, 2016 Planning Board Meeting.

Currently, as written, the Pender County Unified Development Ordinance Section 7.5.1 F specifies:

Permanent dead end streets (cul-de-sacs) or temporary dead end (stub) streets shall be no longer than 1,000 ft. unless it is demonstrated by the developer that the configuration of the property prevents its development without longer streets to provide access to the lots and common area to be subdivided. Temporary dead end or stub streets shall provide turn around capabilities to meet NCDOT requirements. The Cul-de-sac end shall be a bulb type with minimum radii as follows: Curb & Gutter Section: RW = 45', Pavement = 37' to gutter edge, Shoulder Section: RW = 50', Pavement = 35'.

The current language is no longer sufficient in providing guidelines to the development community. At Technical Review Committee meetings and throughout the review process, the Fire Department often comments that more pavement width is necessary to accommodate their needs. One reason for this is that fire equipment is much larger than it used to be. This adds time and expense to the design and review process.

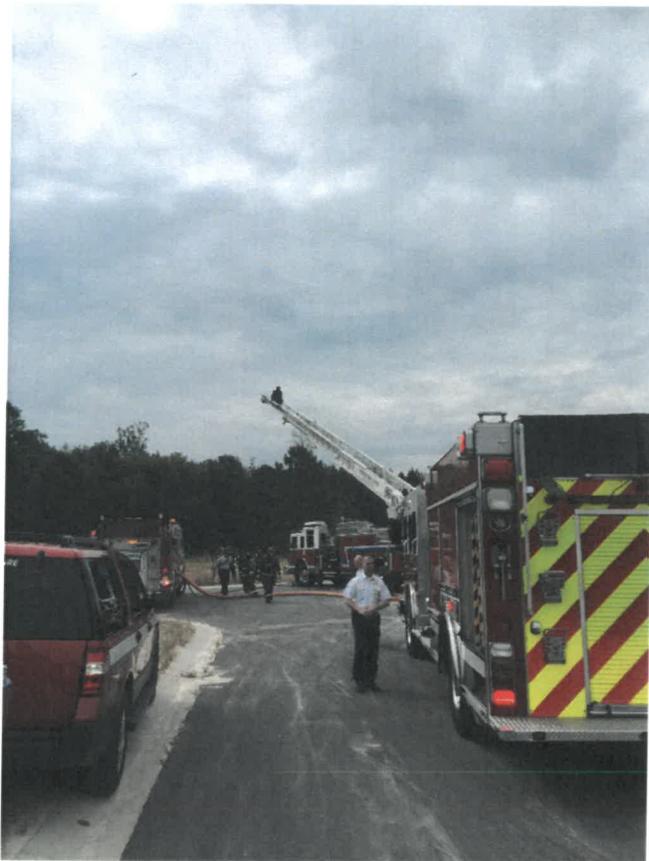
The proposed revisions are an attempt to set one standard that applies to all new development, while also allowing developers several options to suit the landscape. Additionally, language has been added to require more than one ingress and egress point when a subdivision contains more than 30 lots. This is to avoid trapping residents in when an emergency call is in progress.

What is proposed is a result of multiple field exercises. On June 29, 2016 the Fire Department demonstrated entire emergency scenarios. Staff experienced live demonstrations in multiple locations representing different cul de sac sizes. The locations included Avendale (a 30-foot radius cul de sac),

Wyndwater (a 35-foot radius cul de sac) and King's Landing (a 40-foot radius cul de sac). Additionally, a mock emergency was observed at the "Y" turnaround in the Wyndwater residential subdivision. These exercises demonstrated a need to require 80-foot wide cul de sacs in order to accommodate the equipment necessary to respond effectively. They also demonstrated that there is no benefit to requiring a larger cul de sac simply because a street is longer. The setup procedures are the same regardless of the street size.

Discussion is requested on the possibility of making a fire official a signatory on final plats. There is potential in the future to adopt additional standards from Appendix D, which Emergency Services Staff are prepared to explain during discussion. A draft of the ordinance amendments has been attached, as well as photographs from the emergency demonstrations.

Avendale Fire Scene – Typical Response Vehicles and Setup with a 60-foot cul de sac



Wyndwater Fire Scene – Typical Response Vehicles and Setup with a 70-foot cul de sac



Wyndwater Fire Scene –Typical Vehicles and Setup with a Y Intersection



Kings Landing Fire Scene – Typical Setup with a 80-foot cul de sac

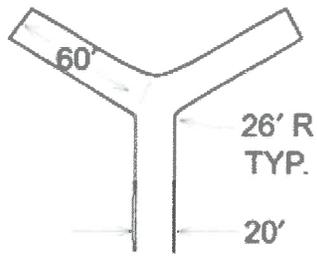


7.5 STREET DESIGN

7.5.1 Public and Private Street Design

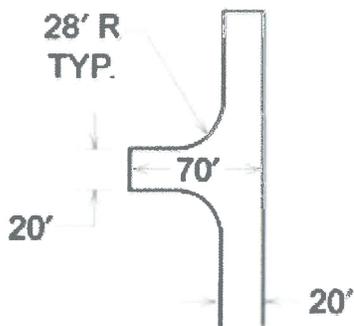
- A. Layout of streets as to arrangement, width, grade, character, and location shall conform to the following:
- 1) Pender County Collector Street Plan, Pender County Transportation Plan or other approved State of Federal Transportation Improvement Plan.
 - 2) Adjoining street systems,
 - 3) Existing, planned and proposed streets, topographic, drainage and other natural features of the property,
 - 4) To provide for continuity in existing streets and proposed streets,
 - 5) Provide adequate right-of-way for collector streets,
 - 6) Reasonable access will be provided to adjacent properties for development.
- B. Spite strips along development boundaries preventing access to streets from adjacent properties are prohibited.
- C. Street Alignment – local residential street intersections should be directly aligned if possible.
- D. When such intersections cannot be aligned, they shall be offset centerline to centerline by not less than 125 ft. Intersections of Collector streets as defined herein or shown on the Pender County Collector Street Plan, Pender County Transportation Plan or other approved State Transportation Improvement Plan.
- E. Streets should intersect as nearly as possible at right angles.
- F. Permanent dead end streets (cul-de-sacs) or temporary dead end (stub) streets shall be no longer than 1,000 ft. unless it is demonstrated by the developer that the configuration of the property prevents its development without longer streets to provide access to the lots and common area to be subdivided.
- G. Temporary, dead end, or stub streets **between 150 and 1,000 feet in length** shall provide turn around capabilities to meet **one of the following requirements**: ~~NCDOT requirements. The Cul-de-sac end shall be a bulb type with minimum radii as follows: Curb & Gutter Section: RW = 45', Pavement = 37' to gutter edge, Shoulder Section: RW = 50', Pavement = 35'.~~
- 1) A cul de sac with at least 90-feet of right of way including 80-feet of pavement.
 - 2) A Y intersection (See Figure G1 for specifications)
 - 3) A T Intersection (See Figure G2 for specifications)
 - 4) A T/Hammerhead intersection (see Figure G3 for specifications)

FIGURE G1



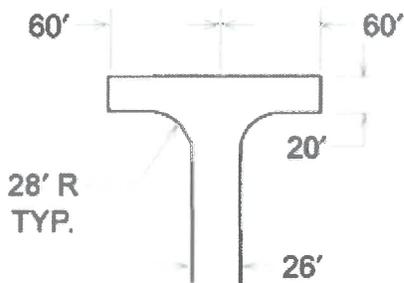
60-FOOT "Y"

FIGURE G2



ACCEPTABLE ALTERNATIVE TO 120-FOOT HAMMERHEAD

FIGURE G3



120-FOOT HAMMERHEAD

H. For new subdivisions exceeding 30 lots, more than one method of ingress and egress must be provided. The turning radius must be approved by the Pender County Fire Marshal or their designee.

G. I. Applicants for subdivision approval shall obtain approval for street names from the Pender County Addressing Coordinator. A copy of the approved preliminary plat with approved street names must be submitted to the Administrator within 30 days of approval of the preliminary plat and prior to final plat submission.

H. J. Sight triangles as required in the NCDOT Secondary Roads Standards shall be provided at all street intersections.

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MEMORANDUM

To: Pender County Planning Board

From: Planning Staff

Date: August 2, 2016

RE: Upcoming Text Amendments

Staff has been working to update the Unified Development Ordinance to clarify, reorganize and modernize the document. Since the last update, the Text Amendment Subcommittee has met to review most of these issues. Staff used their input to further draft amendments. Please see commentary and suggested text in this memo. Final amendments will be presented for public hearing in the future.

Collector Street Policies

As the department has begun to see projects that require the application of the Collector Street Plan, the development community has presented some concerns. It has become evident through application that it may be necessary to differentiate several types of collector streets, as well as offer some administrative relief when certain criteria are met. These items will be discussed. Other amendments resulting from the Collector Street Plan adoption are also presented for your review, and the third party agreement contained in the Collector Street Plan will be added into the Forms portion Appendix of the UDO.

The following text will be added to Section 7.5 Street Design:

7.5.1 Public and Private Street Design (I):

The following notice must be posted on temporary stub streets: "NOTICE THIS RIGHT-OF-WAY MAY BE EXTENDED IN THE FUTURE TO OTHER DEVELOPMENT AND TO OTHER ROADWAYS. COUNTY OF PENDER."

Section 7.5 is proposed to read as follows:

7.5 STREET DESIGN

7.5.1 Public and Private Street Design

A. Layout of streets as to arrangement, width, grade, character, and location shall conform to the following:

1) Pender County Collector Street Plan, Pender County Transportation Plan or other approved State of Federal Transportation Improvement Plan.

a.) In any instance that a site plan or development plan layout does not conform to the specific layout of roadways as proposed in an adopted County plan as referred above, then the applicant must demonstrate the conformance with the spacing standards as detailed below;

Zoning District	Intensity	Access Function	Approximate Street Spacing
Environmental Conservation	<i>No Collector Streets</i> Little to no development	N/A	N/A
Rural Agricultural	<i>Lowest Intensity</i> Less than 2 dwelling units per acre	Highest	3,000 to 6,000 feet apart
General Business, General Industrial, Industrial Transition, Manufactured Housing Community, Residential Performance	<i>Medium Intensity</i> 2-4 dwelling units per acre	High	1,500 to 3,000 feet apart
Residential Mixed, Office & Institutional, Planned Development	<i>High Intensity</i> More than 4 dwelling units per acre/activity nodes	Medium	750 to 1,500 feet apart

b.) Any deviation from the required spacing standards, width, grade, or character of the streets may be granted based on the approval of the Administrator. Criteria for approval may include;

- i. delineation of wetlands as approved by the USACE in the identified right of way when no other arrangement can be made;
- ii. identified riparian areas or Areas of Environmental Concern;
- iii. XXX significant trees, as defined in Section 8.2.1.A.2;
- iv. existing structures located on the subject property and no other arrangement can be made;
- v. building on an existing lot could not occur without the waiver or modification based on the specific group and Cross Section given the defined spacing standards may be achieved by other means;
- vi. there is insufficient right-of-way to allow a full width street Cross Section and additional right-of-way cannot be provided,
- vii. the required street right-of-way would occupy an XXX percentage of the total land area of the tract;
- viii. The existing infrastructure (a) does not meet current standards, (b) is and will remain functionally equivalent to current standards, and ~~(c) there is little likelihood that current standards will be met in the area; and/or~~

2) Adjoining street systems,

3) Existing, planned and proposed streets, topographic, drainage and other natural features of the property,

- 4) To provide for continuity in existing streets and proposed streets,
 - 5) Provide adequate right-of-way for collector streets,
 - 6) Reasonable access will be provided to adjacent properties for development.
- B. Spite strips along development boundaries preventing access to streets from adjacent properties are prohibited.
 - C. Street Alignment – local residential street intersections should be directly aligned if possible.
 - D. When such intersections cannot be aligned, they shall be offset centerline to centerline by not less than 125 ft. Intersections of Collector streets as defined herein or shown on the Pender County Collector Street Plan, Pender County Transportation Plan or other approved State Transportation Improvement Plan.
 - E. Streets should intersect as nearly as possible at right angles.
 - F. Permanent dead end streets (cul-de-sacs) or temporary dead end (stub) streets shall be no longer than 1,000 ft. unless it is demonstrated by the developer that the configuration of the property prevents its development without longer streets to provide access to the lots and common area to be subdivided. Temporary dead end or stub streets shall provide turn around capabilities to meet NCDOT requirements. The Cul-de-sac end shall be a bulb type with minimum radii as follows: Curb & Gutter Section: RW = 45', Pavement = 37' to gutter edge, Shoulder Section: RW = 50', Pavement = 35'.
 - G. Applicants for subdivision approval shall obtain approval for street names from the Pender County Addressing Coordinator. A copy of the approved preliminary plat with approved street names must be submitted to the Administrator within 30 days of approval of the preliminary plat and prior to final plat submission.
 - H. Sight triangles as required in the NCDOT Secondary Roads Standards shall be provided at all street intersections.

Change of Use Permit Requirements

The County is considering simplifying the process of issuing a change of use permit. This is an issue that arises frequently when a new business wants to use an existing building. In some cases the layers of requirements are discouraging, particularly when the business locating in the existing building is similar to the previous use. Section 3.6. of the Pender County UDO describes the process for Minor Site Development Plans. This will be the area of the UDO to potentially update to simplify the change of use process. The text is proposed to read as follows:

MINOR SITE DEVELOPMENT PLANS

3.6.1 Intent

The intent of the minor site development plan is to enable a non-residential project to be illustrated at sufficient scale with less design and engineering efforts than a major site development plan. This type of plan is suitable for **the following uses**: small building additions, ~~new accessory buildings added to an existing site,~~ permanent or seasonal **operations**, ~~or~~ small scale vendors added to existing business sites, ~~or~~ **and certain change of uses. Change of uses that qualify are any change from residential, any change from office to commercial or industrial, and any change to a restaurant. An exact change of use (i.e. garage to garage or restaurant to restaurant) shall not require a minor site development plan.**

3.6.2 Activities Requiring Minor Site Development Plans

- A. ~~Any project including building additions of less than a 10% increase to the floor area of the existing structure or;~~
Any project including a building addition over 10% of the floor area of the existing structure.
- B. Any use proposing to occupy **or renovate** an existing building, structure, or unit ~~or any new use proposing construction within an existing building, structure, or unit~~
- C. Any new structure(s) up to 2,500 square feet in area **excluding those defined as an accessory structure.**
- D. Any new structure that will not increase the impervious surface area to produce additional runoff creating the need for additional stormwater management practices or facilities.
- E. ~~No subdivision of new parcels are proposed.~~ **A minor site plan shall not be required if:**
 - E1. The new use does not require a minor site development plan
 - E2. The new use is the exact same as the previous use
 - E3. The new use is considered an accessory structure

In situations where E(1) E(2) or E(3) are fulfilled, the project may be forwarded to Environmental Health, the Fire Marshal, the Inspections Division, Addressing Coordinator and NCDOT for a review prior to obtaining a change of use permit. Requirements for a change of use permit are located in Section 6.9.

3.6.3 Review

- A. Applicants shall submit two copies of the site plan to the Administrator for review, along with applicable fees and completed application materials. Final approval of the site plan shall be issued by the Administrator.
- B. The Minor Site Plan must meet all the requirements prescribed in Section 6.2, Minor Site Development Contents.
- C. The Administrator shall forward the site plan to the Technical Review Committee for review. The Committee shall make recommendations to the Administrator concerning whether the plan meets the requirements of the Pender County Code and other State or Federal regulations as appropriate within five (5) business days.
- D. The Administrator shall determine and provide comments to the applicant whether the site plan is in conformance with a previously approved Master Development Plan or if an MDP is not required, the site plan is in conformance with applicable sections of this Ordinance.
- E. For projects in the PD zoning district, the Administrator may request that the site plan be presented to the Planning Board for its review.
 - 1 The Planning Board may make recommendations to the Administrator concerning the site plan.
 - 2 The Administrator shall incorporate such recommendations into the review of the site plan.
- F. Approval of the site plan shall expire within two years of the approval date unless building permits have been obtained for construction.

- G. The Administrator shall periodically inspect the site during construction to ensure that the site plan requirements are met.
- H. Final Zoning approval shall not be issued for any use or site requiring a site plan until all requirements shown on the approved site plan have been met and all improvements shown on the site plan have been provided. If structures and improvements have been provided sufficient to guarantee public health and safety but if all site plan improvements have not been completed, a certificate of occupancy shall only be issued if a bond with surety or other acceptable guarantees have been provided to insure that all approved improvements will be provided. Such guarantees shall be for a limited time period acceptable to the Administrator, during which time said improvement shall be completed.

It is also proposed a definition is added to the appendix of a principal structure. Additionally, a new permit application will need to be added to the Forms Section.

Buffers for Adjacent Property Owner Notifications

Staff has researched amending notification policies to adjacent property owners. It has been suggested that the requirements should be expanded further than the direct, adjacent property owners as outlined in NC GS § 153A-343.(a) Method of procedure. After examining illustrations of various buffers, the Text Amendment Subcommittee is recommending expanding the notification procedures to properties within 500-feet. The Statute requires notification for zoning map amendments, however Pender County follows the same process for Master Development Plan, Major Subdivisions, Variances and Special Use Permits.

One consideration is the cost of expanding notifications. We require that two sets of stamped envelopes be provided for each address in the buffer. The additional postage required cost will be borne by the applicant.

The following Ordinance Sections will be updated to reflect the notification requirements policy of 500-feet:

- Rezoning (Article 3)
- Master Development Plans (Article 3)
- Major Subdivisions (Article 3)
- Special Use Permits (Article 3)
- Variance requests (Article 3)
- Conditional Rezoning (Article 4)

Easement Criteria

Currently there are standards scattered throughout the Ordinance in various subdivision regulations regarding easements. Staff is advising the removal of these references and organizing them consistently in one place. The text is proposed to read as follows:

FAMILY DIVISION

6.6.1 Limitations

- A. Family subdivisions are permitted on parcels that have been created and recorded in the Registry before March 29, 2004.

- B. A total of three parcels (excluding the remnant parcel, if the remnant parcel meets the requirements of this Ordinance) per qualified resident household will be allowed to be created under the family subdivision provisions.
- C. The division does not create a new public or private street.

6.6.2 Requirements

- A. The plat shall be clearly designated "Family Subdivision" in bold letters,
- B. Grantor and Grantee statement, located in Appendix D, shall appear on the plat and be signed by the Grantor(s) and Grantee(s) prior to approval.
- C. Certification by the Licensed Professional preparing the plat that each lot is adjacent to a natural drainage way or perennial stream or a 20 ft. drainage easement is recorded from each lot toward a natural drainage way or a perennial stream or if the lot or lots front on a NCDOT maintained road, approval from NCDOT for such lots to drain to the public road,
- D. The plat shows any designated Special Flood Hazard Areas located within the subdivision,
- E. The plat shows any designated Areas of Environmental Concern located within the subdivision
- F. An Improvement Authorization Permit from Environmental Health for each lot to be created, a soil suitability analysis for each lot to be created or approval to connect to existing public sewer
- G. The lots, other than those restricted for building development, shown on the plat meet the requirements of this Ordinance.
- H. The lots created have access to an access easement as defined in this Ordinance. **See Section 7.5.4 Easements.**
- ~~I. The access easement must provide access to a public street.~~
- J. Waste water disposal requirements – One of the following must be met:
 - 1) An Improvement Authorization Permit has been issued for each of the parcels,
 - 2) The soil suitability analysis shows that at least 5,000 sq. ft. of each lot is suitable for traditional on site waste disposal and the required 5000 sq. ft. is not within 10 ft of any lot boundary,
 - 3) Approval has been granted to connect to public sewer or community sewer or
 - 4) Lots not meeting the requirements of 1, 2, or 3 are indicated by the following note:
 "THIS PARCEL CANNOT BE USED FOR BUILDING DEVELOPMENT, UNLESS AN APPROVED WASTE WATER DISPOSAL METHOD HAS BEEN APPROVED AND PERMITTED BY THE PENDER COUNTY ENVIRONMENTAL HEALTH DEPARTMENT OR APPROPRIATE STATE AGENCY OR UNLESS A NEW PLAT IS APPROVED AND RECORDED AS REQUIRED UNDER THIS ORDINANCE."
 a) For alternative, see Design Requirements, Lots Section of this Ordinance for "Special Purpose Lots"
- ~~K. The lots created have either direct access to a public street, private street or private access easement as defined in this Ordinance.~~
- ~~L. A minimum passable travel way 20 feet wide shall be provided within a forty five (45') foot easement at time of zoning approval.~~
- M. Clearing and grubbing shall be completed five feet of each edge of the travel way;

- N. Maintenance. Upon determination by the Administrator that such travel way as approved are not passable, the Administrator may, in addition to other remedies, prevent issuance of any further development approvals until such travel ways are in a proper state of maintenance as determined by the Administrator.
- O. The Administrator shall review the subdivision to insure that the development will not block future access to properties that are adjacent to the lots.
- ~~P. The plat contains the following note: "All new access easements shown or designated on this plat, include the transfer of an easement to public entities and public utilities for the purpose of installation and maintenance of water, sewer, electric and communication lines."~~
- ~~Q. The plat must contain the following note: "All new access easements shown or designated on this plat include the transfer of an easement to Pender County, its employees and agents for access for emergency personnel (police, fire & rescue) and Pender County and its employees for administration of all Pender County Ordinances."~~

THREE LOT DIVISION - NCDOT ROAD

6.7.1 Limitations – The following limitations will apply to three lot subdivisions:

- A. Three lot subdivisions located on an existing NCDOT maintained or other public road will be limited to no more than three such parcels (excluding the remnant parcel, if the remnant parcel meets the requirements of this Ordinance) being created from any parcel that had been created and recorded in the Registry before March 29, 2004.
- B. The division does not create a new public or private street.

6.7.2 Requirements

The following shall be submitted to the Administrator with each proposal for a division of up to three lots fronting on an existing NCDOT maintained public road:

- A. Plat prepared as required by NCGS §47-30, The plat shall be clearly designated "Three Lot Subdivision on NCDOT Road" in bold letters,
- B. Certification by the Licensed Professional preparing the plat that each lot is adjacent to a natural drainage way or perennial stream or a 20 ft. drainage easement is recorded from each lot toward a natural drainage way or a perennial stream or if the lot or lots front on a NCDOT maintained road, approval from NCDOT for such lots to drain to the public road,
- C. The plat shows any designated Special Flood Hazard Areas located within the subdivision
- D. The plat shows any designated Areas of Environmental Concern located within the subdivision,
- E. An Improvement Authorization Permit from Environmental Health for each lot to be created, a soil suitability analysis for each lot to be created or approval to connect to existing public sewer.

- F. The lots, other than those restricted for building development, shown on the plat meet the requirements of this Ordinance,
- G. Waste water disposal requirements – One of the following must be met:
 - 1) An Improvement Authorization Permit has been issued for each of the parcels,
 - 2) The soil suitability analysis shows that at least 5,000 sq. ft. of each lot is suitable for traditional on site waste disposal and the required 5,000 sq. ft. is not within 10 ft of any lot boundary,
 - 3) Approval has been granted to connect to public sewer or community sewer or
 - 4) Lots not meeting the requirements of 1, 2, or 3 are indicated by the following note:
 “THIS PARCEL CANNOT BE USED FOR BUILDING DEVELOPMENT, UNLESS AN APPROVED WASTE WATER DISPOSAL METHOD HAS BEEN APPROVED AND PERMITTED BY THE PENDER COUNTY ENVIRONMENTAL HEALTH DEPARTMENT OR APPROPRIATE STATE AGENCY OR UNLESS A NEW PLAT IS APPROVED AND RECORDED AS REQUIRED UNDER THIS ORDINANCE.”
 - a) For alternative, see Design Requirements, Lots Section of this Ordinance for “Special Purpose Lots.”
- H. The lots created have access to a NCDOT maintained public street.
- I. The Administrator determines that the subdivision complies with the limitations on Three Lot Subdivisions contained in the General Provisions Section of this Ordinance.
- J. The Administrator shall review the subdivision to insure that the development will not block future access to properties that are adjacent to the lots.
- K. The plat contains an ownership and dedication statement signed by the owner or owners in the format provided by this Ordinance.
- L. The plat contains the following note: “All new access easements shown or designated on this plat, include the transfer of an easement to public entities and public utilities for the purpose of installation and maintenance of water, sewer, electric and communication lines

1.1 THREE LOT DIVISION – PRIVATE ROAD/ACCESS EASEMENT

6.8.1 Limitations - The following limitations will apply to three lot subdivisions:

- A. Three lot subdivisions located on an access easement will be limited to no more than three such parcels (excluding the remnant parcel, if the remnant parcel meets the requirements of this Ordinance) being created from any parcel that had been created and recorded in the Registry before March 29, 2004.
- B. Three lot subdivisions located on an access easement as defined in this Ordinance will be limited to three such parcels (excluding the remnant parcel, if the remnant parcel meets the requirements of this Ordinance) being created from any parcel that had been created and recorded in the Registry before March 29, 2004 or any parcel that has been created and approved by the Administrator under the provisions of this Ordinance.
- C. The division does not create a new public or private street.

6.8.2 Requirements

The following shall be submitted to the Administrator with each proposal for a division of up to three lots fronting on an access easement that provides access to an existing NCDOT maintained public road:

- A. Plat prepared as required by NCGS §47-30,
- B. The plat shall be clearly designated "Three Lot Subdivision on Access Easement" in bold letters,
- C. Certification by the Licensed Professional preparing the plat that each lot is adjacent to a natural drainage way or perennial stream or a 20 ft. drainage easement is recorded from each lot to a natural drainage way or a perennial stream or if the lot or lots front on a NCDOT maintained road, approval from NCDOT for such lots to drain to the public road,
- D. The plat shows any designated Special Flood Hazard Areas located within the subdivision,
- E. The plat shows any designated Areas of Environmental Concern located within the subdivision,
- F. An Improvement Authorization Permit from Environmental Health for each lot to be created, a soil suitability analysis for each lot to be created or approval to connect to existing public sewer.
- G. The lots, other than those restricted for building development or designated and reserved for open space, shown on the plat meet the requirements of this Ordinance
- H. Waste water disposal requirements – One of the following must be met:
 - 1) An Improvement Authorization Permit has been issued for each of the parcels,
 - 2) The soil suitability analysis shows that at least 5,000 sq. ft. of each lot is suitable for traditional on site waste disposal and the required 5,000 sq ft. is not within 10 ft of any lot boundary,
 - 3) Approval has been granted to connect to public sewer or community sewer,
 - 4) or Lots not meeting the requirements of 1, 2, or 3 are indicated by the following note:
"THIS PARCEL CANNOT BE USED FOR BUILDING DEVELOPMENT, UNLESS AN APPROVED WASTE WATER DISPOSAL METHOD HAS BEEN APPROVED AND PERMITTED BY THE PENDER COUNTY ENVIRONMENTAL HEALTH DEPARTMENT OR APPROPRIATE STATE AGENCY OR UNLESS A NEW PLAT IS APPROVED AND RECORDED AS REQUIRED UNDER THIS ORDINANCE."
 - a) For alternative, see Design Requirements, Lots Section of this Ordinance for "Special Purpose Lots."
- ~~I. The lots created have access to an access easement as defined in this Ordinance, See Section 7.5.4 Easements for additional requirements.~~
- ~~J. The access easement that provides access to a public street is no longer than 500 ft.~~
- ~~K. A minimum passable travel way 20 feet wide shall be provided within a forty five (45') foot easement at time of zoning approval.~~
- L. Clearing and grubbing shall be completed five feet of each edge of the travel way;
- M. Maintenance. Upon determination by the Administrator that such travel way as approved are not passable, the Administrator may, in addition to other remedies, prevent issuance of any further development approvals until such travel ways are in a proper state of maintenance as determined by the Administrator.

- N. The Administrator determines that the subdivision complies with the limitations on Three Lot Subdivisions contained in the General Provisions Section of this Ordinance.
- O. The plat contains an ownership and dedication statement signed by the owner or owners.
- ~~P. The plat contains the following note: "All new access easements shown or designated on this plat, include the transfer of an easement to public entities and public utilities for the purpose of installation and maintenance of water, sewer, electric and communication lines."~~
- ~~Q. The plat must contain the following note: "All new access easements shown or designated on this plat include the transfer of an easement to Pender County, its employees and agents for access for emergency personnel (police, fire & rescue) and Pender County and its employees for administration of all Pender County Ordinances."~~

7.5.3 Private Streets

- A. All designated private streets shall be designed and constructed in compliance with the current NCDOT Subdivision Roads Minimum Construction Standards. However, variations to right-of-way widths and geometric design may be permitted upon Planning Board review and approval where certain features such as topography, environmental features, low impact development design or unique needs of a development exist at the Master Development Plan approval.
- B. Developments with private streets shall make provisions for immediate access for Pender County Emergency Service (Law Enforcement, Fire & Rescue) vehicles and employees to the development and shall provide for an easement for such services and an easement shall be provided to Pender County and its employees for administration of Pender County Ordinances.
- C. Subdivisions with private streets will be subject to requirements to construct public collector streets under any of the following conditions:
 - 1) When the subdivision contains streets that have any dimension of more than 5280 ft.,
 - 2) When any street in the subdivision has the potential to serve more than 200 residential or commercial units,
 - 3) When access to any lot or unit in the subdivision is more than 5280 ft. by a private street to a public street,
 - 4) When existing public streets have been dedicated or constructed to the property line of the subdivision,
 - 5) When access to adjacent properties will be hindered as a result of private streets being allowed in the subdivision.
- D. All subdivisions that have any private streets must meet the minimum qualifying requirements contained in the Required Improvements section of this Ordinance.
- E. All subdivisions proposing new construction of streets must provide a Certificate of Disclosure: Private Roads found in Appendix D.

7.5.4 Easement Requirements

- A. Access easements must provide access to a public street
- B. Lots created have either direct access to a public street, private street or private access easement as defined by this ordinance.
- C. A minimum passable travel way of 20-feet wide shall be provided
- D. The plat contains the following note: "All new access easements shown or designated on this plat, include the transfer of an easement to public entities and public utilities for the purpose of installation and maintenance of water, sewer, electric and communication lines."
- R. The plat must contain the following note: "All new access easements shown or designated on this plat include the transfer of an easement to Pender County, its employees and administration of all Pender County Ordinances."

General Use Rezoning

Section 3.3 regulates rezoning procedures. Section 3.3.5, Action by the Administrator, lists in Section B that the request is reviewed by the Technical Review Committee. While this step is logical for Conditional Use Rezoning, General Use Rezoning typically do not contain a level of detail to warrant review by the TRC. Currently this step is not being followed.

The review of a General Use rezoning includes staff consulting with applicable agencies, adopted plans and property owners as necessary to generate a recommendation. Unless the board sees value in leaving this step a part of the process, staff is recommending the following amendment

3.3.5 Action by Administrator

- E. The Administrator shall prepare a staff report that reviews the rezoning request in light of any applicable plans and the general requirements of this Ordinance. The staff report shall consider the entire range of permitted uses in the requested classification regardless of any representations made that the use will be limited.
- ~~F. The Administrator will forward the rezoning request to the Technical Review Committee for review. The TRC shall make recommendations concerning whether the plan meets the requirements and or plans of their particular state agency, county department or utility authority.~~
- G. Following completion of the review by staff, the Administrator shall forward the completed request, staff recommendation, and any related materials to the Planning Board for a hearing and recommendation in accordance with the adopted meeting schedule.
- H. Following Planning Board review and recommendation, the Administrator shall forward the completed rezoning request and any related materials, including the Planning Board recommendation, to the County Commissioners for hearing and final action.

USES NOT LISTED

Zoning Ordinances must be clear in the land use regulations including what uses are permitted within which zoning district. The UDO outlines all uses in Section 5. According to 5.2.1.A, any use that is not specifically listed in the Article is expressly prohibited unless the Administrator determines through written interpretation (Section 3.17) that the use is similar to a permitted use or permitted group of uses listed in the Table of Permitted Uses. At this time with recent court of appeal cases, and in consultation with the Attorney, it is recommended that the language of Section 5.2.1.A be updated to reflect that unlisted uses shall be treated similarly to another use most similar, and that the uses not listed must be included in the Ordinance as part of another use. This is more in harmony of current practice. The following section of text is proposed to be updated with language provided by the County Attorney.

5.1 USE INTERPRETATION

Uses Not Specifically Listed

- A. Any use not specifically listed in this Article is expressly prohibited, unless the Administrator determines, in accordance with Section 3.17, Written Interpretation that the use is similar to a permitted individual use or permitted group of uses as listed in this Article. Where such similar permitted individual use or permitted group of uses is subject to a limited use standard contained in this Article or special exception review, the proposed use shall also be subject to such standard or approval. The Administrator shall not amend this chapter by adding to or eliminating any use standard for the proposed use.

Addressing updates

In the last group of text amendments several references to General Statutes were removed inadvertently. Planning Staff is working with the Addressing Coordinator to finesse this language. Clarifications will be made to Section 11.1.2 Naming A-121 153A-239.1, Section 11.6 Addressing 6 and Section 11.1.1 Overview GS 62.

Preliminary and Final Plat Requirements

In an effort to increase efficiencies and clarify subdivision regulations, the following text updates are recommended:

6.4 PRELIMINARY PLAT CONTENTS

Preliminary plats not illustrating or containing the data from Section A shall be returned to the developer or his the authorized agent for completion and resubmission.

A. The preliminary plat shall be prepared in accordance with the following specifications:

- 1) **Plat Requirements**
 - a) The plat must be prepared by an authorized Licensed Professional.
 - ~~b) The name of the subdivision.~~
 - c) The name(s), address(es), and telephone number(s) of the owner(s), registered land surveyor(s), land planner(s), architect(s), landscape architect(s), and professional engineer(s) responsible for the subdivision and the registration number(s) and seal(s) of the registered land surveyor(s).
 - d) A sketch vicinity map at an appropriate scale, showing the relationship between the subdivision and the surrounding area.
 - e) The date of the survey and the plan preparation; with spaces per subsequent revision.
 - f) The name of the township, county, and state in which the subdivision is located.
 - g) Deed book and reference of ownership acquisition.
 - h) The names of current owners of adjacent landowners along with PIN, current uses, other legal reference where applicable, shall be shown.
 - i) The exact boundary lines of the tract to be developed fully dimensioned by bearings and distances, and the location of intersecting boundary lines of adjoining lands.
 - j) Scale at 1" = 50' or larger, denoted both graphically and numerically.
 - k) North arrow in accordance with the Standards of Practice for Land Surveyors.
 - l) The location, purpose, and dimensions of areas to be used for purposes other than residential;
 - m) The blocks lettered alphabetically throughout the entire subdivision and the lots numbered consecutively throughout each block.
 - n) ~~The location and measurements of all~~ proposed minimum building setback lines and density calculations.
 - o) The location and dimensions of all proposed and existing rights-of-way, utility or other easements, riding trails, pedestrian or bicycle paths, natural buffers, and areas if any to be dedicated to public use with the purpose of each stated.
 - p) Property lines, buildings or other structures, water courses, railroads, bridges, culverts, storm drains, and corporate limits, township boundaries, and county lines.
 - q) Sufficient survey to determine readily and reproduce on the ground every straight or curved boundary line, road line, lot line, right-of-way line, easement line, and setback line, including dimensions, bearings, or deflection angles, radii, central angles, and tangent distances for the center line of curved roads and curved property lines that are not the boundary of curved roads. All dimensions shall be in accordance with the Standards and Practices of Land Surveyors.
 - r) The accurate locations and descriptions of all monuments, markers, and control points.

- s) Sufficient information shall be provided so that a corner of the property can be located on the ground and found with a measurement from the intersection of two state maintained roads.

2) Design Standards

- a) All subdivided land and parcels shall comply with Section 7.2, Lot Design.
- ~~b) Homeowners Association shall be required for all major residential subdivisions with privately maintained streets, open space, and any other dedicated land as stated in Section 7.3, Homeowners Association Requirements.~~
- c) Street layout and access shall conform to Section 7.4, Access and Section 7.5, Street Design.
- d) Calculated open space requirements must adhere to Section 7.6, Open Space.
- e) Landscaping and Buffers shall be shown on the site plan and adhere to the landscaping standards set forth in Article 8, Landscaping and Buffers.

3) Road Layout

- a) Right-of-way lines and pavement widths of all roads and the location and width of all adjacent roads and easements.
- b) The location and design of parking areas and pedestrian and vehicular access points. That the design of traffic patterns, traffic control measures and street pavement areas, including plan profiles and cross section views, and with provisions for maintaining traffic flows for both public use as well as emergency management services are consistent with the requirements of this Ordinance and any other adopted plan.
- c) When the subdivision entrance does not connect to a NCDOT maintained road, recorded documents shall be submitted that confirm the property and the proposed lots have access to a NCDOT maintained road by a public or private street that meets the standards of this Ordinance.
- d) For non-residential and multifamily projects, the location of trash handling, recycling, grease bins, and other waste-related facilities employed in the normal operation of the use.
- e) When any development proposes private streets a description of the method to provide Pender County Emergency Service personnel and vehicles immediate access shall be submitted.
- f) Stormwater facilities, water supply, sanitary sewer service, fire protection and hydrants, street signs, and street lighting designed in conformance with department standards, specifications and guidelines;
- g) Plan profile and cross section of drainage and utility services and other proposed easements or dedications as required.

4) Traffic Impacts

- a) Existing traffic counts for road(s) and intersection(s) studied and dates/times counts were conducted.
- b) Estimated AM and PM Peak Hour Trips per the Institute of Transportation Engineers Trip Generation Manual.
- c) A Traffic Impact Analysis is required when the development generates 100 trips in the morning or evening peak hours or over 1,000 trips per day. The Traffic Impact Analysis must state the dates and times the counts were conducted.

- ~~5) Certificate of approval by the Pender County Addressing Coordinator for proposed road names.~~

5) Adopted Plan Compliance

- a) Compliance with all applicable requirements of this Ordinance **and any other County adopted plan or policy document.**
 - b) Agreement with the **most recent Comprehensive Land Use Plan** ~~most recently adopted CAMA Land Use Plan~~ and any other applicable adopted land use document(s). ~~Reference of recently approved MDP.~~
 - c) Compliance with site construction specifications **or approved Master Development Plan conditions.**
 - d) The Administrator, **Technical Review Committee** or the Planning Board may request additional information be submitted that is pertinent to review of the proposed subdivision for compliance with the provisions of this Ordinance or other Pender County Ordinances.
- B. **Upon completion of Section A**, the following additional materials **or permits are required with the submitted with the preliminary plat for final approval in accordance with Section 3.10.3.K.:**
- 1) ~~Soil suitability analysis indicating the suitability of the property for individual septic tanks or an Improvement Authorization Permit for each lot unless community sewer is available and a conditioned approval for connection is submitted. The soil suitability analysis of the property shall also indicate the suitability of the soil for the type structures proposed.~~ **Wastewater (either; a or b, as applicable)**
 - a) **On-Site or Off-Site Wastewater Disposal System**
 - a) ~~Verification of receipt of the preliminary plat of the development by the Pender County Health Department.~~
 - Soil suitability analysis indicating the suitability of the property for individual septic tanks**
 - c) Detailed description of any proposed waste water system and system maintenance arrangements and procedures to serve lots that are not suitable for traditional onsite septic systems, along with a map showing the proposed location of the offsite components of the system, including lines.
 - b) **Community Wastewater Systems**
 - a) **Authorization to Construct, as approved by the appropriate State Agency**
 - b) **Extensions based upon previous approval of wastewater system**
 - c) ~~Construction plans sealed by a registered engineer, as approved by NC DEQ, acceptance of operation and maintenance of the system~~
 - d) ~~Constructions plans sealed by a registered engineer, as approved by the appropriate State Agency NC DEQ,~~
 - e) **If applicable, Certification that the system will be owned by a Public or Community Water system as defined in this Ordinance with conditional acceptance of ownership or certification that the system will be owned by a homeowners association established under the provisions of this Ordinance.**
 - 2) ~~A copy of the Preliminary Plat with the street names as approved by the Pender County Addressing Coordinator or his/her designee.~~
- 2) **Water**
- a) **Authorization to Construct, as approved by the appropriate State Agency**
 - b) ~~Constructions plans sealed by a registered engineer, as approved by the appropriate State Agency NC DEQ,~~

- c) Acceptance of operation and maintenance of the system by a Public (**Pender County Utilities**) or Community Water system as defined in this Ordinance,
 - d) **If applicable**, Certification that the system will be owned by a Public or Community Water system as defined in this Ordinance with conditional acceptance of ownership or certification that the system will be owned by a homeowners association established under the provisions of this Ordinance.
- 3) **Road Layout**
- a) **Public Right of Way**
 - i) **Driveway Permit: Approval by NCDOT of connection of subdivision roads with NCDOT maintained roads.**
 - ii) **Plan Approval: Street construction & street drainage plans as approved by NCDOT District Engineer with letter of approval (for public streets).**
 - iii) **Verification of receipt of the preliminary plat of the development by the NCDOT District Engineer or his the appointed designee.**
 - b) **Private Right of Way**
 - i) **Street construction & street drainage plans in accord with NCDOT submittal requirements, design and construction standards or in accord with Section 7.5, Street Design, private street standards. The plans must be signed and sealed by a registered surveyor or engineer.**
 - ii.) **A letter from the design professional will accompany the plans certifying that they meet the NCDOT submittal requirements, design and construction standards or Private Street Standards, Pender County (for private streets).**
 - iii) **When any street layout or geometric design does not specifically meet the NCDOT Secondary Road Standards or the adopted Pender County Private Street Standards, a narrative explanation, justification detailed drawing of the design shall be submitted for review.**
- 4) **Approved road and subdivision names in accordance with Article 11.**
- 5) **Stormwater Management and Drainage Plans**
- a.) **Stormwater Management Plan as approved by the appropriate State Agency (with letter of approval).**
 - b) **Drainage Plan: a general description and map of the proposed drainage for the subdivision shall include the following:**
 - i. **The boundaries of all drainage basins that flow through the property from upstream.**
 - ii. **All drainage facilities that flow through the property and receive any stormwater discharge from upstream.**
 - iii. **The boundaries of all drainage basins that receive discharge from the property that is located from the discharge point on the property to the recipient perennial stream.**
 - iv. **All drainage facilities that receive stormwater discharge from the property from the discharge point to the recipient perennial stream.**
 - v. **This information can be described in a narrative submission and shown on a copy of a USGS 7.5 Minute Quad or other similar topographical map (11 X 17 map submission)**

- vi. A drainage plan that will include all portions of the development shall be submitted. This plan shall be prepared and sealed by a registered engineer. The plan and facilities shall provide for a drainage system for these areas that will accommodate the ten-year storm event without flooding or substantial ponding of water in the areas included in the plan. The plan must also accommodate any discharge from properties in upland portions of the drainage basin that flows through the property for the same storm event for the type development for which that property is zoned. The boundary of any drainage area on a portion of the site and/or upland from the site and drainage areas between stormwater discharge points from the site to the recipient perennial stream shall be shown on a map (copy of 7.5 min. USGS Quad or similar map). Any drainage facility receiving stormwater discharge from the development shall have the capacity to carry the anticipated stormwater flow from areas that discharge through them for the 10 year storm event from the point of discharge at the development to the recipient perennial stream without overflowing their banks. The location, size and/or capacity of all structures included in the drainage system and receiving discharge from the development to the recipient perennial stream shall be shown on the plan and calculations used in designing the drainage system shall be submitted in a legible format. This plan may be included in the street and drainage plan, stormwater management plan or on the preliminary plat, as long as the design professional certifies that the specific drainage plan submitted complies with these requirements and the information required is shown or submitted.

~~C. The Following Material May Be Submitted As a Condition of Approval of the Preliminary Plat, When Approved By the Planning Board or Administrator~~

- 4) Approval from the Division of Coastal Management when the development is located in an Area of Environmental Concern.
- 5) Sediment & Erosion Control Plans as approved by Land Quality (with letter of approval).
- 7) **Wetlands**
 - a) Approval of Wetlands Delineation by the Army Corps of Engineers (USACE) (if wetlands in development).
 - b) Wetlands fill authorization or permit if construction in wetlands is involved.
- 8) **Flood Requirements in accordance with the Flood Damage Prevention Ordinance**
- 9) **Any other local, State or Federal permit as required for the specific project.**

Appendix A Definitions:

Wastewater System: a system of wastewater collection, treatment and disposal in single or multiple components, including a privy, septic tank system, public or community wastewater system, wastewater reuse or recycle system, mechanical or biological wastewater treatment system , any other similar system, and any chemical toilet used only for human waste.

ADD PRINCIPAL STRUCTURE

Appendix D:

<p>Certification of Submission A copy of this plat has been submitted. Approval is subject to review; this does not constitute an approval.</p> <p>Pender County Utilities: _____ Date: _____</p> <hr/>
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6.5 FINAL PLAT CONTENTS

A. Submission Requirements and General Provisions

- 1) A final plat will not be accepted for review that is incomplete or for which has not been submitted the documents necessary for verification of the conditions of Preliminary Plat approval.
- 2) The final plat shall be reviewed and approved or disapproved and notice of action taken provided to the applicant within 30 working days of completed submission. When the final plat is approved the signed original will be provided to the applicant and a signed copy placed in the Record File for the subdivision.
- 3) The completed final plat must be submitted within **2 years** ~~24 months~~ of approval of the preliminary plat or within **2 years** ~~24 months~~ of approval of a previously recorded final plat.
- 4) ~~The Administrator must take action on the final plat within 15 working days of completed submission and installation of improvements or security for improvements.~~
- 5) The final plat must conform ~~generally~~ to the preliminary plat and specifically to all conditions of approval of the preliminary plat. **The Administrator may approve minor variations from the approved preliminary plat layout including so as not to include; a reduction in individual lot acreage, an increase in total lot number or density, significant roadway changes or any other major alterations.**
- 6) All conditions of preliminary plat approval must have been met before any final plat will be considered for review. ~~Confirmation of compliance with all provisions of Preliminary Plat must be submitted at least 10 days before the final plat is accepted for review. Likely can remove the 10 day timeframe, not sure what the basis is on this one. A final plat will not be scheduled for review which is incomplete or does not have the required documents submitted with it (language was taken from 3.10.3 N)~~
- 7) Plat Submission – the final plat must be submitted in digital format to the Administrator. The digital submission of the plat will be considered proprietary information. The digital layout will be made available to the Tax Supervisor for parcel update and the digital submission may be returned to the person submitting it. A copy on mylar suitable for recording shall be submitted for signing upon review & approval of the final map. The final plat shall be reviewed, approved and signed by the Administrator.
- 8) Upon approval of the final plat by the Administrator, the Subdivider shall record the final plat with the County Register, as provided for by that office, within ninety (90) days after the approval. Otherwise the approval of the final plat shall be considered void.
- 9) Upon initial approval of the final plat parcel layout the Administrator shall immediately notify the Tax Assessor so that parcel identifiers can be issued.
- 10) Minimum Number of Lots Required on a Final Plat – the minimum lots included on the final plat shall be as follows:
 - a) Up to 10 lots – 100%
 - b) 11 – 34 lots – 50% upon initial recordation, remainder thereafter
 - c) 35 – 100 lots – minimum of 25 lots/units upon initial recordation, minimum increments of 10 lots thereafter

- d) 100 or more lots – minimum of 50 lots/units upon initial recordation, minimum increments of 10 lots thereafter.
- 11) The final plat, approved covenants, restrictions and homeowners' association documents must be recorded in the Register of Deeds within 60 days after approval by the Administrator and prior to any sale of lots in the development.
- 12) The final plat must be prepared by a licensed surveyor.

B. Additional Materials or Permits

- 1) All lots shown on the final plat other than open space or other specially approved lots shall meet any one of the following **approved wastewater methods** as follows:
 - a) ~~Be served by an onsite waste water system, which is located on the site where the unit served is located, and the system has received an "Improvement Authorization Permit" from Environmental Health,~~
 - b) ~~Be served by a Community Sewer System as defined in this Ordinance and approval for connection to the system is provided,~~
 - c) ~~Be served by a waste water system that meets the requirements of the "Water And Sewer System Requirements In Streets, Access Easements Or Other Locations Off The Site Of The Unit Served," of this Ordinance,~~
 - d) ~~The soil suitability analysis as required by this Ordinance and submitted with the preliminary plat shows that each lot contains at least 5,000 sq. ft. of area that is "suitable" for traditional on site waste disposal and the required 5,000 sq. ft. is not within 10 ft of any lot boundary,~~
 - e) ~~Lots not meeting a., b., c., or d. of this paragraph shall be labeled with a bold note as follows: "THE PARCELS SO NOTED CANNOT BE USED FOR BUILDING DEVELOPMENT, UNLESS AN APPROVED WASTE WATER DISPOSAL METHOD HAS BEEN APPROVED AND PERMITTED BY THE PENDER COUNTY ENVIRONMENTAL HEALTH DEPARTMENT OR APPROPRIATE STATE AGENCY OR UNLESS A NEW PLAT IS APPROVED AND RECORDED AS REQUIRED UNDER THIS ORDINANCE."~~
 - f) ~~For alternative, see Design Requirements, Lots Section of this Ordinance for "Special Purpose Lots."~~
- a) **On-Site or Off-Site Wastewater Disposal System (1, 2, or 3, as applicable)**
 - i.) **Improvement Permits for each lot to be served by an on or off-site waste water system, and the system has received an "Improvement Authorization Permit" from the Environmental Health Department**
 - ii.) **Engineered Option Permits for each lot: provided to the Environmental Health Department**
 - iii.) **Independent Soil Suitability Analysis: The soil suitability analysis as required by this Ordinance and submitted with the preliminary plat shows that each lot contains at least 5,000 sq. ft. of area that is "suitable" for **septic** traditional on site waste disposal and the required 5,000 sq. ft. is not within 10 ft of any lot boundary,**
- b) **Community Wastewater Systems**
 - i.) **Engineered Certification of Installation**
 - ii.) **Certifications of State Acceptance by the appropriate State Agency**

iii.) If applicable, Certification that the system will be owned by a Public or Community Wastewater system as defined in this Ordinance with conditional acceptance of ownership or certification that the system will be owned by a homeowners association established under the provisions of this Ordinance.

c) Lots not meeting *a.*, *or b.*, of this paragraph shall be labeled with a bold note as follows: “THE PARCELS SO NOTED CANNOT BE USED FOR BUILDING DEVELOPMENT, UNLESS AN APPROVED WASTE WATER DISPOSAL METHOD HAS BEEN APPROVED AND PERMITTED BY THE PENDER COUNTY ENVIRONMENTAL HEALTH DEPARTMENT OR APPROPRIATE STATE AGENCY OR UNLESS A NEW PLAT IS APPROVED AND RECORDED AS REQUIRED UNDER THIS ORDINANCE.”

2) Water: All lots shown on the final plat other than open space or other specially approved lots shall meet the following approved Community water system acceptance water methods as follows:

a.) Community Water System

i.) Engineered Certifications of Installation

ii.) Acceptance of System by the appropriate State Agency

b.) Private Water Certifications (Well) from Environmental Health

3) All improvements for the subdivision including but not limited to; recreation areas, infrastructure, roadways and street signs of the proposed in the development must have been constructed and certifications of completion to standards specified provided or their construction guaranteed by a Performance Guarantee referenced in Appendix D.

4) Roadways

a.) Public Roadways

i.) All public streets must have been constructed, inspected and approved in writing **or via signature on the plat** by the NCDOT District Engineer or a Performance Guarantee provided, **or all of the following**;

ii.) Estimate of the cost to complete construction of the streets and all other improvements required or proposed in the development that are not complete, prepared, signed and sealed by a licensed engineer,

iii.) Performance Guarantee for the cost of all improvements not certified as complete.

b.) Private Roadways (i. or ii and iii)

i.) Certification by a licensed engineer of the completion of construction of all private streets and other required improvements, or all of the following:

ii.) Estimate of the cost to complete construction of the streets and all other improvements required or proposed in the development that are not complete, prepared, signed and sealed by a licensed engineer,

iii.) Certification by a professional land surveyor of installation of all required monuments and markers.

C. Supplemental Documentation

1) ~~Two copies~~ **One copy** of Articles of Incorporation of Homeowner’s Association and related documents for any development that contains private streets or other non-public facilities, including drainage systems outside public street right of-ways, water systems and sewer systems and open space.

- 2) ~~Two copies~~ **One copy** of the restrictive covenants to be recorded on the property.
- 3) **If all required improvements are not complete** Performance Guarantee **from Appendix D must be provided for all improvements**
- 4) **If all required improvements are complete the Defect Guarantee from Appendix D must be provided for all improvements** ~~when a Performance Guarantee has not been provided for~~
- 5) **Deeds for all open space parcels transferring ownership to an association.** ~~Draft document transferring ownership of all common area and facilities to the Homeowners Association as shown on the final plat of the portion of the subdivision to be recorded.~~ A recorded copy of this document must be submitted to the Administrator within 30 calendar days of recording of the final plat (see Section 7.3, Homeowners Association Requirements).
- 6) **Improvement Certification, found in Appendix D**
- 7) **Street Certification (if private), found in Appendix D**

B. **Certificates Required on Final Plat**

The following Certificates can be found in Appendix D.

- 1) Certificate of Ownership, Dedication and Jurisdiction
- 2) Certificate of Approval Subdivision Public Road Construction by NCDOT District Engineer **as applicable**
- 3) **Certification from the Pender County Addressing Coordinator or appropriate designee**
- 4) **Certification from Environmental Health**
- 5) Surveyor Certificate I
- 6) Surveyor Certificate II
- 7) Surveyor Certificate III
- 8) Parcel Identifier Certificate
- 9) Certificate of Registration by Register of Deeds (unsigned)
- 10) Certificate of Final Plat Approval

Add to Appendix D

Reviewed and Approved by the Addressing Coordinator

Addressing Coordinator: _____ Date: _____

Reviewed and Approved by Environmental Health

Environmental Health: _____ Date: _____

Reviewed and Approved by Pender County Utilities