

## Applicant's Supplemental EIA Responses

**July 30, 2020**

ERAC Review of Environmental Impact Assessment – Williams Corner  
 Supplemental Information to the EIA (dated March 23, 2020)  
 Chatham County, North Carolina

Environmental Impact Assessment Item	Adequately Described and Fully Discussed?	Response
Proposed Project Description and Need		
<p>1. Describe the overall project in detail, including all proposed phases.</p>	<p>"No long-term significant impacts" is not a valid statement. Need to address impacts to stream buffers and wildlife corridors.</p> <p>Is there an easement on the conservation land? All Phases are not described completely. Give acreage for Phases I, III, and IV). Cumulative impacts are not described. Need to address continuing sprawl along 15-501. Clearing habitat will impact wildlife. Explain how wildlife will not be impacted long-term.</p>	<p>The finding of no long-term significant impacts set forth in the executive summary is a general statement based on the findings and conclusions of the entire EIA. Specific support for that conclusion is found not in the Executive Summary but in the ensuing text of the EIA, under each sub-topic, and in the hundreds of pages of supporting exhibits. As we work through the sub-topics, we will address the specific ERAC concerns therein. Also, immediately below, we will address the specific points raised in this item 1:</p> <p><b>Impacts to stream buffers and wildlife corridors:</b> Approximately 50% of the overall acreage (59 out of 118 acres) —and 100% of the highest value resources within the project area— will be conserved perpetually (with the exception of two roadway crossings and a pedestrian trail network). This includes the riparian buffers along the streams shown on the site plan as well as the completely undeveloped rear portion of the property. This conservation strategy significantly exceeds the requirements even for a “Conservation Subdivision” under the Chatham County Subdivision Ordinance (which requires 40% Conservation Space). By preserving the natural wildlife corridors along the streams and creeks, such conservation minimizes long-term impacts to wildlife and preserves the opportunity for wildlife to move along and through the protected portions of the development. While the existing approval allows for as little as 25’ buffers on intermittent streams and 50’ buffers on perennial streams, the proposed plan calls for 50’ riparian buffers on each side of the intermittent streams on-site and 100’ buffers on each side of the perennial streams on-site. Thus, Cub Creek will enjoy a 200’ wide combined riparian buffer (not including the width of the stream). A review of the site plan shows the significant beneficial impacts on stream buffers and wildlife corridors tied to the doubling of those riparian buffers. The configuration of those corridors and buffers is also extremely beneficial and positive since the corridors run the entire length of the project both from North to South and from East to West.</p> <p>The site design minimizes habitat fragmentation within a transitioning and</p>

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		<p>developing corridor, and further ensures that impacts to wildlife are minimized to the greatest extent practicable, save for pursuing a “no-build” alternative. Ultimately, a “no-build” alternative is unlikely in perpetuity, given the site location, land value, and proximity to a major thoroughfare among other factors. It is in this context that the EIA deems impacts to wildlife to be minimal.</p> <p>Additional discussion is provided in Section 12 below. Wildlife and Natural Vegetation.</p> <p><b>Easement on Conservation Land:</b> Yes, the +/- 59 acres of conservation land shown on the site plan (excluding the roadway crossings and pedestrian trail amenity) will be perpetually protected by a recorded conservation declaration whether the conserved area is retained by the POA for the development or is conveyed to a 501(c)(3) organization charged with conservation of the property.</p> <p><b>Phasing:</b> The following is a list of the project phases and the approximate acreage of each development phase. A phasing map is attached hereto as Exhibit 1. Note that Phase 1 includes the construction of all internal circulation roads.</p> <p>Build out expected to be completed by 2027 in 3 phases:</p> <ul style="list-style-type: none"><li>• Phase 1 - South Campus Apartments and Retail at the corner of Lystra Road and US 15-501 (approximately 24.8 acres)</li><li>• Phase 2 - Office &amp; Storage (approximately 7.3 acres)</li><li>• Phase 3 - North Campus Apartments (approximately 11.4 acres)</li></ul> <p><b>Cumulative Impacts:</b> This project is uniquely situated to actually decrease cumulative impacts because of the fact that it already has an approved design that is more impactful on a cumulative basis. Whatever environmental impacts that were going to be added by this project to the overall cumulative impacts of development in the area are going to be reduced by a number of new design elements including but not limited to: (1) increased riparian buffers throughout; (2) overall decrease in traffic (see TIA); (3) addition of</p>
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		<p>conservation acres to the project (original project was 89.5 acres and current project is 118 acres), commensurately increasing the conserved area; (4) greater preservation of groundwater resources; (5) preservation of wildlife and natural vegetation within the conservation areas; (6) reduced air quality impacts based on reduced traffic; and (7) preservation of any areas of archeological or historical value. So, while the project will add some impacts typically associated with development, the site plan development of only the portions nearest to a major traffic thoroughfare and conservation as the site gets further from the thoroughfare supports the conclusion of reduced cumulative impacts.</p> <p><b>“Continuing Sprawl along 15-501”:</b> This question seems to be outside the normal scope of an EIA but is addressed at length in the application materials. The application materials include a fulsome discussion of whether the development proposal is consistent with the goals and strategies of the Chatham County Comprehensive Plan, including its strategic location on US 15-501. For ease of reference, that thirteen page written discussion (submitted with the development application) is attached hereto as Exhibit 2 to this Supplemental Information packet.</p> <p><b>Impact of Clearing on Wildlife: (See above under Impacts to Wildlife Corridors)</b> At less than 24% imperviousness and with the protection of over 59 acres of riparian areas and conservation areas, the site design ensures that impacts to wildlife are minimized to the greatest extent practicable, save for pursuing a “no-build” alternative. Ultimately, a “no-build” alternative is unlikely in perpetuity, given the site location, land value, and proximity to a major thoroughfare among other factors. Only +/- 28 of the acres will be developed to impervious surface, leaving +/- 89 acres without impervious coverage and +/- 59 acres will be preserved undisturbed in perpetuity. It is in this context that the EIA deems impacts to wildlife to be minimal.</p>
<p>2. Provide a project location map showing surrounding areas.</p>		
<p>3. Provide a project site plan showing existing and</p>		

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proposed facilities.		
<p>4. Describe how this project fits into larger plans or connects with adjacent projects.</p>	<p>Explain how this project fits with other projects along the 15-501 corridor and its connector roads ie: Chatham Park.                  Does not discuss traffic impacts at the intersection at 15-501 and Lystra which has been the location of many traffic accidents. Does not address potential economic uncertainty. County already has many zombie developments still from the 2008 recession. Current COVID-19 and economic situation make this even more focused.</p>	<p><b>Project Fits with other Projects Along 15-501 and Connector Roads:</b>                  Please see the thirteen page discussion of how this project fulfills many of the Goals, Objectives, Recommendations and Action Items of the Comprehensive Plan and specifically for this location at the intersection of US 15-501 and Lystra Road (Exhibit 2, attached hereto). This discussion can also be accessed at this link:   <a href="https://www.chathamnc.org/home/showdocument?id=47735">https://www.chathamnc.org/home/showdocument?id=47735</a></p> <p><b>Traffic Impact and Safety:</b> The County EIA checklist requires only that the applicant provide a copy of any required traffic impact analysis. Applicant commissioned and filed with the Application an extensive Traffic Impact Analysis performed by Kimley Horn. The TIA takes into account existing and projected traffic and also includes certain intersection improvements to the Lystra Road intersection and to the section of US 15-501 along the frontage of the project (see Exhibit 3, attached hereto). Please see the TIA here:   <a href="https://www.chathamnc.org/home/showdocument?id=47739">https://www.chathamnc.org/home/showdocument?id=47739</a></p> <p><b>Economic Impact:</b> The economic impact of the project is well outside the scope of an EIA and the list of items required to be covered by an EIA in Chatham County. Nevertheless, Applicant commissioned and submitted with the application a thorough Fiscal Benefits and Economic Impacts analysis performed by DPFG which can be accessed at this link.   <a href="https://www.chathamnc.org/home/showdocument?id=47743">https://www.chathamnc.org/home/showdocument?id=47743</a></p>
<p>5. List and describe public facilities or benefits provided by the project.</p>	<p>No discussion of public facilities.</p>	<p><b>Public Facilities or Benefits:</b> Williams Corner will be an excellent addition to the array of public facilities and benefits located in the northeastern Chatham County population hub. The project will provide an extensive pedestrian trail network that gives public access to the 59 +/- acres of conservation property on the site. In addition, the project will supply two transit stops to Chatham Transit Network at the expense of the developer. These transit stops will allow for expansion of the developing mass transit efforts and will facilitate a reduction of traffic into Chapel Hill and Pittsboro.</p>

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		<p>It's an appropriate complement to the multifamily residences that will be located within the project. In addition, the project will include two electric vehicle charging stations and pedestrian friendly shopping. Further, the Fiscal Analysis cited above details the extensive amounts that are estimated to be contributed as benefits, including:</p> <ul style="list-style-type: none"> <li>a. Increase Chatham County's overall real property tax base by \$145.3 million</li> <li>b. Increase Chatham County's commercial property tax base by \$62.8 million</li> <li>c. Generate annual Chatham County property tax revenue of \$1.1 million</li> <li>d. Generate total incremental annual Chatham County revenues of \$1.8 million</li> <li>e. Generate annual sales tax revenue of \$667,000</li> <li>f. Generate total incremental annual North Chatham Fire District revenue of \$172,000</li> <li>g. Generate one-time capital revenues of \$605,000 for Chatham County Public Schools</li> <li>h. Create 567 direct onsite permanent jobs in Chatham County</li> <li>i. Create 870 total permanent jobs in Chatham County</li> <li>j. Create total annual labor income of \$25.2 million in Chatham County</li> </ul>
<p>6. Discuss the land acreage to be disturbed during each phase.</p>	<p>Says that will be a future discussion. Unacceptable. Provide more information.</p>	<p>Exhibit 4 (attached hereto) provides an estimate of the grading area for each phase of the project, summarized below.</p> <p>Phase 1 - South Campus Apartments (approximately 11.4 acres of disturbance) and Retail at the corner of Lystra Road and US 15-501 (approximately 13.4 acres of disturbance)</p> <p>Phase 2 - Office &amp; Storage (approximately 18.5 acres of disturbance to occur during Phase 2)</p> <p>Phase 3 - North Campus Apartments (disturbance to occur during Phase 2)</p>

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7. List square footage and height (in stores) of new buildings.		
8. Describe proposed uses of all buildings and proposed facilities.		
9. Show number of parking spaces in parking lots and decks.		
10. Show areas to be cleared, graded, filled, paved and landscaped.	Unclear. Provide more detailed information.	<p>Site development limits land clearing and disturbance to the areas in the western portion of the overall project area, as indicated on the Williams Corner Site Plan (dated 1/31/2020) provided by McKim &amp; Creed as Attachment A of the EIA.</p> <p>The previously referenced Exhibit 4, attached hereto shows approximate areas to be graded. Exhibit 5 shows areas to be cut and filled. The site plan initially provided in Attachment A of the EIA indicates areas to be paved and landscaped.</p> <p>A detailed grading plan will be available after zoning approval and once reviewed and approved by the county.</p>
11. Show connections to existing utility and sewer lines or new utilities.	<p>Connections are discussed in the text but not shown on site drawings.</p> <p>Description regarding wastewater treatment states that wastewater will be contracted with Old North State for treatment and disposal offsite. No discussion of expected volume, treatment methods, cumulative or indirect effects. Has the</p>	<p><b>Connections to Existing Utilities:</b> Attached hereto as Exhibits 6 and 7 are two figures showing the anticipated internal sewer line locations and also the anticipated sewer line connection route to ONSWC.</p> <p>Attached hereto as Exhibit 8 is a “will-serve” commitment letter provided by Old North State for treatment and disposal of wastewater generated by the Williams Corner project as well as a “will serve letter” from Chatham County Water (Public Works) Department. Discussions about the regulatory status of the publicly regulated sewer and/or water utilities and any compliance issues are beyond the scope of this EIA. Applicant has “shown connections to existing utility and sewer lines or new utilities” as required.</p>

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	<p>connection to Old North State been approved? If not, what is the plan? If land application, where will that be and what will be the impacts? Not discussed. Frequent violations at Briar Chapel from Old North State-from sewer breaks and discharges are not discussed. Address impacts to Jordan Lake from additional discharge.</p>	
12. Show wastewater management systems on a map.	Not shown	See #11 immediately above.
13. Show proposed areas of impervious and semi-pervious surfaces.		
14. Show and describe any proposed stormwater control devices.	<p>Inadequate discussion of post-construction stormwater controls                  Need to address increasing “flashy flows” from storms.</p>	<p>The anticipated stormwater control device locations are shown on the Site Plan and, as constructed, will comply with the Chatham County Stormwater Ordinance and any approved stormwater plans.</p> <p>The <a href="#">Chatham County Stormwater Ordinance</a> requires that a stormwater plan be submitted for projects that will exceed 20,000 square feet of land disturbance. This requirement applies to all new development and redevelopment within County jurisdiction, including private, public, state, and federal development not covered by a separate NPDES permit. Stormwater Management Plans must address the following:</p> <ul style="list-style-type: none"> <li>• <i>Capture and treat runoff volume for the 1-year, 1-hour storm event</i></li> <li>• <i>Minimum removal of 85% of Total Suspended Solids (TSS)</i></li> <li>• <i>Post development peak flow discharges not to exceed the pre-development rates for 1-, 2-, 5-, 10-, and 25- year, 24-hour storm events</i></li> </ul>

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		<p><i>The Site Plan included in Attachment 1 depicts 7 different stormwater ponds dispersed throughout the site. The large pond located in the center of the site is not being utilized for treatment. All outlet structures will be non-erosive and located away from streams.</i></p> <p>Additional measures such as rain gardens, subsurface detention, dry basins and stormwater wetlands may be employed throughout the site in order to comply with the ordinance.</p> <p>All structures will be incorporated into a master stormwater plan once the zoning approval is secured.</p>
<b>Alternatives Analysis</b>		
<p>1. Discuss and compare all reasonable development alternatives (site selection, facility layout, utilities, stormwater management, construction methods, open space preservation, any other pertinent alternative considerations.</p>	<p>States that all development alternatives were considered, but these are not discussed. Provide more detail. The 20-year-old plan is not an appropriate alternative for comparison. There is no mention of impact to traffic and infrastructure. Provide. Traffic Impact Analysis (TIA) is mentioned in the Air Quality section below, provide here as well.</p>	<p><b>Alternatives Analysis:</b> Within the realm of “reasonable development alternatives” for this site there really are only two alternatives: (1) the approved 2006 site plan or (2) an alternate development plan. A “no-action” alternative is not reasonable given the location of the site, its designation for development under the Chatham County Comprehensive Plan and the significant investment of ownership in the site to date.</p> <p>As set forth in Section IV (item ii), the originally approved site plan can still be constructed as approved, therefore is an appropriate comparison. Because the approval is grandfathered, it would be compliant with all applicable, grandfathered regulations. It would not, however, comply with (nor be required to comply with) current regulations adopted in Chatham County since the original approval. In analyzing the alternatives, the Applicant concluded that the preferred alternative was to re-design the project so that it could (1) meet current regulatory and environmental standards, (2) provide additional benefits to the public in the form of public facilities, public funding and extensive open and conservation space, and (3) still be economically feasible for the applicant.</p> <p>The proposed site plan went through many different permutations as Applicant worked its way through the development of this alternatives analysis.</p> <p>Applicant held extensive community meetings for public input from adjoining and nearby property owners. Prior to the application filing, a well-attended</p>



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		<p>community meeting was held. Based on the turnout and interest and based on comments and issues raised at that meeting, Applicant delayed its original intended filing of January 3, 2020. Applicant immediately began work on site plan revisions to attempt to incorporate some of the concerns raised by the adjoining neighbors, specifically the neighbors in the Wilder Ridge community to the east and the Legend Oaks community to the north.</p> <p>Among other changes, Applicant expanded the Wilder Ridge building structure setbacks from 100' to 300'; expanded Legend Oaks building setback from 100' to 200', and made 320' the minimum distance from closest residential lot line to the nearest building face. In addition, Applicant revised the plan to reduce the height of buildings closest to Wilder Ridge and Legend Oaks from 4 stories down to 3 stories, and placed all 4-story buildings in the interior of the project.</p> <p>After making these development alternatives revisions, Applicant noticed and held a second community meeting for all adjoiners on January 29, 2020. In addition, Applicant met with 16 residents of the Wilder Ridge community on January 27, 2020 to review changes specifically addressing their concerns as immediate adjoiners to the east. Based on all of the input, significant changes to the site plan were made and reviewed with the adjoiners in attendance at the second phase of community meetings.</p> <p>In addition to the community meetings, Applicant met with the Appearance Commission on December 18, 2019. Applicant agreed to incorporate the recommendation adopted by the Appearance Commission at that meeting. That is, in lieu of adding plantings along the landscape buffer area of the site that has no development (the conservation area in the northeastern-most section), applicant has agreed to shift the equivalent of such plantings equitably from that area to portions of the landscape buffers along the to-be-developed areas that adjoin outside residential properties. Also, Applicant has met and consulted numerous times with Planning Staff given that this is the first ever application for a Mixed Use Conditional District project in Chatham County. Many of the considerations raised by Planning Staff have been incorporated and addressed by the applicant.</p>
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		<p>Another example is that, as part of the alternatives analysis, Developer consciously elected to reduce the amount of office and retail space so as to lessen the traffic impact of the project (see TIA).</p> <p><b>Site Selection:</b> Site selection is based on the small number of sites available for a mixed-use development under the Comprehensive Plan. The fact that this site already has an approved development plan makes it an inherently better alternative than adding another site to the areas on 15-501 for commercial development.</p> <p><b>Facility Layout:</b> See above discussions regarding setbacks and unprecedented conservation space for a commercial development in Chatham County. Development of this site into the standard residential subdivisions would do nothing to add to the desperately needed commercial tax base, would not aid in development of mass transit along the corridor and would only add to residential sprawl. Ruling out the residential development alternative leaves the commercial or mixed-use alternatives. The mixed use alternative was ultimately selected after extensive meetings and conversations with Planning Staff and review of the unique set of public benefits that will be created with a mixed-use development alternative. Thus, the layout of the buildings was conformed to the preferred mixed-use alternative. Commercial buildings are site-planned close to 15-501 in keeping with the preferred development pattern. Residential components are situated off the highway and act as a transition between adjoining residential and the commercial component. The setbacks ensure that the closest buildings to existing residential will be approximately 300' away rather than the 20' setback under the current approval. All buildings are outside of expanded riparian buffers and no development is allowed within the 59 +/- conservation acres. Considering all alternatives, the site plan and facility layout is the preferable alternative.</p> <p><b>Utilities:</b> The water alternative for the project would be individual wells or a community water well rather than use of the County Water system. Concern for the water table, groundwater, possible well failure and multiple other considerations led to the alternative of tapping into the County water system. Likewise, with respect to wastewater, the alternative to off-site wastewater treatment by a publicly regulated utility would be on-site wastewater treatment</p>
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		<p>and discharge, as currently allowed under the existing development approval. In analyzing the alternatives, it was determined that the off-site option was preferable given that the on-site alternative would prevent the ability to have unfettered preservation of +/-59 acres of conservation space. If the on-site wastewater treatment alternative is selected, the wastewater treatment plant and the spray irrigation fields would all be located in the conservation areas dedicated under the preferred alternative plan.</p> <p><b>Stormwater Management Construction Options:</b> Irrespective of the development alternative proposed or built, the least environmentally impactful stormwater management construction option will be selected.</p> <p><b>Open Space Preservation:</b> As previously discussed, the preferred development plan provides the opportunity to essentially double the open spaces along the creek and streams on the site and further allows for permanent conservation of +/- 59 acres of land. The currently approved plan is not even comparable in that regard. From a residential development alternative standpoint, even a Conservation Subdivision would not require as much conservation space as is being dedicated with the preferred alternative. The proposed plan conserves almost 50% of the available acreage while a conservation subdivision would only be required to conserve 40% of the available acreage.</p> <p>In summary, the applicant took painstaking efforts to take into account all reasonable development alternatives, took input from the local community as well as from the planning and watershed staff and only then did it settle on the proposed alternative. The proposed alternative is, on the whole, superior to all of the reasonable development alternatives, taking environmental and all elements and factors into account.</p>
<p>2. Discuss how the preferred alternative was selected and its benefits relative to other alternatives (including a no-build alternative, if applicable).</p>	<p>This discussion is inadequate.</p>	<p>See # 1 immediately above.</p>
<p>Existing Environment and Project</p>		

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Impacts For each resource topic below, describe:		
A. Existing resources and conditions.		
B. Anticipated impacts (short-term construction impacts, long-term operation impacts, and indirect or secondary impacts.)	Discussion of direct and indirect impacts is inadequate.	<p><b>Short-term Construction Impacts:</b> Grading and construction will have typical short-term construction impacts in the limits of disturbance areas. Once completed, however, these impacts will dissipate. Any development alternative will have similar short-term construction impacts.</p> <p><b>Direct Impacts:</b> Positive direct impacts are associated with the conservation of +/- 50% of the property. The plan protects riparian buffers to the maximum extent possible and incorporates stormwater controls. The plan consolidates commercial and retail uses in areas that are proximate to existing like-kind facilities and transportation corridors. Negative direct impacts are those limited to minor impacts to wildlife, air quality and noise conditions. Such minor impacts are unavoidable given that any reasonable commercial development alternative will experience similar or more dramatic direct impacts.</p> <p><b>Indirect Impacts:</b> Positive indirect impacts are associated with consolidating development in the specifically designated commercial development areas under the Comprehensive Plan. This fulfills the objective of limiting sprawl and the appurtenant expansion and installation of support infrastructure. This has the indirect impact of preserving the non-commercial acreage along the 15-501 corridor, exactly as intended by the Comprehensive Plan. The long-term indirect benefit to the environment will be both significant and in keeping with the goals of the Comprehensive Plan. Negative indirect impacts appear to be limited in scope to off-site sewer alternatives and the possibility of diffuse impacts to wildlife off-site. The off-site sewer impacts are consistent with those of a regulated utility and those impacts are regulated by state and local authorities as applicable.</p> <p><b>Additional Discussion of Habitat loss and Habitat Fragmentation:</b>                  While any development activity may impact wildlife in the loss of existing habitat, in this case, the habitat loss is not significant given that the</p>

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		<p>development area has been previously disturbed and is so close to US 15-501. In terms of fragmentation, the corridor was fragmented by US 15-501 and its subsequent expansion; habitat loss and fragmentation is minimized to greatest extent practicable by 1) focusing land disturbance and development proximate to (and within) most recent previously disturbed areas, where wildlife habitat is subject to more frequent human disturbance, such as noise and human interaction from adjacent development and traffic; 2) maintaining low impervious coverage; and 3) incorporating stormwater BMPs and sediment and erosion controls to mitigate impacts to riparian and downstream habitat.</p> <p>US 15-501 and Lystra Road, adjacent to the project area, already function as barriers to wildlife movement and sources of wildlife mortality. Williams Corner minimizes further effects to wildlife by concentrating development primarily in the existing Road Effects Zone of US 15-501 and Lystra Roads. It is reasonably concluded that potential impacts to wildlife are avoided and minimized to the greatest extent practicable and direct and indirect impacts to wildlife are minimized and insignificant over the long-term.</p> <p>Additional discussion is provided in Section 12 below.</p>
<p>C. Discuss how potential impacts to the resource will be avoided and minimized through alternative selection, design strategies, construction methods, and long-term maintenance procedures.</p>	<p>Discussion is inadequate.</p>	<p>See above discussion regarding conservation space and design strategies.</p> <p><b>Construction Methods and Maintenance Procedures:</b> Standard construction methods and maintenance will be employed and will be subject to County and State regulation and permitting as applicable. Construction methods and maintenance procedures are the same for all alternatives.</p> <p><b>Design Strategies:</b> The current plan updates all project design and construction practices to current standards, which results in increased riparian buffers and stormwater management practices.</p> <p><b>Long-term Maintenance:</b> Invasive species management within riparian areas will occur, as needed, to maintain ecological health and preserve the value of the property and may specifically include management of the Russian Olive distributed on-site.</p>

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<p>D. For unavoidable impacts, describe whether any compensatory mitigation is planned or required.</p>	<p>Discussion is inadequate. Two stream crossings are proposed but no indication where, discussions of impacts, or permits needed.</p>	<p><b>Unavoidable Impacts:</b> The two stream crossings are depicted on the Site Plan attached to the Original EIA as Exhibit A. The purpose and need for the crossings are to access high ground within the project area and to provide adequate ingress and egress for the development. Section 4.0 of the EIA states that, “The proposed project will require permit verification from USACE and concurrence from DWR for a Nationwide Permit 29/39 and corresponding Water Quality Certification #4139 for authorization to construct two stream crossings. No wetland fills are proposed...The Project proponent is aware that stream mitigation may be required from the USACE depending on the final site plan. Should mitigation be required by USACE, several mitigation banks are available in the primary service area of the Project.” The U.S. Army Corps of Engineers (USACE) and the N.C. Division of Water Resources (DWR) assess compensatory mitigation requirements on a case-by-case basis during the permit review process.</p> <p>Unavoidable impacts to riparian buffers will result from the need to construct the two stream crossings. While the county has no requirement for mitigation for the loss of riparian areas, impacts are de facto mitigated by any Corps-required mitigation.</p>
1. Geography		
<ul style="list-style-type: none"> <li>Discuss the geographic setting, geology, and topography of the project area and adjacent areas.</li> </ul>		
<ul style="list-style-type: none"> <li>Provide a topographic map of the property and surrounding area, use the county GIS website topography (2’ contours interval) data at a scale appropriate for the project size, i.e., 1” = 100’,</li> </ul>		

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etc.).		
<ul style="list-style-type: none"> <li>Identify any 100-year floodplains (FEMA Special Flood Hazard Areas) on or adjacent to the property. If present, provide an appropriate-scale map of the flood-prone areas defined by the NC Flood Mapping Program.</li> </ul>		
<ul style="list-style-type: none"> <li>Show areas that will be graded or filled, and provide estimated cut/fill volumes.</li> </ul>	No. Provide estimates or conceptual planning at least. Where are your disposal areas? Where are you planning to cut?	Relocation sites and earthwork estimates of the site cut and fill volumes are indicated on Exhibit 5, attached hereto. Earthwork estimates are approximately 367,000 CY of cut and 394,000 CY of fill on-site.
<ul style="list-style-type: none"> <li>If the project includes pond or dam work, show areas that will be flooded.</li> </ul>	Not clear if existing pond (referred to as borrow pit) will be retained, though described as habitat for various wildlife species.	Portions of the existing man-made pond (previously used as a borrow pit during the widening of US 15-501) will be retained, as depicted on conceptual site plans included in Attachment A of the initial EIA. This remaining area is within the perimeter buffer and its ultimate dimensional configuration is subject to final plan approval.  No dam work is proposed, and no areas will be flooded.
<b>2. Soils and Prime Farmlands</b>		
<ul style="list-style-type: none"> <li>Identify dominant soils in the project area (county GIS or NRCS website) and show on a map.</li> </ul>		
<ul style="list-style-type: none"> <li>Discuss any soil constraints (fill, wetland soils, septic suitability, slopes, etc.) and indicate those areas on a map.</li> </ul>	Provide more discussion about steep slopes and show on site maps.	Septic suitability is irrelevant given wastewater treatment by a regulated utility.  <b>Steep Slopes:</b> Steep slopes within the construction area will be either graded or filled. Retaining walls will be constructed as needed to contain grading to avoid impacts to riparian areas, perimeter buffers and conservation lands. Exhibit 9, attached hereto indicates the slope analysis for the site. The vast majority of the steep slopes are within the riparian or conservation areas. As

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		shown on Exhibit 9, the main area of steep slopes within the development area is the northernmost section near the NCDOT borrow pit, which slopes were artificially created during the highway construction.
<ul style="list-style-type: none"> <li>Describe any soil disturbance or contamination expected as a result of this project.</li> </ul>	Discussion is inadequate.	<p>Soil disturbance is limited to mass grading to prepare the proposed built upon areas for construction. Typical earth-moving equipment will be used, including but not limited to pan, excavator, track hoes, dump trucks. Soil contamination is not expected given the current and previous uses of the property.</p> <p>Inconsequential and sporadic minor contamination is possible from construction equipment and may include hydraulic fluid, oil, fuel. Such minor contamination will be limited to the development and disturbed areas, will be immediately addressed and will have no impacts beyond those areas. More discussion is provided in Section 13 below.</p>
<ul style="list-style-type: none"> <li>If contamination is expected, discuss containment plans and procedures.</li> </ul>	No. How will contamination be contained? Reported? Provide more detail about your spill response. Also, discuss potential for future contamination issues.	In the event of soil contamination, contaminated areas will be immediately isolated and disposed of by qualified personnel. More discussion is provided in section 13 below.
<ul style="list-style-type: none"> <li>If soil will be relocated, specify the number of square yards/feet to be moved, and its relocation site.</li> </ul>	Discussion is inadequate.	Soils will be relocated on-site generally from cut areas to fill areas to achieve site balance. All soils will be appropriately compacted for the intended land use. Relocation sites and earthwork estimates of the site cut and fill volumes are indicated on Exhibit 5.
<ul style="list-style-type: none"> <li>Describe runoff management plans for the project.</li> </ul>		
<ul style="list-style-type: none"> <li>If soil disturbance is proposed, describe the off-site impacts expected from this activity.</li> </ul>	Discussion is inadequate.	<p>The site sediment and erosion control plan, which implements site stabilization and erosion control features and will be reviewed and approved by Chatham County, mitigates off-site impacts to the maximum extent possible. Thus, offsite impacts are not expected. For reference, following is a link to the Chatham County soil erosion and sedimentation control requirements.</p> <p><a href="https://www.chathamnc.org/home/showdocument?id=44126">https://www.chathamnc.org/home/showdocument?id=44126</a></p>
<ul style="list-style-type: none"> <li>Provide a map of any prime or unique farmland soils in</li> </ul>		



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<p>the project or service areas, and include reference used to make this determination.</p>		
<ul style="list-style-type: none"> <li>Describe impacts to prime or unique farmland soils, including acreage estimates of lost farmland soils and retained farmland soils.</li> </ul>	<p>Discussion and analysis are inadequate. Also, should the 1.05 acres of prime farmland retained [blue area shown in upper right corner of undisturbed land] be flagged in Exhibit 2.3?</p>	<p>The USDA defines Prime and unique farmland as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas.</p> <p>The majority of the site is forested, with no indication of recent farming. Minimal impact to prime or unique farmland are expected as a result of the proposed project, as the site and general area have low to medium agricultural suitability, per the Agricultural Suitability Analysis found on page 101 of the Chatham County Comprehensive Plan. The Comprehensive Plan also references a 2009 Farmland Protection Plan (P. 101, Figure 21) that appropriately identifies that the region where the project is situated as having a low suitability for agricultural endeavors.</p> <p>According to Exhibit 2.3 that was provided in the initial EIA, 1.05 acres of land categorized as prime farmland are retained and 23.06 acres of land categorized as prime farmland are lost under the current plan. It is worth noting that approximately 2.4 acres is mapped at the location of an existing man-made pond located adjacent to Legend Oaks and, by definition, is not prime farmland. Similarly, highway rights-of-way can be eliminated from prime farmland categorization due to restrictions of use outside of the applicant's control. Undisturbed perimeter buffers may or may not be retained under the prime farmland categorization, depending on zoning conditions that may or may not preclude agriculture. From an impact standpoint, it is worth noting that the project provides positive benefits in that the site design limits sprawl and consumption of other land categorized as prime farmland.</p> <p>There is no subdivision requirement to flag these areas.</p>
<p>3. Land Use</p>		
<ul style="list-style-type: none"> <li>Provide a map showing current use of land on the site and surrounding properties.</li> </ul>		

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<ul style="list-style-type: none"> <li>Discuss how the current land use fits into the surrounding area (conservation, development, ecological function, etc.)</li> </ul>	<p>Discussion is inadequate.                  Current land use in the area is considerably less dense and lower impervious. Not discussed.                  The surrounding areas are described as more urbanized than they actually are.                  Inaccurate.                  Wildlife cannot migrate to habitat in adjacent properties.                  Does not address impacts to water quality.                  This report does not address increasing sprawl of a critical area.</p>	<p><b>Current Land Use and Surrounding Area:</b> Current land use in the region surrounding the project area and the future intended land uses described within the Chatham County Comprehensive Plan vary in density and use. On a larger scale, the USDA Economic Research Service classifies Chatham County as “Metro” with a population of 1 million-250,000 (see Exhibit 10, attached hereto), on the Rural-Urban Continuum Code (2013), a 9-level classification of counties by metro-nonmetro status, location, and urban size. Metro areas are defined as “counties containing one or more urbanized areas: high-density urban areas containing 50,000 people or more; metro areas also include outlying counties that are economically tied to the central counties, as measured by the share of workers commuting on a daily basis to the central counties” and nonmetro counties are defined as “outside the boundaries of metro areas and have no cities with 50,000 residents or more.”</p> <p>While it may be true that the residential land use in the area is less dense, with lower impervious area, than what is proposed with the project, it is also true that similar development, in terms of use types, density, and impervious area, are present throughout the US 15-501 Corridor and within the greater region. Examples include the Chatham Downs development, immediately south of the project area at the intersection of Lystra Road and US 15-501 and Polks Landing, immediately west of the project area. It is important to note that the proposed development is the first mixed-use development proposed under this zoning classification in Chatham County. As such, of course, it will and should have a higher density than residential development in the area. This site is not only in a Community Center under the Comprehensive Plan but it is also in a Compact Residential section under the Comprehensive Plan. As such it intended under the plan to have greater density.</p> <p>The current use of the property (i.e. vacant, undeveloped) is counter to the land uses described within the Chatham County Comprehensive Plan, where the site is designated as a “Community Center” (P. 47) and with the Compact Residential Zone (P. 47).</p> <p><b>Wildlife Migration:</b> Wildlife can migrate to habitat within preserved portions of the project area and further east to adjacent properties as there are no barriers to migration. US 15-501 and Lystra road already act as barriers to</p>
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		<p>wildlife dispersal.</p> <p><b>Impacts to Water Quality:</b> The site plan is in compliance with all laws and regulations enacted for the protection of water supply watersheds as covered by applicable federal, state, and local rules, including the Clean Water Act, the Jordan Lake Buffer Rules, and the Chatham County Watershed Protection Ordinance. Impacts to water quality are effectively mitigated and minimized to the greatest extent practicable through the preservation of on-site riparian buffers and a large portion of existing forested area, the implementation of a comprehensive stormwater plan, and the use of sediment and erosion control BMPs.</p> <p><b>Increasing Sprawl of a Critical Area:</b> The designation of the urban corridor within the Chatham County Comprehensive Plan seems to recognize that the conservation and ecological value of the land proximate to US 15-501 is already impacted. However, the progressive design of the project preserves a significant portion of the project area and provides for other positive indirect impacts as discussed elsewhere. Plus, it cannot be ignored that this site has an approved development plan already and that it is targeted under the Comprehensive Plan for development <u>precisely so as to designate development pods and reduce suburban sprawl outside the designated development areas. If the Comprehensive Plan is followed, this project will not increase sprawl, it will contribute to the reduction of overall suburban sprawl in northeastern Chatham County.</u></p>
<ul style="list-style-type: none"> <li>• Provide the current zoning of the project site and the surrounding area.</li> </ul>		
<ul style="list-style-type: none"> <li>• Discuss how the proposed uses fit into the intended land use of the area (conservation, development, ecological function, quality of life).</li> </ul>	<p>Discussion is inadequate.</p>	<p>See above discussion and Exhibit 2, attached hereto.</p>
<ul style="list-style-type: none"> <li>• Indicate whether zoning or local land use plans will need to be changed after project</li> </ul>		

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completion.		
4. Wetlands		
<ul style="list-style-type: none"> <li>Indicate whether wetlands are present, describe the basis for this determination and identity of the person who made the determination.</li> </ul>	Delineators not named in the report.	<p>The waters of the U.S., including wetlands, were delineated, surveyed, and accurately depicted on the wetlands delineation exhibits dated May 12, 2014 and provided as Attachment E of the initial EIA. The Corps Regulatory Official certified and signed each exhibit on August 18, 2014.</p> <p>Delineated By:                      Kevin Yates                      John R. McAdams Company, Inc.</p> <p>Verified By:                      Andy Williams                      US Army Corps of Engineers</p> <p>Peer Review By:                      Chris Huysman                      Wetlands and Waters, Inc.</p>
<ul style="list-style-type: none"> <li>Show identified wetlands on a map, and describe all relevant details, such as acreage, types, delineation, function, etc.)</li> </ul>		
<ul style="list-style-type: none"> <li>If wetlands are to be filled, specify the number of acres that will be affected.</li> </ul>		
<ul style="list-style-type: none"> <li>List all required permits and permitting agencies.</li> </ul>	Buffer impact approval from WRB, 404/401 permitting not discussed.	<p><b>Permitting:</b> Section 4.0 of the EIA states that, “The proposed project will require permit verification from USACE and concurrence from DWR for a Nationwide Permit 29/39 and corresponding Water Quality Certification #4139 for authorization to construct two stream crossings. No wetland fills are proposed... The Project proponent is aware that stream mitigation may be required from the USACE depending on the final site plan. Should mitigation be required by USACE, several mitigation banks are available in the primary service area of the Project.” As previously mentioned, stream mitigation may be required as part of the Clean Water Act Permitting for the project. The U.S. Army Corps of Engineers (USACE) and the N.C. Division of Water Resources</p>

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		<p>(DWR) will determine the appropriate amount of compensatory mitigation required for the project. USACE and NC DWR assess compensatory mitigation requirements on a case-by-case basis during the permit review process. Per Federal regulations, the applicant must avoid and minimize impacts to the greatest extent practicable to obtain a permit.</p> <p><b>Buffer Impact Approval:</b> Unavoidable impacts to riparian buffers will result from the need to construct the two stream crossings. Buffer impact approval will be required from Chatham County to construct the two crossings. Project plans will be submitted to the Watershed Review Board for review and approval. While the county has no requirement for mitigation for the loss of riparian areas, impacts are de facto mitigated by any Corps-required mitigation. Any compensatory mitigation required will likely necessitate a deed restriction on all retained wetlands and streams.</p> <p>The conceptual site plan initially included in Attachment A of the EIA indicates the approximate location of the two stream crossings.</p>
<ul style="list-style-type: none"> <li>• If any diversions/additions/withdrawals of surface water will affect wetlands, describe those activities.</li> </ul>	<p>Not discussed.</p>	<p>There are no proposed diversions, additions, or withdrawals from any of the wetlands or streams within the boundaries of the project.</p>
<p>5. Public lands and Scenic, Recreational, and State Natural Areas</p>		
<ul style="list-style-type: none"> <li>• Provide a map of County or municipal parks, scenic, recreational or state natural areas (SNHAs, State or Federal Forests, etc.) on or adjacent to the site/project area.</li> </ul>	<p>Text says that there are none on or near the site. Where are the nearest areas? Provide a map.</p>	<p>Exhibit 5.1, provided in the initial EIA, is a map of public lands and scenic, recreational, and state natural areas within the region. That information can also be found at the following link:  <a href="https://www.arcgis.com/apps/webappviewer/index.html?id=cfccf3c3c60e439c84a9d777f29cc2e6">https://www.arcgis.com/apps/webappviewer/index.html?id=cfccf3c3c60e439c84a9d777f29cc2e6</a></p> <p>There are no public lands or scenic, recreational, or state natural areas located adjacent to or within the site boundary. The following is a link to the Chatham County district parks:  <a href="https://www.chathamnc.org/government/departments-programs/parks-">https://www.chathamnc.org/government/departments-programs/parks-</a></p>

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		<p><a href="#">recreation/county-parks-trails</a></p> <p>Following is a link to the Chatham County recreational bike loop map:</p> <p><a href="https://www.chathamnc.org/government/departments-programs/planning/transportation/recreational-bike-loop-map">https://www.chathamnc.org/government/departments-programs/planning/transportation/recreational-bike-loop-map</a></p> <p>Additionally, the NC Natural Heritage Program (NCNHP) report included in Attachment J of the initial EIA shows natural areas documented within a one-mile radius of the site.</p>
6. Areas of Archaeological or Historical Value		
<ul style="list-style-type: none"> <li>Discuss any archaeological or historical studies of the project location; provide relevant references.</li> </ul>		
<ul style="list-style-type: none"> <li>Describe and identify on a map any structures (i.e., walls, buildings, etc.) on the site and provide estimated ages of those structures.</li> </ul>		
<ul style="list-style-type: none"> <li>Describe all impacts to any archaeological or historical resources in the proposed project area.</li> </ul>	<p>The proposed trail loop in the conservation land area is located near one edge of the Cole Family cemetery. How will the cemetery be maintained and protected?</p>	<p>The Cole Family cemetery has been surveyed and the location depicted on various maps submitted with the zoning application. All State and local regulations regarding protection will be observed. Signs will demark and protect its corners.</p>
<ul style="list-style-type: none"> <li>Describe plans for demolishing or rebuilding any structures.</li> </ul>		
<ul style="list-style-type: none"> <li>Provide photographs of any significant resources, including all structures older than 50-years.</li> </ul>		

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<ul style="list-style-type: none"> <li>• Provide relevant correspondence with the Chatham County Historical Association and NC SHPO.</li> </ul>		
7. Air Quality		
<ul style="list-style-type: none"> <li>• Describe the project's impacts on ambient air quality.</li> </ul>		
<ul style="list-style-type: none"> <li>• Describe plans for any open burning during or after construction.</li> </ul>	<p>Yes, but clearing operations and slash disposal are not discussed in detail here. Provide air quality discussion in regards impacts to adjacent properties from burning waste from clearing operations. Suggest grinding as an alternative. If grinding is used, discuss noise and air impacts.</p>	<p><b>Burning:</b> Any burning associated with site clearing will comply with existing state laws that ensure that impacts to adjacent properties are minimized. Burn piles will be located at least 500 feet from adjacent properties and highway rights-of-way. There will be no open burning after construction.</p> <p>Following is a link to air quality regulations related to outdoor burning:  <a href="https://www.ncforestservice.gov/burn_permits/burn_airregs.htm">https://www.ncforestservice.gov/burn_permits/burn_airregs.htm</a></p> <p>Following is a link to the North Carolina General Statute regulating open fires:  <a href="https://www.ncleg.net/EnactedLegislation/Statutes/HTML/ByArticle/Chapter_106/Article_78.html">https://www.ncleg.net/EnactedLegislation/Statutes/HTML/ByArticle/Chapter_106/Article_78.html</a></p> <p><b>Grinding:</b> Grinding equipment, if used, will comply with appropriate emissions standards for off highway vehicles. Grinding equipment will generate noise during normal construction timeframes and will be subject to the limitations and exceptions specified under the Chatham County Noise Ordinance. Generally, equipment is equipped with mufflers and noise reducing equipment by the manufacturer.</p>
<ul style="list-style-type: none"> <li>• Indicate the number of proposed parking spaces, if applicable.</li> </ul>		
<ul style="list-style-type: none"> <li>• Describe whether the project will increase odor levels, or the likelihood of odor complaints.</li> </ul>		
<ul style="list-style-type: none"> <li>• Provide a copy of any</li> </ul>		

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required traffic studies.		
8. Noise Levels		
<ul style="list-style-type: none"> <li>Discuss current noise levels; use a benchmark if possible.</li> </ul>	<p>Benchmarks given are inadequate for comparison.</p>	<p>Depending on weather conditions and leaf cover, ambient noise is audible to approximately ½ mile within the project area and diminishes in low elevation riparian areas. Noise is currently generated off-site, primarily by vehicle traffic and adjacent residential and commercial uses.</p>
<ul style="list-style-type: none"> <li>Describe any increases in noise levels expected from this project.</li> </ul>	<p>No. Construction noise is addressed, but long-term increases are not detailed. Future noise levels discussed are inappropriate for comparison. Address realistic noise impacts to the residential properties adjacent to the site.</p>	<p>It is not anticipated that implementation of the project will produce noise levels that exceed those permissible under the Chatham County Noise Ordinance, which are defined by maximum permissible daily standards by receiving land. As described in the Chatham County Noise Ordinance, the maximum permissible daily standard shall not exceed 60 decibels without a permit by the receiving land, and unless a permit has been issued, no person can exceed 60 decibels during the following hours: from Sunday to Thursday, from 7:00 a.m. to 9:00 p.m., or from Friday to Saturday, from 7:00 a.m. to 11:00 p.m. Noise cannot exceed 80 decibels at any time under the ordinance. It should be noted that construction operations limited to daytime hours from “7:00 a.m. to 9:00 p.m. on weekdays and 8:00 a.m. to 7:00 p.m. on Sundays for which building permits have been issued, or construction operations not requiring permits during such hours, provided all equipment is operated in accordance with the manufacturer’s specifications and with all standard equipment, manufacturer’s mufflers and noise reducing equipment in use and in proper operating condition” are exempt from the Noise Ordinance provisions. Any uses allowed within the approved MUCD are subject to the maximum permissible daily standards by receiving land described in the Chatham County Noise Ordinance standards.</p> <p>None of the proposed uses of the Williams Corner development will cause consistent and prolonged increases in noise, and noise impacts to adjacent properties are expected to be minimal and insignificant over the long-term. The combination of site perimeter buffers, landscape plantings, preservation of forested land outside of the development, and the building placement/orientation of the development itself minimize increases in noise that may result from the development. Proposed buildings greater than one story in height will limit the transmission of increased noise generated by the project by acting as sound barriers, and will attenuate noise. Further, these buildings assist in mitigating noise that may be generated by retail and</p>



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		<p>commercial uses proximate to US 15-501, and will assist in reducing ambient noise generated by US 15-501.</p> <p>The TIA commissioned for the development concluded that all intersections are expected to operate under capacity post-development, therefore it can be concluded that ambient noise from US 15-501 and Lystra Road may increase over time as those intersections and roadways approach capacity with continued regional growth. The NCDOT Traffic Noise Manual defines criteria that, if approached or exceeded, requires consideration of noise abatement, which consideration will not be required by this development but may become relevant at a later time in connection with any possible subsequent development. . The NCDOT Traffic Noise Manual can be accessed at the link below. The manual also provides Construction Equipment Typical Noise Level Emissions in Table 9.3 (p.88).</p> <p><a href="https://connect.ncdot.gov/resources/Environmental/PDEA%20Procedures%20Manual%20Documents/2016%20NCDOT%20Traffic%20Noise%20Manual.pdf">https://connect.ncdot.gov/resources/Environmental/PDEA%20Procedures%20Manual%20Documents/2016%20NCDOT%20Traffic%20Noise%20Manual.pdf</a></p>
<ul style="list-style-type: none"> <li>Specify the distance at which the increased noise will be heard.</li> </ul>	No	<p>Any marginal, post-development noise increases are not anticipated to be significant nor distinguishable from existing ambient noise levels and are anticipated to dissipate rapidly as distanced from the site. Further, as discussed elsewhere, the buildings within the development will act as sound barriers, further decreasing the off-site impact.</p>
<ul style="list-style-type: none"> <li>Discuss whether surrounding properties will be affected by noise levels.</li> </ul>	No	<p>It is not anticipated that surrounding properties will be impacted by noise levels.</p> <p>As mentioned above, the placement of buildings that act as sound barriers as well as the distance between commercial uses and residential uses mitigate the introduction of business related noises into residential areas. All noises will, of course, be subject to regulation and control by the Chatham County Noise Ordinance provisions.</p>
<ul style="list-style-type: none"> <li>If commercial uses are proposed, specify the hours of operation.</li> </ul>	<p>Typical hours for proposed commercial tenant are not provided. Are storage units accessible 24/7?</p>	<p>The hours of operation for commercial uses will range between 7:00 a.m. and 10:00 p.m.</p> <p>Retail facilities will generally operate between the hours of 8:00 a.m. and 10:00 p.m..</p>

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		<p>Office facilities will generally operate between the hours of 8:00 a.m. and 5:00 p.m.</p> <p>Eateries will generally operate between the hours of 7:00 a.m. and 12 a.m.                  Bars may remain open until 2 a.m.</p> <p>Storage facilities will be accessible 24/7 year-round but the intensity of the use will be minimal.</p>
<b>9. Light Levels</b>		
<ul style="list-style-type: none"> <li>Describe lighting plans for the project, including how lighting will impact adjacent residents and wildlife.</li> </ul>		
<b>10. Surface and Groundwater Resources (discuss separately)</b>		
<ul style="list-style-type: none"> <li>Identify and provide a map of surface waters in the project area. Describe groundwater (aquifers) in the project area.</li> </ul>		
<ul style="list-style-type: none"> <li>Include names, locations, classifications, and use support ratings for surface waters.</li> </ul>		
<ul style="list-style-type: none"> <li>Specify and show on a map the river basin in which the project is located.</li> </ul>		
<ul style="list-style-type: none"> <li>Discuss any known groundwater quality issues.</li> </ul>		
<ul style="list-style-type: none"> <li>Discuss drinking water sources.</li> </ul>		
<b>11. Fish and Aquatic Habitats</b>		
<ul style="list-style-type: none"> <li>Describe fish and aquatic habitats in and adjacent to the</li> </ul>	A surface water was identified as isolated	The pond that resulted from the mining of aggregate was not captured by the US Army Corps of Engineers. Further, discharges into isolated man-made

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<p>site/project area.</p>	<p>and non-jurisdictional by USACE. Did DWR take a position on jurisdiction?</p>	<p>ponds are specifically exempted from permitting under North Carolina’s isolated wetlands and waters rules. (15A NCAC 02H .1301 (e)(2).</p> <p>Per 15A NCAC 02H .1301 (e)(2):                  “Discharges to isolated, man-made ponds or isolated ditches except for those wetlands or waters constructed for compensatory mitigation or for on-site stormwater management”</p> <p>Water started to collect in the man-made pit circa 2004 and has fluctuated in size since then due to factors relating to excavation and rainfall.</p>
<ul style="list-style-type: none"> <li>Discuss impacts to fish and aquatic life and their habitats, including a map showing those habitats.</li> </ul>		
<p>12. Wildlife and Natural Vegetation</p>		
<ul style="list-style-type: none"> <li>Describe and provide a map of natural community types on and adjacent to the site/project area.</li> </ul>	<p>Use the Fourth Approximation of Schafle &amp; Weakley (2012)</p>	<p>Comment is acknowledged.</p>
<ul style="list-style-type: none"> <li>List the species of dominant plants and animals observed on the site that typify those communities.</li> </ul>		
<ul style="list-style-type: none"> <li>Evaluate and discuss whether suitable habitat exists for rare, threatened, and /or endangered species, as described y the NC Natural Heritage Program.</li> </ul>		
<ul style="list-style-type: none"> <li>If wildlife will be displaced, discuss any limitation of adjacent areas to support them.</li> </ul>	<p>Conclusions are not realistic. Stating that the project won’t have impacts because wildlife can move offsite to habitat</p>	<p>The existing urban / suburban character of the project area supports numerous animal and bird species which are generalists and that are well adapted to increasingly urbanized areas. Below is a partial list of animals and birds that were either observed within or expected to be within the project area that will continue to survive during and after development.</p>

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	<p>on adjacent properties is not valid.                  Address displacement impacts, fragmentation, and habitat loss.                  Any deforestation for construction should not be allowed during the spring nesting season for birds.</p>	<ul style="list-style-type: none"> <li>• Deer</li> <li>• Raccoons</li> <li>• Coyotes</li> <li>• Red Foxes</li> <li>• Mice</li> <li>• Squirrels</li> <li>• Opossums</li> <li>• Rabbits</li> <li>• Hawks (various species)</li> <li>• American Robin</li> <li>• Flycatchers</li> <li>• Wrens</li> <li>• Sparrows</li> <li>• Cardinals</li> <li>• Crows</li> <li>• Blackbirds</li> </ul> <p>Conserving the undeveloped eastern portion of the property assemblage assists in minimizing habitat fragmentation to the maximum extent practicable, given the land value, development pressure, and categorization of the immediate area as a “Community Center” and “Compact Residential” in the Chatham County Comprehensive Plan.</p> <p>The Big Woods Conservation Design Guide (2017) provides recommendations consistent with those set forth in Plan Chatham that include prioritizing priority habitats in natural spaces in new development, including unfragmented oak and mixed hardwood/pine forests, early successional communities, wetlands, rock outcrops, riparian and floodplain communities, and streams and rivers. The project successfully implements this recommendation into the site design by conserving not only the riparian buffer of Cub Creek, but also the 59 acres of unfragmented mixed upland hardwoods and bottomlands, steep slopes, rock formations, and wetlands in the eastern portion of the project area. Further, the riparian corridor of Cub Creek appears to be designated as having “Conservation Preference” on the Residential and Conservation Conflict Area Map (Figure 1, P. 8) of the Big Woods Conservation Design Guide, which is</p>
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		<p>guaranteed with the current site design.</p> <p>The EIA writers want to clarify here that their conclusion considered the development of the project in phases over a seven year period. Wildlife, squirrels, birds, deer and other small mammals will migrate to adjacent undisturbed land and self-regulate according to specific population dynamics. Speaking on a regional basis, vertical construction is less impactful to the environment than horizontal development, and the conclusion that the site has no significant impact on wildlife considers that the development of an urban corridor, with site-specific development concentrated proximate to a major thoroughfare, preserves outlying rural land and cumulatively, the impacts to wildlife can be considered minimal.</p>
<ul style="list-style-type: none"> <li>Identify, list, and describe the distribution of the invasive species present on the site. Consult the NC Botanical Garden’s Web page, “Plants to Avoid in the Southeast US” for a list of invasive species common to the region.</li> </ul>	<p>Invasive species distribution is not discussed in detail. Show on map. Long-term management is mentioned, but no details are given. Provide management plan and identify responsible party. Landscaping sheet shows ornamental trees, shrubs, and grasses. Provide a list of all proposed species. Will only native vegetation be used for landscaping and cultivated species considered invasive be banned from use?</p>	<p>There is no specific mandate within the subdivision ordinance to show the invasive species distribution on a map. However, site and field visits revealed that the greatest diversity and concentration of invasive species is closest to US 15-501; distribution decreases as one goes from west to east on the tract. Proximate to the intersection of Lystra Road and Highway 15/501 the sub-canopy is comprised of up to 85% invasive species; here, Russian Olive effectively shades out the herbaceous community but for Japanese Stilt Grass. The lowest concentrations of invasive species are in areas that will remain undisturbed under the current land plan. Following is a list of invasive species observed on-site:</p> <ol style="list-style-type: none"> <li>1. Japanese stilt grass (<i>Microstegium vimineum</i>)</li> <li>2. Japanese honeysuckle (<i>Lonicera japonica</i>)</li> <li>3. Russian Olive (<i>Eleagnus angustifolia</i>)</li> <li>4. Chinese Privet (<i>Ligustrum sinense</i>)</li> <li>5. Tree-of-Heaven (<i>Ailanthus altissima</i>)</li> <li>6. Princess tree (<i>Paulownia tomentosa</i>)</li> <li>7. Oriental Bittersweet (<i>Celastrus orbiculatus</i>)</li> <li>8. Serecia Lespedeza (<i>Lespedeza cuneata</i>)</li> <li>9. English Ivy (<i>Hedera helix</i>)</li> </ol> <p>The following types of vegetation management are allowed by state law within riparian buffers under the Jordan River Buffer Rules (15A NCAC 02B .0267),</p>

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		<p>per the following link. Note that there are no specific state mandates that a Vegetation Management Plan be approved prior to engaging in any of these activities within regulated riparian buffers.</p> <p><a href="http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20b/15a%20ncac%2002b%20.0267.pdf">http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20b/15a%20ncac%2002b%20.0267.pdf</a></p> <ol style="list-style-type: none"> <li>1. Emergency fire control measures provided that topography is restored</li> <li>2. Mowing or harvesting of plant products in Zone Two</li> <li>3. Planting vegetation to enhance the riparian buffer</li> <li>4. Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised.</li> <li>5. Removal of individual trees that are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering stability of the streambank.</li> <li>6. Removal of individual trees which are dead, diseased or damaged.</li> <li>7. Removal of poison ivy</li> <li>8. Removal of invasive exotic vegetation as defined in: Smith, Cherri L. 1998. Exotic Plant Guidelines. Dept. of Environment and Natural Resources. Division of Parks and Recreation. Raleigh, NC. Guideline #30</li> </ol> <p>Consistent with the State’s riparian buffer rules, the developer will engage in management of the Russian Olive distributed on-site.</p> <p>The developer commits to the use of endemic non-invasive species and will consult with the NC Botanical Garden’s recommendations for “Plants to Avoid in the Southeast US”.</p>
<ul style="list-style-type: none"> <li>• If forest will be cleared, discuss the extent of planned deforestation and specify the forestry methods to be used, including BMPs.</li> </ul>	<p>Discussion is very minimal. Provide methods, BMPs, discuss SMZ, discuss leave trees, and species selection. What will be</p>	<p><b>Forestry Methods:</b> Forest Practices Guidelines Related to Water Quality          Forestry operations in North Carolina are subject to regulation under the Sedimentation Pollution Control Act of 1973 (GS Ch.113A Art.4 referred to as “SPCA”). However, forestry operations may be exempted from the permit and plan requirements of the SPCA, if the operations meet the compliance standards outlined in the Forest Practices Guidelines Related to Water Quality</p>

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	<p>done with the timber post-harvest? How will slash be disposed of?-Grinding on site is encouraged as an alternative to burning.</p>	<p>(15A NCAC II .0100 - .0209, referred to as “FPGs”) and General Statutes regarding stream and ditch obstructions (GS 77-13 and GS 77-14).</p> <p>The North Carolina Division of Forest Resources (DFR) is delegated the authority to monitor and evaluate forestry operations for compliance with these aforementioned laws and/or rules. In addition, the DFR works to resolve identified FPG compliance questions brought to its attention through citizen complaints. Violations of the FPG performance standards that cannot be resolved by the DFR are referred to the appropriate State agency for enforcement action.</p> <p>Forestry best management practices will be used during the clearing phase of the project. Landscape Plan Sheet 1, initially included in Attachment A of the EIA, depicts the site development plan and shows all forested areas that will remain undisturbed in dark green. Forested areas shown in light green are part of required buffers and will remain intact or will be augmented to the extent required by the subdivision ordinance. Here is a link to the Forestry BMP Manual:</p> <p><a href="https://www.ncforestservice.gov/water_quality/bmp_manual.htm">https://www.ncforestservice.gov/water_quality/bmp_manual.htm</a></p> <p>During the grading phases of the project, more restrictive BMPs will be implemented which exceed BMP requirements for forestry practices. For example, forestry practices allow for select cutting of timber from riparian areas and do not require erosion control fencing. The site will be graded under and approved Sediment and Erosion Control Plan, as codified in the ordinance and as administered by Chatham County. The erosion control plan will indicate BMPs to be incorporated. The review of this plan and the subsequent permit will ensure that the grading operation exceeds state Forestry BMP requirements.</p> <p>Following is a link to the County Erosion Control Website:</p> <p><a href="https://www.chathamnc.org/government/departments-programs/watershed-protection/erosion-control">https://www.chathamnc.org/government/departments-programs/watershed-protection/erosion-control</a></p>
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		<p><b>Post-Harvest and Disposal:</b> Merchantable timber will be sold to defray costs associated with construction, permitting, and approvals.</p> <p>Slash, laps and non-merchantable timber will be burned or ground depending on environmental and economic factors at the time of construction. If ambient air quality standards or drought prevent burning, then grinding may be an alternative. Regardless, the disposal will be in accordance with established rules and regulations. Following are links to forestry burning permits and air quality air permits:</p> <p><a href="https://www.ncforestservice.gov/burn_permits/burn_permits_main.htm">https://www.ncforestservice.gov/burn_permits/burn_permits_main.htm</a>  <a href="https://files.nc.gov/ncdeq/Air%20Quality/rules/rules/15A-NCAC-02D-Section-.1900.pdf">https://files.nc.gov/ncdeq/Air%20Quality/rules/rules/15A-NCAC-02D-Section-.1900.pdf</a></p>
13. Hazardous Materials		
<ul style="list-style-type: none"> <li>• List all hazardous materials to be stored or introduced during construction or operation.</li> </ul>	<p>Insufficient. Provide more details. Provide more detail about your spill response. Also, discuss potential for future contamination issues.</p>	<p>Per § 93.05 PERMITS section (C) of the Chatham County Code of Ordinances, “No person shall maintain, store, handle materials and conduct processes which produce conditions hazardous to life or property or install equipment used in conjunction with those activities without a permit as required by the Fire Marshal and prescribed in the State Fire Prevention Code of the State Building Code most current edition and this code. Before a permit may be issued, the Fire Marshal and/or his or her authorized representative, shall inspect and approve the receptacles, vehicles, buildings, structures, storage areas, devices, processes and conditions related to the permit.” The ordinance can be accessed at this link:</p> <p><a href="https://codelibrary.amlegal.com/codes/chathamcounty/latest/chathamcounty_nc/0-0-0-925">https://codelibrary.amlegal.com/codes/chathamcounty/latest/chathamcounty_nc/0-0-0-925</a></p> <p>No hazardous materials will be permitted for treatment, storage, or disposal on the site.</p> <p><b>Spill Response:</b> Hazardous materials introduced to the site during construction phases will be in de minimis quantities and may include fuel for construction equipment. Per industry standards, contractors working on-site will be required to retain a copy of an incidental spill plan, and must retain spill kits while performing work onsite. Any hazardous materials introduced during</p>



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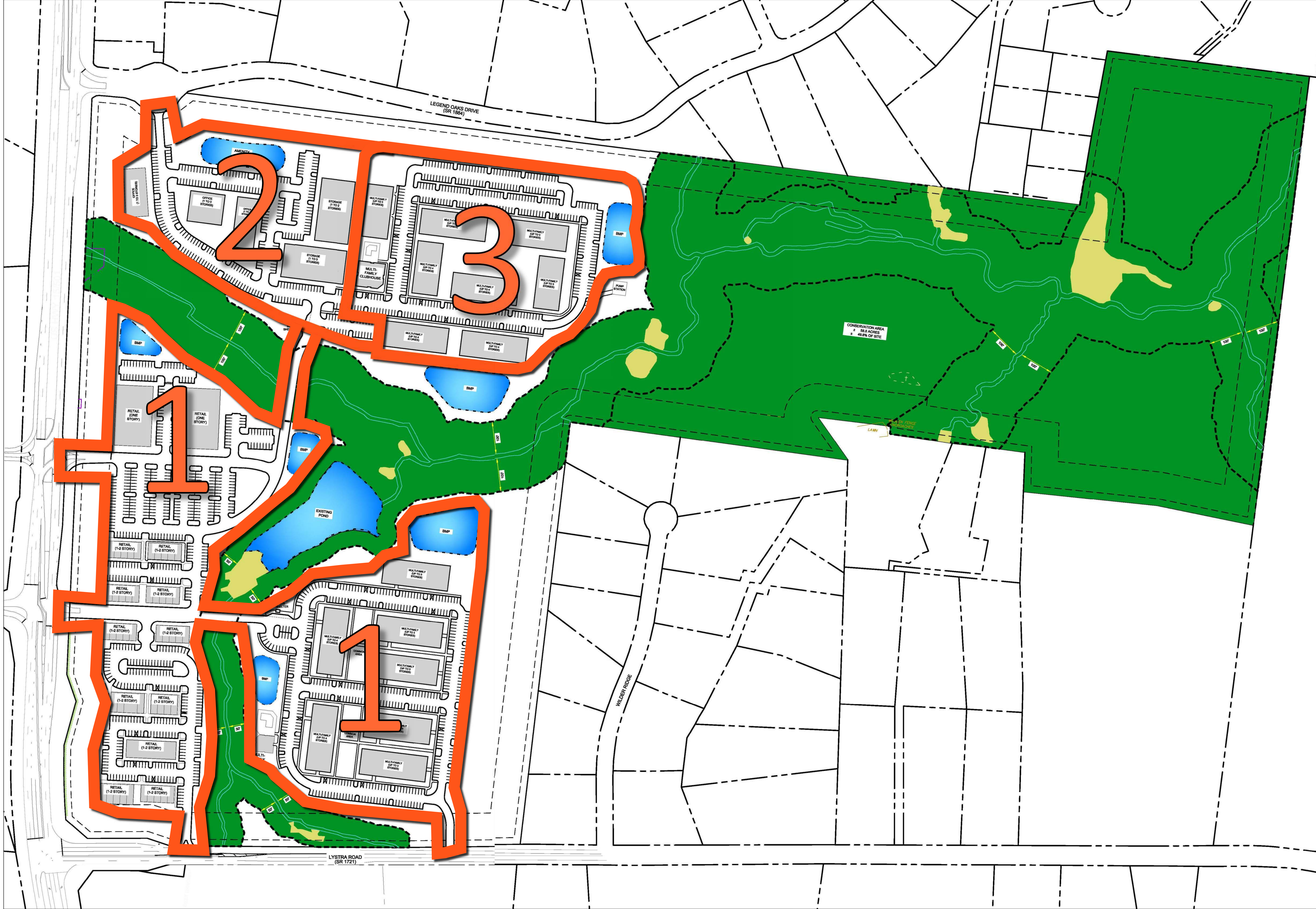
		<p>construction or operation will be in de minimis quantities and will generally be associated with equipment fuel and hydraulic fluids. The Hazard Communication Standard (HCS) (29 CFR 1910.1200(g)), revised in 2012, requires that the chemical manufacturer, distributor, or importer provide Safety Data Sheets (SDSs) (formerly MSDSs or Material Safety Data Sheets) for each hazardous chemical to downstream users to communicate information on these hazards. Per the Hazard Communication Standard, all employers with hazardous chemicals in their workplaces must have labels and safety data sheets for their exposed workers, and train them to handle the chemicals appropriately. Any incidental spills of hazardous materials that occur during or post-construction, such as due to equipment leaks or traffic accidents, will be contained and disposed of offsite by qualified personnel.</p> <p><b>Potential for future contamination issues:</b>                  There is limited potential for future contamination issues based on the types of uses included in the proposed development, including multi-family residential, retail/shopping, and storage. Further, all buildings, structures, and premises associated with the project are subject to inspection by the Fire Marshal and/or an authorized representative for compliance with the Chatham County Fire Prevention and Protection Code, which includes “the purposes of ascertaining and causing to be corrected any condition which may cause fire or explosion, endanger life from fire or explosion, or any violations of the provisions of the code, or any other ordinance pertaining to fire or explosion hazards.”</p>
<ul style="list-style-type: none"> <li>For each hazardous material, other than de minimis quantities or for routine housekeeping purposes, describe the procedures to be used to ensure their proper management, storage, and disposal.</li> </ul>	<p>No</p>	<p>Hazardous materials, if any, will be limited to de minimis quantities or for routine housekeeping purposes.</p>
<p>References</p>	<p>References listed at end. Provide citations in text.</p>	<p>References were provided, as required.</p>

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Exhibits (Maps, Figures, Tables, Photos, etc.)		
State and Federal Permits Required		

# Exhibit 1

## Williams Corner Phasing Map



## Exhibit 2

# Application Justification

## APPLICATION SECTION A ADDENDUM

### JUSTIFICATION OF APPLICATION

- 1. The alleged error in this Ordinance, if any, which would be remedied by the proposed amendment with a detailed explanation of such error in the Ordinance and detailed reasons how the proposed amendment will correct the same.**

No error in the Ordinance is alleged. The requested Mixed Use Conditional Use District is allowed under Section 10.12 of the Chatham County Zoning Ordinance. Thus, this justification is not required for this application.

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- 2. The changed or changing conditions, if any, of the area or in the County generally, which make the proposed amendment reasonably necessary to the promotion of the public health, safety and general welfare.**

The existing Williams Corner Project Conditional Use Permit was approved in January 2006. In the intervening fourteen years conditions in the area and the County have changed significantly. Since 2006, Chatham County has adopted revised zoning and subdivision ordinances, along with a constellation of new development regulatory standards, including updated environmental, stormwater and watershed regulations.

In addition, the commercial and real estate market has changed. Since the original approval, Chatham County and the nation itself experienced a significant residential real estate recession that impacted not just the number of residential sales but also the nature and type of residential dwellings sought-after in the post-recession residential marketplace. Because of its ideal and its unique and desirable community attributes, Chatham County emerged early from the national recession

and, under the leadership of the Board of Commissioners and the Planning Staff, has been enjoying an arc of resiliency in terms of planning and community building for the most recent years.

But perhaps the most significant change has been the Planning Staff's and this Board's historic and successful drafting and adoption of a Comprehensive Land Use Plan known as "Plan Chatham," adopted in November 2017. Plan Chatham, a strategic guide for future land use decisions, was adopted after almost two years of an interactive, community-wide process of determining the appropriate planning "road map" for the County.

Plan Chatham includes a Future Land Use and Conservation map as well as multiple goals, objectives, recommendation and action items.

Applicant has taken all of these intervening changes, strategies and plans into account as it has worked to envision a new Williams Corner development – one that incorporates the new regulatory documents, the new plans and the existing residential and commercial marketplace.

In particular, one element that is changing in the wake of the housing recession has been a new focus on the need for alternative housing options other than just single-family, detached residential dwellings that have been the hallmark of growth in northeastern Chatham County since at least the late 1980's. There is a severe lack of multi-family rental units in Chatham County. As of 2014, the combination of apartments and duplex units in Chatham County comprised less than 7% of the total housing units in the County and there are more than twice that many mobile homes in the County. (*Plan Chatham*, p.25). The Comprehensive Plan puts an emphasis on changing that allocation and increasing residential density in certain targeted locations such as the Williams Corner location. (*See Plan Chatham Community Center and Compact Residential descriptions*, p. 47, p. 63, p. 73, p. 127).

As set forth in more detail below in item #3 immediately below (regarding carrying out the intent of adopted plans), mixed-use communities are strongly valued and encouraged under Plan Chatham in part because they encourage self-sufficient, neighborhood and pedestrian friendly, walkable and non-sprawling communities. Such communities will cut down on transportation expense and congestion. These attributes are deemed to promote the public health, safety and general welfare of the community at large.

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**3. The manner in which the proposed amendment will carry out the intent and purpose of any adopted plans or part thereof.**

Because of its location and design, the proposed Williams Corner mixed use conditional district is ideally situated to carry out the intent and many of the purposes of Plan Chatham, the Comprehensive Plan 2017, adopted by the Board of Commissioners in November 2017.

Plan Chatham approaches the future growth of Chatham County by (a) describing ten Goals, (b) establishing multiple Objectives for each Goal, (c) making Recommendations to achieve the Goals and, finally, (d) promoting Action Items (or “Implementation Steps”). The following paragraphs will demonstrate in detail how thoroughly the proposed Williams Corner Mixed Use Conditional District fulfills those Goals, Objectives, Recommendations and Action Items.

**A. Chapter 2: Issues and Opportunities.**

With respect to Employment and Income (*Plan Chatham, pp. 15-16*), Williams Corner helps to alleviate the concerns regarding local job opportunities and out-commuting for employment. The attached Fiscal Benefits and Economic Impacts Study performed by Lucy Gallo of



Development Planning and Financing Group, Inc., goes into extensive detail regarding these issues. In summary, however, it shows that at buildout, Williams Corner is anticipated to create 567 direct, onsite permanent jobs in Chatham County and 870 total permanent jobs in the County. These jobs are anticipated to generate \$25.2 million of annual labor income in Chatham County. (*Gallo, p. 9-10*). By creating local jobs and simultaneously attracting residents to the County, Williams Corner should help to begin to reduce the Plan Chatham figure of 57% of Chatham workers out-commuting to jobs outside the County. This will also have the effect of increasing the daytime demand for goods and services sold and provided within the County. (*Plan Chatham, p. 16*).

With respect to the problem 58% of retail sales “leaking” to outside communities (*Plan Chatham, p. 16*), Williams Corner will be a double benefit because it will create new opportunities to capture retail sales on the 15-501 corridor and simultaneously attract new residents (within the mixed use community) living nearby who will, in turn, make more local retail purchases, especially within the Williams Corner project. Plan Chatham acknowledges that more density (beyond the 20,000 northeast Chatham residents) is needed within the 15-501 corridor in order to attract “national retail and restaurant operators” and thereby capture more retail sales. The Williams Corner project, with a maximum of 540 apartments planned, will generate approximately 810 more local residents to add to that number, thereby helping to reach one of the objectives of Plan Chatham.

Chapter 2 also points up the existing concern about the Chatham County imbalance with respect to residential vs. commercial tax base. The commercial/industrial tax base in Chatham comprises only approximately 8% of the total tax base while that figure is between 20% and 40% in neighboring counties. (*Plan Chatham, p. 20*). Williams Corner will alleviate that concern to some extent because the developed portions of Williams Corner will all be deemed commercial tax base. In fact, the Economic

Analysis attached estimates that Williams Corner will add approximately \$145,300,000 of new commercial tax base (without adding any new residential tax base), which amount is estimated to generate \$975,000 in new annual Chatham County ad valorem tax revenue. (*Gallo, p. 4*).

Chapter 2 also addresses the ideal locations within the County for future retail/ shopping locations. (*Plan Chatham, p. 22*). Williams Corner is in the heart of the area shown as the “High” preference area for retail businesses on the Retail/Shopping Preference Map included in Plan Chatham (*Plan Chatham, p.22*).

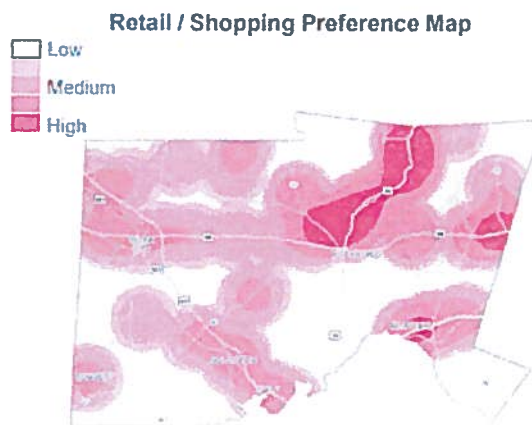


FIGURE 4. RETAIL/SHOPPING PREFERENCE MAP

Chapter 2 further address the problem of housing mix disparities in Chatham County. There is a severe lack of multi-family rental units in Chatham County. As of 2014, the combination of apartments and duplex units in Chatham County comprised less than 7% of the total housing units in the County and there are more than twice that many mobile homes in the County. (*Plan Chatham, p.25*). The Comprehensive Plan puts an emphasis on changing that allocation and increasing residential density in certain targeted locations such as the Williams Corner location. (*See Plan Chatham Community Center and Compact Residential descriptions, p. 47, p. 63, p. 73, p. 127*). Williams Corner will go a long way to helping correct that imbalance by adding up to 540 apartment units without adding single family units.

Finally, Chapter 2 addresses Infrastructure, the Environment and Parks/Health. (*Plan Chatham, pp. 30-37*). Williams Corner will not unduly tax existing and planned the infrastructure in that it has received a “will serve” letter from Chatham County Water and from Old North State Water Company (sewer) for offsite provision of potable water and wastewater treatment. Williams Corner will be improving the transit map by creating two future bus shelter locations suitable for transit stops. In addition, Williams Corner will provide access to reliable high-speed internet, another important utility. (*Plan Chatham p. 31*).

With respect to issues regarding the environment (*Plan Chatham, pp. 33-35*), Williams Corner will be updating compliance so that it incorporates the new environmental standards adopted since its prior approval in 2006. This will have many tangible benefits, including doubling the size of the riparian buffer along Cub Creek within the project (from 50’ each side to 100’ each side). Current stormwater and erosion control ordinances will also be applicable to the project. Stormwater collection will be addressed through the use of accepted Stormwater Control Measures (SCMs) described in the NCDEQ Stormwater Design manual. Per applicable design standards, the following accepted BMP options: stormwater ponds, bio-retention basins and/or constructed wetlands. Per applicable standards, the post development peak flow discharge rates shall not exceed the pre-development peak discharge rates for all storms up to and including the 25-year, 24-hour event; the project will capture, and treat the runoff volume produced from the 1-year, 1-hour storm event; and the designed SCMs will remove 85% of the average annual Total Suspended Solids (TSS) from the development produced runoff. Likewise, this project will have a remarkably large amount of open space (*Plan Chatham, p. 35*) given the approximately 59 acres of conservation area and other open space within the project. Only 24% of the acreage will be developed, leaving 76% of the 118 acres as conservation, common area, riparian buffers and/or open space.

Parks and Health (*Plan Chatham*, p. 36-37). Whereas only 17% of Chatham residents are located within a half mile of a trail or park, Williams Corner will provide immediate access for all of its residents to an extensive network of trails as shown on the site plan. The trail network will meander through the open and conservation space making it both a trail and a park-like use and experience. Likewise, Williams Corner is physically situated in close proximity to the UNC Health clinic at Polks Landing, thereby insuring improved access to health services for its residents. (*Plan Chatham*, p. 37).

Williams Corner meets many of the Issues and Opportunities set out in Chapter 2 of the Plan Chatham document. Because it is a mixed use community, it is uniquely positioned to meet more of the goals and plans of Plan Chatham than any other singular-use type of project. There can be no doubt that Williams Corner will help carry out the intent and purposes of Plan Chatham.

**B. Chapter 3: Goals/Objectives and Land Use Descriptions.**

**1. Goals and Objectives:**

Williams Corner helps to fulfill many of the Goals and Objectives set out in Chapter 3 of Plan Chatham. The following table lays out many of the Goals and Objectives, showing the ways in which Williams Corner meets them.

<b>GOAL</b>	<b>OBJECTIVES MET</b>	<b>PLAN CHATHAM PAGE REF.</b>	<b>FEATURE</b>
Preserve the rural character and lifestyle of	Promote small businesses, number of telecommuters,	p. 41	Plan for 90k s.f. of office space; fiber internet available;

<p>Chatham County (Objective #1)</p>	<p>acreage of conservation</p> <p>Rural character in balance of County preserved by concentrating density in approved locations</p>		<p>Approximately 59 acres in conservation</p>
<p>Promote a compact growth pattern by developing in and near existing towns, communities <u>and</u> <u>in designated,</u> <u>well planned,</u> <u>walkable mixed</u> <u>use centers</u> (Objective #3)</p>	<p>“Strive to locate 70% of new development within ETJ’s <u>or</u> <u>designated County</u> <u>centers.”</u></p> <p>“Reduce impact to natural resources”</p>	<p>p.41</p>	<p>Williams Corner located in the heart of one of two Community Centers designated on the Future Land Use and Conservation Map</p> <p>Increased riparian buffers and voluntary setbacks</p>
<p>Diversify tax base and generate more high-quality, in-county jobs to reduce dependence on residential property taxes, create economic opportunity and</p>	<p>“Increase non- residential share of tax base”</p> <p>“Increase high-quality in-county jobs” and “living wage jobs”</p>	<p>p. 41</p>	<p>See attached Economic Impact Analysis (Gallo)</p>

reduce out-commuting (Objective #4)			
Conserve natural resources (Objective #5)	“Acres of protected land” “number of acres of conservation land or forested land cover along rivers and streams”	p. 42	Approximately 59 acres in conservation; Increased riparian buffers
Provide recreational opportunities and access to open space (Objective #6)	“Provide expanded rec. opportunities and improve access to . . . community facilities, trails and open space	p.42	Extensive network of trails and up to 89 acres of open space, all accessible by a network of sidewalks and trails
Provide infrastructure to support desired development and support economic and environmental objectives (objective #7)	“Create multi-modal transportation system”  “Number of new residential water wells vs. public water system customers”	p.42	Two transit stops provided  All customers will be Chatham County municipal water customers
	“New septic tanks vs. private wastewater systems”  “Transit ridership”	p. 42	No new septic. All wastewater treated by private wastewater system off-site  Two transit stops

	“Percentage of homes and businesses with internet available”		100%
Become more resilient by mitigating, responding and adapting to emerging threats (Objective #8)	“Number of electric vehicles or charging stations”  “Acreage of forested woodlands”	p. 43	Four electric vehicle charging stations will be provided  Approximately 59 acres in conservation
Provide equitable access to high-quality education, housing and community options for all (Objective #9)	“Provide housing and community options (types, locations and prices) for all ages and incomes	p.43	Providing much-needed apartment alternative to proliferation of single-family dwellings and located within minutes of three elementary schools, two middle schools, two high schools and a community college campus
Foster a healthy community (Objective #10)	“Support active lifestyles (walking and biking as transportation options)”	p. 43	Extensive network of sidewalks and trails within the community

2. Future Land Use and Conservation Plan (and Map)(pp.44-45):

One of the “Major Recommendations” of the Plan is to “Concentrate future growth in compact, walkable development, located in existing municipalities as well as existing and planned growth areas.” Without a doubt the Williams Corner development is in the heart of the planned growth area on the Future Land Use Map and is the exact kind of “compact, walkable development” envisioned with this Major Recommendation. (*Plan Chatham*, p. 44).

A second Major Recommendation of Plan Chatham is to “Increase employment opportunities within the County.” (*Plan Chatham*, p. 44). Williams Corner is anticipated to (1) create 567 direct onsite permanent jobs in Chatham County; (2) create 870 total permanent jobs in Chatham County; and (3) create total annual labor income of \$25.2 million in Chatham County. (*See Gallo Report attached hereto*).

The Future Land Use and Conservation Map reserves the location of Williams Corner as a “Community Center” and also shows that Williams Corner is in the heart of the “Compact Residential” zone. (*Plan Chatham*, p.45).

### 3. Land Use Descriptions (pp. 44-49):

Plan Chatham Specifically Identifies the Williams Corner Location as being within the “Community Centers” and “Compact Residential” locations (*Plan Chatham p. 45-47*).

The Williams Corner intersection is one of only two Community Centers designated on the Plan Chatham map. (*Plan Chatham Map, p. 45, Chatham Downs*). In fact, the description of Community Centers in Plan Chatham expressly contemplates a mixed use project like Williams Corner in this location, even mentioning it by name (*Plan Chatham, p. 47*). The very first element of the definition of Community Centers, as defined in Plan Chatham, is: “retail hubs located along key roadway corridors.” Williams Corner is certainly a retail hub along the key roadway corridor of 15-501. In addition to allowing retail at this location, it specifically contemplates mixed use projects as well, including, “retail, restaurants, services and offices uses”



along with “residential units” including “attached units.” (*Plan Chatham*, p. 47). It further states the “2+ stories are common.” All of the proposed Williams Corner uses are specifically contemplated for location within a Community Center such as the Chatham Downs Community Center.

In addition to being in the center of the Community Center circle on the land use map, Williams Corner is also within the heart of the “Compact Residential” area designated on the land use map. (*Plan Chatham*, p. 45). Within the Compact Residential area, Plan Chatham calls for, among other things, “a mix of uses” including “single family detached and attached units and some multifamily units.” Since Williams Corner is within both the Community Center location and the Compact Residential location on the land use map, it cannot be denied that the proposed uses within Williams Corner (retail/office/commercial and multi-family) are consistent with the Comprehensive Plan.

Very importantly, this application squares perfectly with the categorical statement in the Comprehensive Plan that “Zoning parcels in a manner that is consistent with the Land Use and Conservation Plan is one of the most effective ways of implementing Plan Chatham and realizing the vision.” (*Plan Chatham*, p. 45, *emphasis added*). Applicant is requesting precisely that: rezoning the Williams Corner property to MUCD so as to allow a mixed use community that is consistent with Plan Chatham.

C. Chapter 4: Economic Development, Land Use, Natural Resources, Parks and Recreation, Transportation.

1. Economic Development Goals: Williams Corner meets the Economic Development goals of Plan Chatham. (*Plan Chatham* pp. 53-59)

In order to counteract the loss of manufacturing jobs in Chatham, Plan Chatham’s “Primary Goal” in the economic development sector is to “Diversify the tax base and generate more high quality, in-county jobs to

reduce dependence on residential property taxes, create economic opportunity and reduce out-commuting.” (*Plan Chatham*, p. 53).

Williams Corner helps to meet all elements of that goal. According to the Economic Impact Analysis prepared by Lucy Gallo, at full build-out, Williams Corner is anticipated to have the following economic impacts:

- a. Increase Chatham County’s overall real property tax base by \$145.3 million
- b. Increase Chatham County’s commercial property tax base by \$62.8 million
- c. Generate annual Chatham County property tax revenue of \$1.1 million
- d. Generate total incremental annual Chatham County revenues of \$1.8 million
- e. Generate annual sales tax revenue of \$667,000
- f. Generate total incremental annual North Chatham Fire District revenue of \$172,000
- g. Generate one-time capital revenues of \$605,000 for Chatham County Public Schools
- h. Create 567 direct onsite permanent jobs in Chatham County
- i. Create 870 total permanent jobs in Chatham County
- j. Create total annual labor income of \$25.2 million in Chatham County

See attached Economic Impact Analysis by Lucy Gallo for more detailed information.

Moreover, Economic Development Strategy 2.2 encourages larger retail (and complementary uses such as offices) to be located within Community Centers. (*Plan Chatham*, p. 55).

2. Land Use Goals (*Plan Chatham*, pp. 61-69).

Williams Corner Helps Meet the Principal Goals Set forth in the Land Use Section of Plan Chatham.

The principal goal set forth in the Land Use Plan Element section of Plan Chatham is that 70% of new development should be directed to municipalities “or near county centers.” This is a reference to “community centers” such as the Chatham Downs Community Center at the Williams Corner location. (*Plan Chatham, p. 61*). Further, Community Centers such as this one are “to be developed for larger scale commercial, office and mixed use developments.” (*Plan Chatham, p. 62, Strategy 2.1, emphasis added*). This directive to locate mixed use projects within Community Centers is also evident in Land Use Policy 3. (*Plan Chatham, p. 63*).

Land Use policy 4 (Support future transit) and the related Strategy 4.1 (“recognize opportunities for the incorporation of future transit stops”) is met by Applicant’s incorporation of two future bus shelters shown on the site plan, each in proximity to the apartment buildings. (*Plan Chatham, p. 65*).

Land use Policy 6 and Strategy 6.1 are met by locating this “highway commercial” within the appointed Community Center area shown on the Land Use map (*Plan Chatham, p. 67*). Strategy 6.4 is also met by ensuring that every parcel will not have access to the highway but rather will use the shared driveways and cross access easements shown on the site plan. The driveway permits for this project remain valid and the locations are depicted on the site plan. (*Plan Chatham, p. 67*).

Likewise, Land Use Policies 9 (limited development in conservation areas) and 10 (integrated open space in new development) are both met by Williams Corner. There will be approximately 58 acres of conservation area with no vertical development and only a possible trail network or other environmentally friendly amenity. The open space will all be accessible by pedestrians.

### 3. Natural Resources (*Plan Chatham, pp. 103-109*)

Williams Corner helps to meet natural Resource goals set out in Plan Chatham. The Williams Corner site plan thoroughly meets Strategy 1.1 by maintaining the riparian buffers required by the current Watershed protection ordinance and by minimizing stream crossings (only two stream roadway crossings in the entire 118 acre tract). A review of the site plan shows the 50' each side riparian buffers on intermittent streams as well as 100' each side riparian buffers on the perennial Cub Creek. This is a significant improvement over the currently approved 25'-50' buffers on 2006 Williams Corner plan.

Strategy 3.1 (*Plan Chatham, p. 107*). There are no Natural Heritage natural Areas within the Williams Corner project (See attached EIA).

Recommendation 5 (*Plan Chatham, p. 109*). Williams Corner "improves access to natural areas" by conserving approximately 59 total acres and by including an trail network within such areas. See Site Plan.

#### 4. Parks and Recreation (*Plan Chatham, pp. 117-124*)

Williams Corner helps to meet the PR Policy 3 of "increasing the number and mileage of trails and greenways." (*Plan Chatham, p. 122.*) See site plan for trail network within the project. There are two separate multi-family complexes. As is typical for the current apartment marketplace, within each multi-family complex there will be exercise, swimming pool and typical indoor and outdoor active recreation facilities.

See plan Chatham, Strategy 4.2, p. 123.

#### 5. Transportation (*Plan Chatham, pp. 125-135*)

Williams Corner helps to achieve Trans Policy 2 and Strategy 2.2 by ensuring that new development "is appropriately supportive of existing or future transit service." Strategy 2.2 seeks to "encourage the inclusion of transit accommodations within new developments" at planned Community Centers. (*Plan Chatham, p. 127*). Williams Corner includes two transit stop locations on its site plan.

D. Land Use Action Items: The first and most prominent Land Use Action Item within Plan Chatham, referred to as “Action Item 01”, states: “Facilitate well-designed mixed use developments in appropriate locations.” (Plan Chatham, p. 145).

Action Item 01 contemplates a mixture of commercial and residential uses, precisely as proposed by this application. It expressly requires “allow[ing] more residential uses in some of the non-residential districts.” (Plan Chatham, p. 145). Plan Chatham goes on to say that “Multi-family dwellings (**apartments** and condominiums) would be appropriate in this district, as well as in NB and B-1 under certain circumstances.” (Plan Chatham, p. 145). The Plan also recommends creation of ‘mixed-use zoning districts,’ including the proposed MU-3 for mixed-use development that is predominantly commercial and includes some amount of complementary residential. (Plan Chatham, p. 145). This Action Item regarding future mixed use developments is the only place within Plan Chatham that “apartments” are explicitly discussed and encouraged. (Plan Chatham, p.145). Thus, the Williams Corner mixed use blend of office, retail, storage and apartments is not only compatible with Plan Chatham, but it is explicitly called for as Land Use Action Item 01 under the plan.

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**4. The requested amendment is either essential or desirable for the public convenience or welfare.**

Applicant hereby incorporates all of the prior information cited above and below regarding the need and desirability of the Williams Corner project in this location. The fact that the project squares so thoroughly with the Plan Chatham goals, objectives and strategies is a strong indication that the request is desirable for the public convenience and welfare. Certainly the economic analysis by Gallo (attached hereto) reflects extensive desirability based on the economic impact of the project, which impacts are compatible with the goals of Plan Chatham as well. The market analysis further

evidences that the project is both essential and desirable in this time and in this location.

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**5. All other circumstances, factors and reasons which the applicant offers in support of the proposed amendment.**

This project has been on the books for 14 years. Developing in accordance with this revised application, as a mixed use conditional district is more compatible with the current economic and regulatory environment. It is an improvement over the existing, approved project in many ways. It has been designed with the needs of the County and the concerns of the adjoining in mind.

**PROPOSED CONDITIONS**

Applicant offers the following specific conditions in support of the approval of this Mixed Use Conditional District:

1. While the site plan is conceptual in nature as to shape and configuration of buildings, the site plan shall be mandatory as to the following items shown on the site plan:
  - (a) building setbacks, building distances from nearby property lines, and building height limitations are mandatory conditions.
  - (b) the multi-family unit caps (for the North pod, the South pod and overall) are mandatory conditions.
  - (c) there shall be no vertical structures or parking within the 100' wide Common Area shown along the 100' setback adjacent to Wilder Ridge. Developer will make best efforts to preserve all trees within this Common Area but grading shall be allowed within the first 50' of the Common Area adjacent to the development pad.
2. Subject to Condition #1 above, the commercial/retail/storage uses final locations within the development area shown on the site plan

may vary. The square footage of storage facility uses shall not exceed 120,000 s.f. Otherwise, the square footage caps as between office and retail are estimated. The combined square footage of office and retail space shall not exceed 230,000 s.f.. There will be no big box retail structures (“big box” is defined as greater than 50,000 s.f. of conditioned space).

3. The Multi-family units in Williams Corner may be apartments, condominiums or a combination of the two.
4. All areas noted on the Site Plan as “Conservation Areas” or “Riparian Buffers” shall be conserved in their natural state except for roadway/utility crossings and permitted trails.
5. There are two separate multi-family complexes. As is typical for the current apartment marketplace, within each multi-family complex there will be exercise, swimming pool and typical indoor and outdoor active recreation facilities.
6. The impervious surface maximum for the developed portion of the project shall not exceed 24% of the total site acreage.
7. The buildings will be subject to mandatory design guidelines, including design review and approval, imposed by the declarant under the commercial declaration to be applicable to the property.
8. Applicant has simultaneously sought a Zoning Ordinance Text Amendment which would allow for parking facilities to be placed within the inside 50’ of the 100’ highway setback. In the event this text amendment is approved, Applicant shall be entitled to submit a revised site plan to Planning Staff for approval, which site plan may reconfigure parking along U.S. Highway 15-501 in accordance with the terms of the amendment.

9. Two future bus shelter locations (one within each multi-family section) suitable for transit stops will be created. See anticipated locations on site plan.
10. Four (4) electric vehicle charging stations (two in each apartment complex) will be provided.
11. No building within Williams Corner will exceed sixty feet (60') in height.
12. Landscaping plans for end users or tenants will comply with the Chatham County Design Guidelines and will be subject to the ordinary review process before the Chatham County appearance Commission and the Planning Department.
13. The maximum combined number of apartment units in Williams Corner will be 540 units.
14. Wastewater service for Williams Corner is to be provided by Old North State Water Company, its successors and assigns ("ONSWC"). In the Williams Corner project cannot ultimately connect to the ONSWC wastewater system, the wastewater will be treated on-site.



## Exhibit 3

# Traffic Impact Analysis (Excerpt)

## 7.0 Recommendations

### Background Improvements

The following improvements were assumed to be implemented by others and were included in the analysis in the background and build-out conditions:

#### US 15/501 at Knox Way (by Polks Village):

- Reconfigure the eastbound approach of Knox Way to provide exclusive left- and right-turn lanes
- Modify the existing median on US 15/501 to permit left-turns out of Knox Way but prohibit left-turns into Knox Way
- Install a traffic signal to accommodate the revised intersection laneage

#### US 15/501 at Polks Landing Road (by Polks Village):

- Install a traffic signal to accommodate volumes into/out of Polks Landing Road (“superstreet” configuration with southbound US 15/501)

#### US 15/501 at Lystra Road (by NCDOT – signal plans already completed):

- Modify the existing traffic signal to limit the northbound U-turn movement and southbound left-turn movement to protected-only phasing (from the existing permitted or permitted + protected phasing)

### Recommended Improvements

The following roadway improvements are recommended to be performed as part of this project:

#### US 15/501 at Legend Oaks Drive:

- Construct an exclusive southbound left-turn lane on US 15/501 with 200 feet of storage and appropriate tapers

#### Legend Oaks Drive at North Site Driveway:

- Construct the North Site Driveway with one ingress lane and one egress lane at the existing roundabout
- Coordinate with NCDOT on required modifications to the roundabout to accommodate the Site Driveway approach, including signing and marking improvements

#### US 15/501 at Knox Way/Central Site Driveway:

- Construct the Central Site Driveway with one ingress lane and two egress lanes (an exclusive left-turn lane and an exclusive right-turn lane)
- Construct a northbound right-turn lane on US 15/501 with 100 feet of storage and appropriate tapers
- Modify the traffic signal to accommodate the recommended roadway laneage

US 15/501 at Polks Landing Road/South Site Driveway:

- Construct the South Site Driveway with one ingress lane and one egress lane
- Construct a northbound right-turn lane on US 15/501 with 100 feet of storage and appropriate tapers
- Install a traffic signal to accommodate volumes into/out of the proposed South Site Driveway approach (“superstreet” configuration with northbound US 15/501)

US 15/501 at Lystra Road:

- Construct an additional southbound left-turn lane on US 15/501 with 175 feet of storage to provide dual left-turn lanes on that approach
- Construct an additional westbound left-turn lane on Lystra Road with 275 feet of storage to provide dual left-turn lanes on that approach
- Extend the storage of the existing westbound right-turn lane on Lystra Road by approximately 75 feet to provide 200 feet of storage on that movement
- Modify the existing traffic signal to accommodate the recommended laneage

Lystra Road:

- Construct an additional eastbound lane on Lystra Road from US 15/501 that terminates as a right-turn lane at Chatham Downs Drive (to provide a second receiving lane for the recommended dual southbound left-turn lanes on US 15/501)
- Restripe the existing westbound left-turn lane on Lystra Road as a two-way left-turn lane between Chatham Downs Drive and the proposed East Site Driveway

Lystra Road at East Site Driveway (Full-Movement):

- Construct the East Site Driveway with one ingress lane and one egress lane
- Provide an eastbound left-turn lane on US 15/501

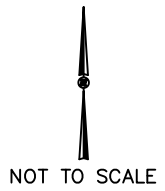
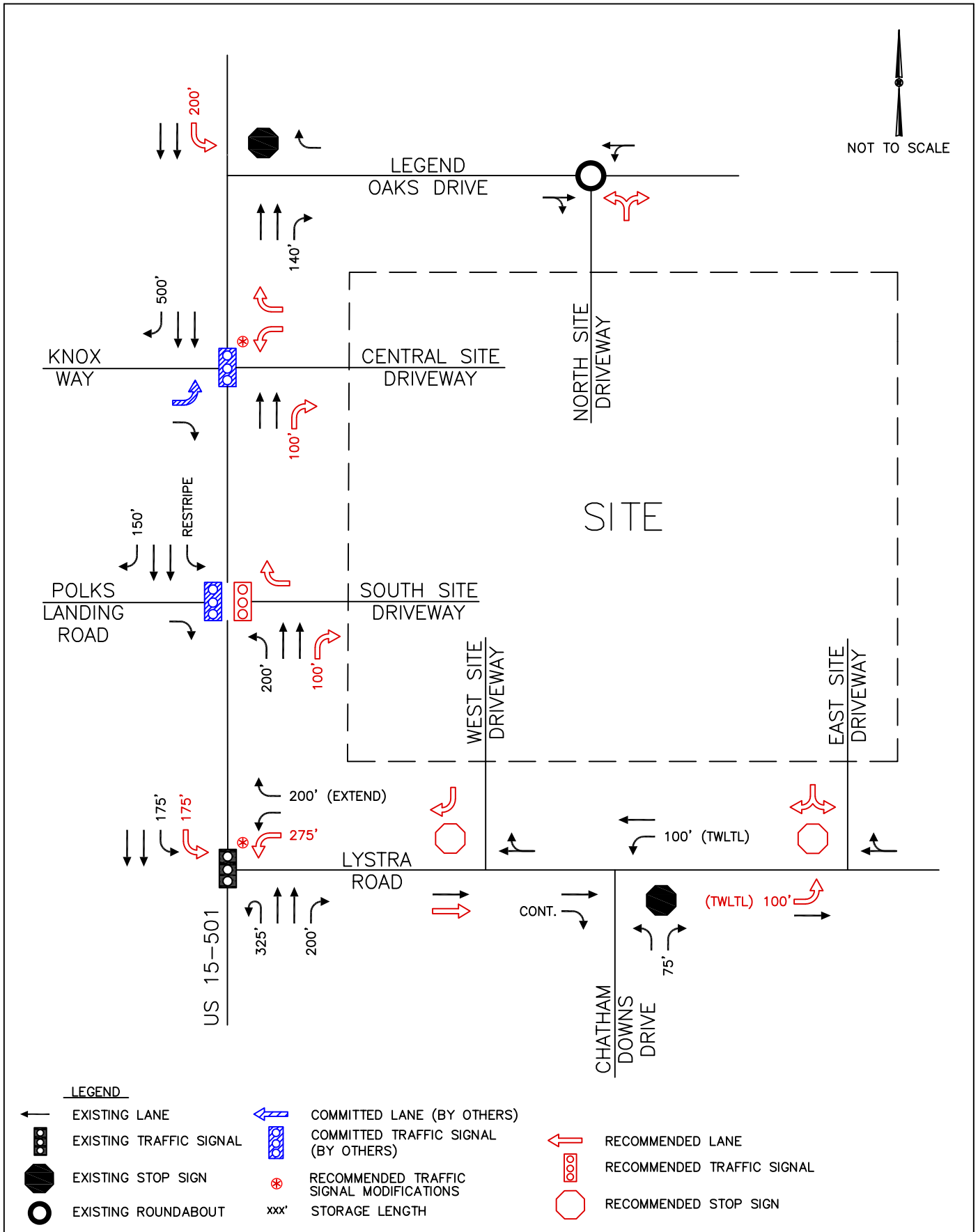
Lystra Road at West Site Driveway (Right-in/Right-out):

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

Analyses indicate that with the committed and recommended improvements in place, all of the study intersections will operate at acceptable LOS at project build-out. It should also be noted that the existing roundabout on Legend Oaks Drive is expected to operate with short overall delays at project build-out and well below the capacity of the roundabout. As the recommended turn lanes are consistent with where turn lanes were committed to be performed for the previous, more-intense development plan, site traffic impacts are expected to be effectively mitigated for this revised development plan.

The committed and recommended roadway laneage is shown on **Figure 7.1**.

K:\\_DUR\_LDEV\013566000 Williams Corner Update\T5 - Report-Submittals\TIA Figures\Williams Corner 2020 Update\_TIA Figures.dwg



WILLIAMS CORNER  
2020 TIA UPDATE  
TRAFFIC IMPACT ANALYSIS  
CHAPEL HILL, NC

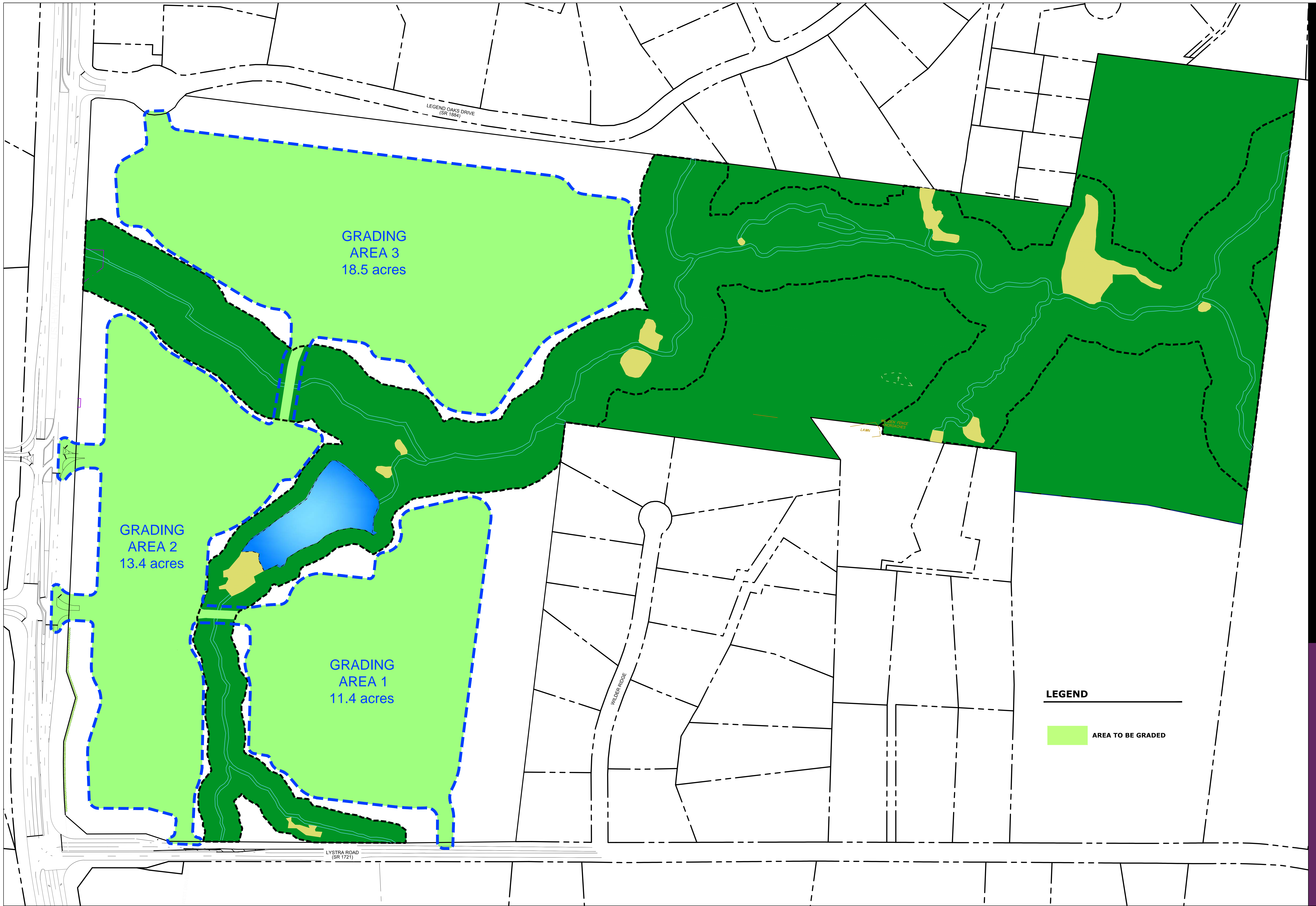
RECOMMENDED ROADWAY  
LANEAGE

FIGURE  
7.1

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

## Exhibit 4

# Williams Corner Grading Map



GRADING  
AREA 3  
18.5 acres

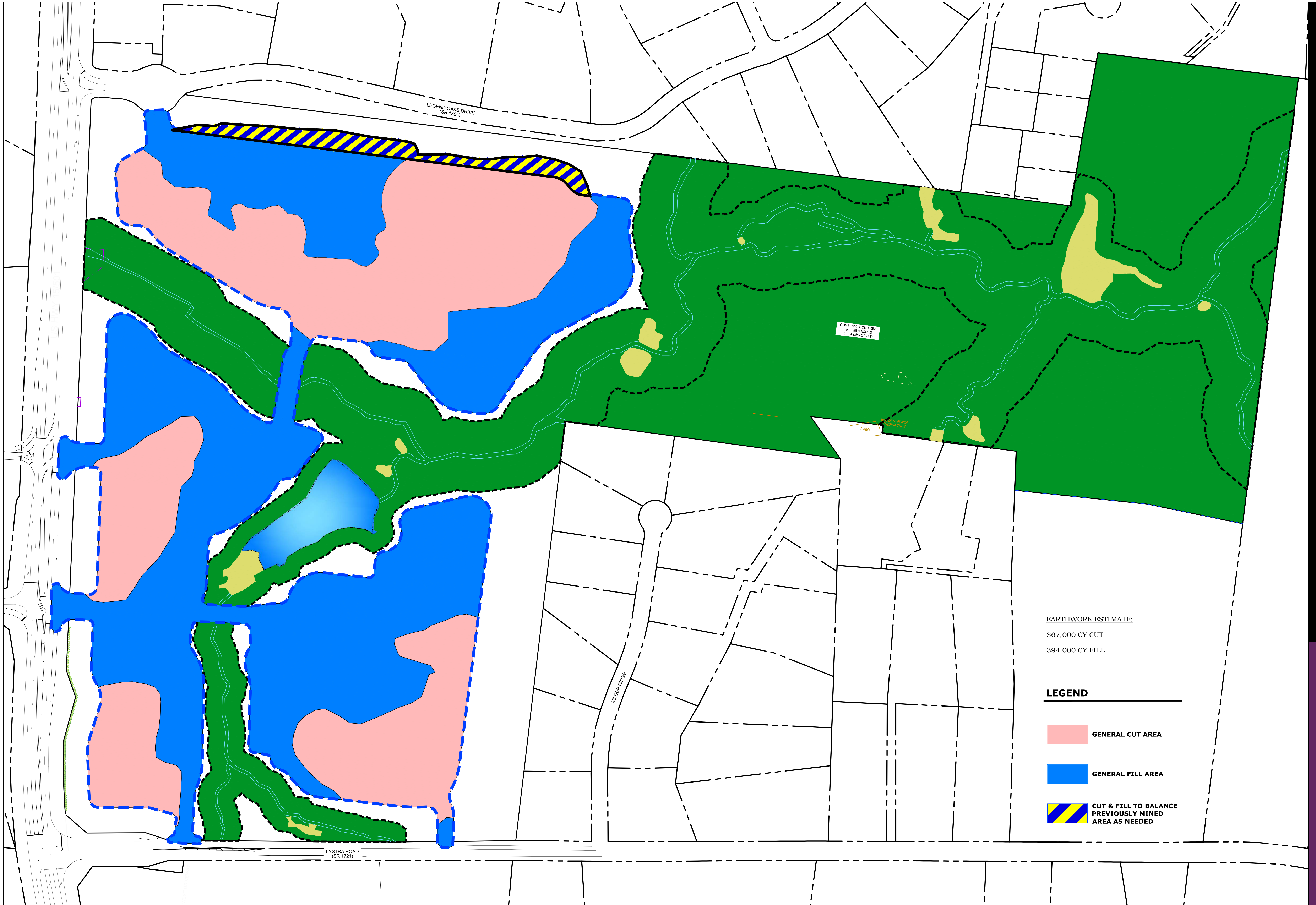
GRADING  
AREA 2  
13.4 acres

GRADING  
AREA 1  
11.4 acres

**LEGEND**  
AREA TO BE GRADED

## Exhibit 5

### Williams Corner Cut & Fill Areas



**EARTHWORK ESTIMATE:**  
 367,000 CY CUT  
 394,000 CY FILL

- LEGEND**
- GENERAL CUT AREA
  - GENERAL FILL AREA
  - CUT & FILL TO BALANCE PREVIOUSLY MINED AREA AS NEEDED



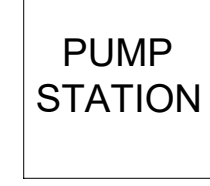


## Exhibit 6

# Williams Corner Preliminary Sewer Alignment



LEGEND:

-  GRAVITY SANITARY SEWER
-  FM FORCE MAIN
-  PUMP STATION

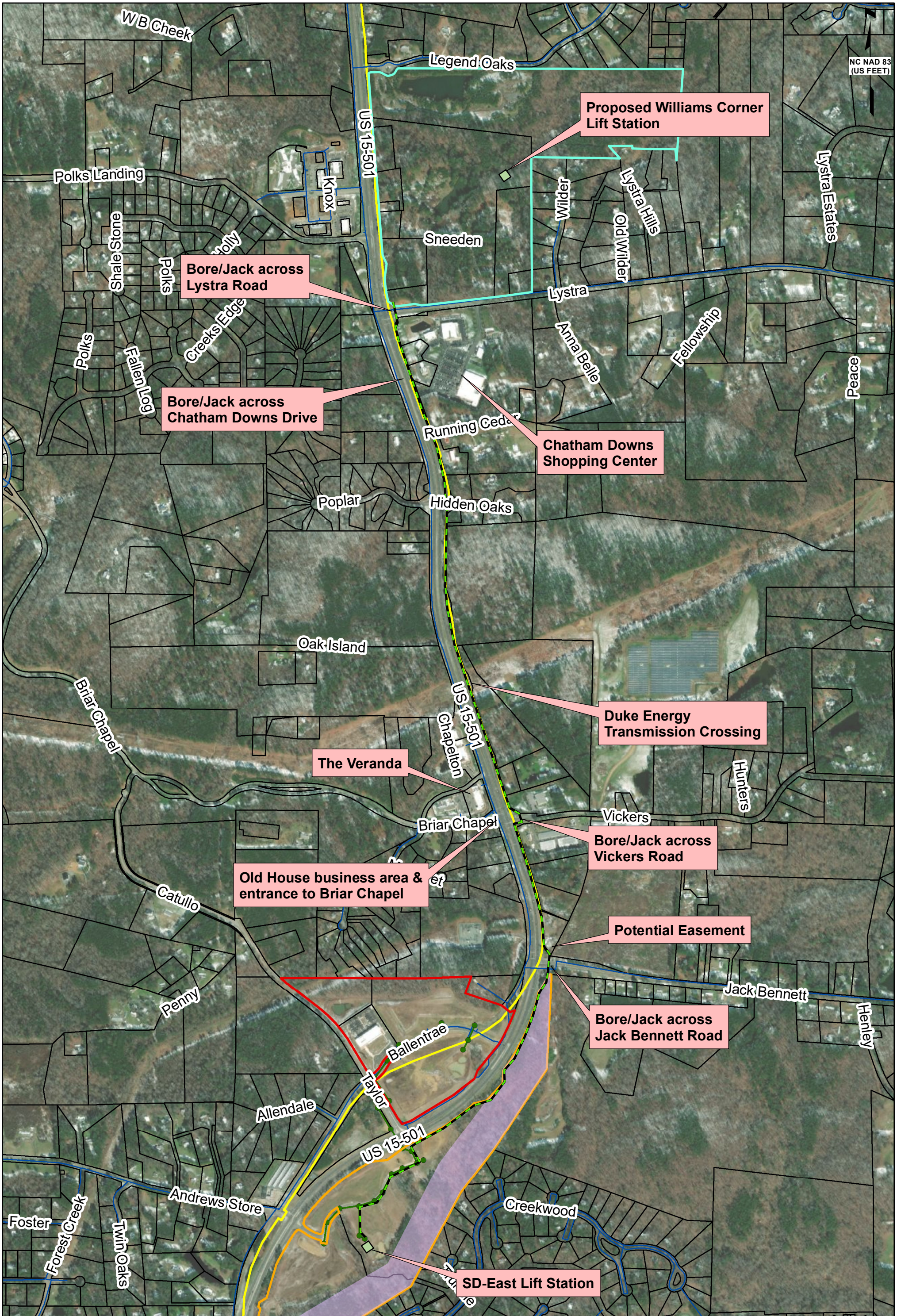
PRELIMINARY SEWER ALIGNMENT

SCALE: 1" = 120'  
 0' 60' 120' 240'  
 DATE: 03.31.2020



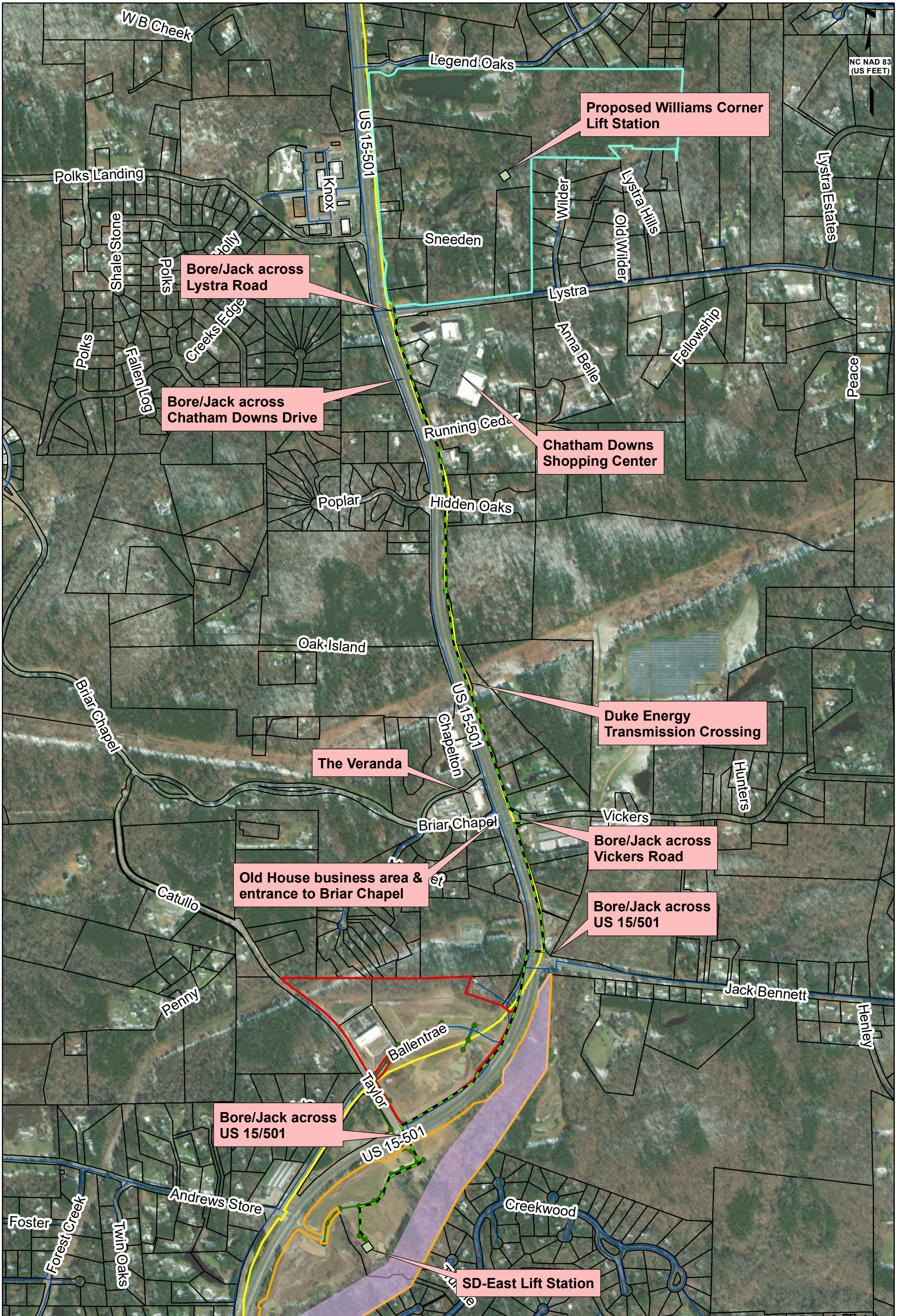
## Exhibit 7

# Anticipated Wastewater Routing Alternatives for Connection to ONSWC Wastewater System



**Appendix C**  
**Alternative No. 1**  
 Chatham County, NC

- Legend**
- Alternative No. 1
  - Williams Corner
  - Ferrington Buffer
  - SD-East
  - SD-West
  - Existing Sewer
  - Existing Water Mains
  - Existing Manhole
  - Gas Pipelines



## Exhibit 8

# Old North State & Chatham County Public Works Service Agreement Letters

December 30, 2019

Mr. Chris Ehrenfeld  
Bold Development Group  
50051 Governors Drive  
Chapel Hill, NC 27517

Re: Williams Corner Development  
Chatham County, NC

Dear Mr. Ehrenfeld:

Old North State Water Company, LLC (“ONSWC”) is the owner and/or operator of the wastewater facilities providing wastewater utility service to the Briar Chapel/Fearrington Village area. In addition, this system serves various properties in and around the Briar Chapel/Fearrington Village communities.

Chatham County is aware that ONSWC has plans to expand the capacity and treatment quality of their existing facilities and the expansion is anticipated to be conducted in phases. Upon expansion, ONSWC will have the wastewater capacity in its wastewater facility to serve the proposed development plan to be constructed at Williams Corner. ONSWC anticipates that its expansion work will be completed before Williams Corner will be in a position to tap on. Therefore, in accordance with all the required governmental approvals, ONSWC will have the capacity to provide wastewater utility service to the residents and commercial users of this proposed development and has agreed to make such capacity available to Williams Corner.

Let me know if you need anything else in order to proceed with your plans.

Regards,



Lee Bowman  
Authorized Representative

Water and Wastewater Treatment Plant  
Distribution and Collection Systems



Maintenance and Construction  
Customer Service and Billing

## CHATHAM COUNTY

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### PUBLIC WORKS DEPARTMENT – UTILITIES & WATER DIVISION

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Phone: (919) 542-8270  
Fax: (919) 542-8282  
Email: [larry.bridges@chathamnc.org](mailto:larry.bridges@chathamnc.org)  
Website: [www.chathamnc.org](http://www.chathamnc.org)

964 East Street, 2<sup>nd</sup> Floor/Suite 205  
Post Office Box 910  
Pittsboro, N.C. 27312

January 14, 2020

ZR Chatham, LLC  
C/o Chris Ehrenfeld (Bold Development Group)  
50051 Governors Drive Suite A  
Chapel Hill, NC 27517

**Subject: Water Availability for the Williams Corner project**

Per your request, this letter is being sent to you as conformation that the Williams Corner project has direct access to Chatham County's North Water System (PWSID# 03-19-126) along both the Hwy 15-501 and Lystra Rd. sides of the proposed property(s). The County will be able to serve water to this project pending design approval by County staff and NCDEQ-Public Water Supply Section.

If you have any questions or need any additional information please do not hesitate to call or email me. Thank you.

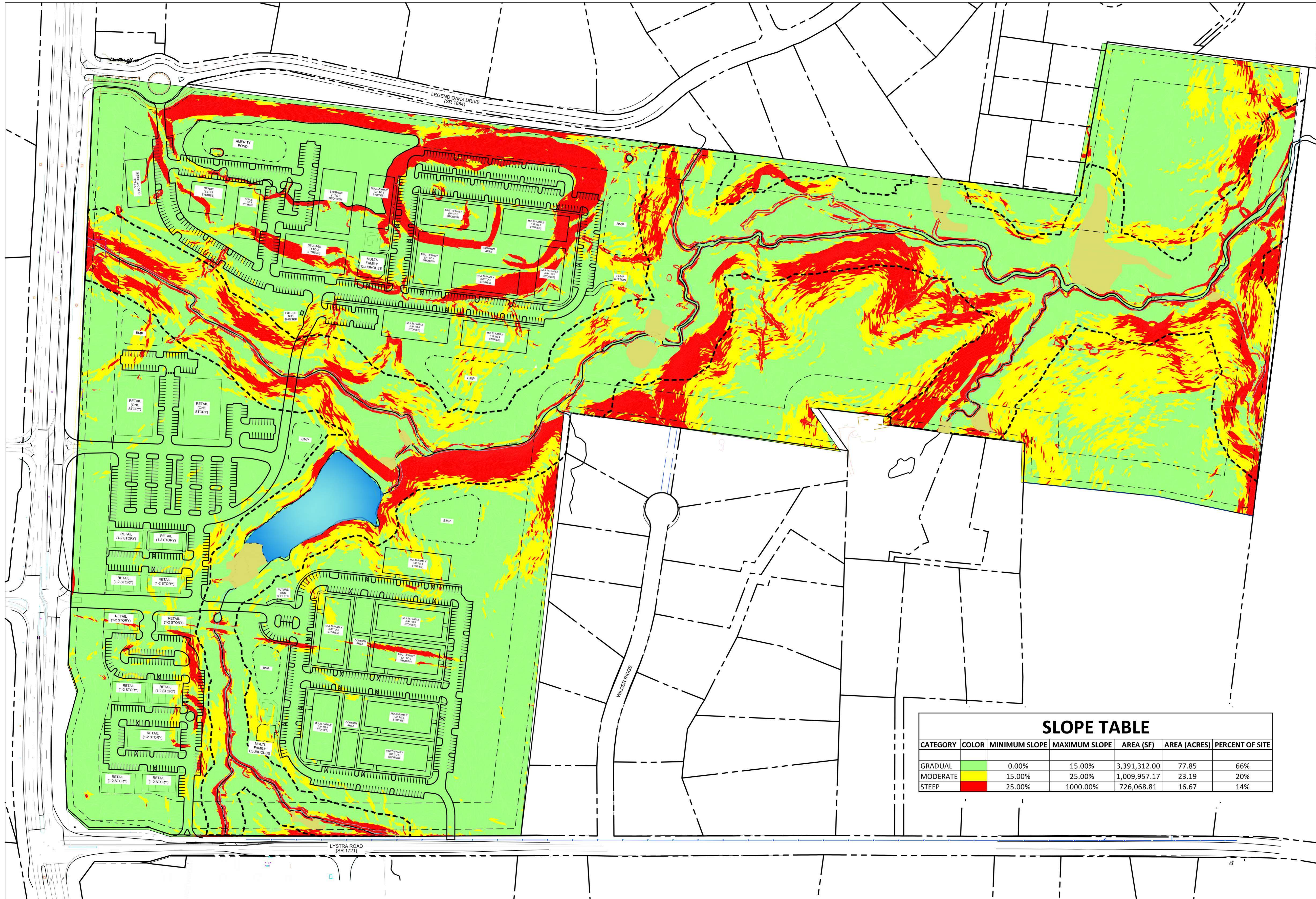
Sincerely,

**Larry Bridges**  
**Chatham County**  
**Public Utilities Director**



## Exhibit 9

# Williams Corner Slope Analysis Map



LEGEND OAKS DRIVE (SR 1884)

WILDER RIDGE

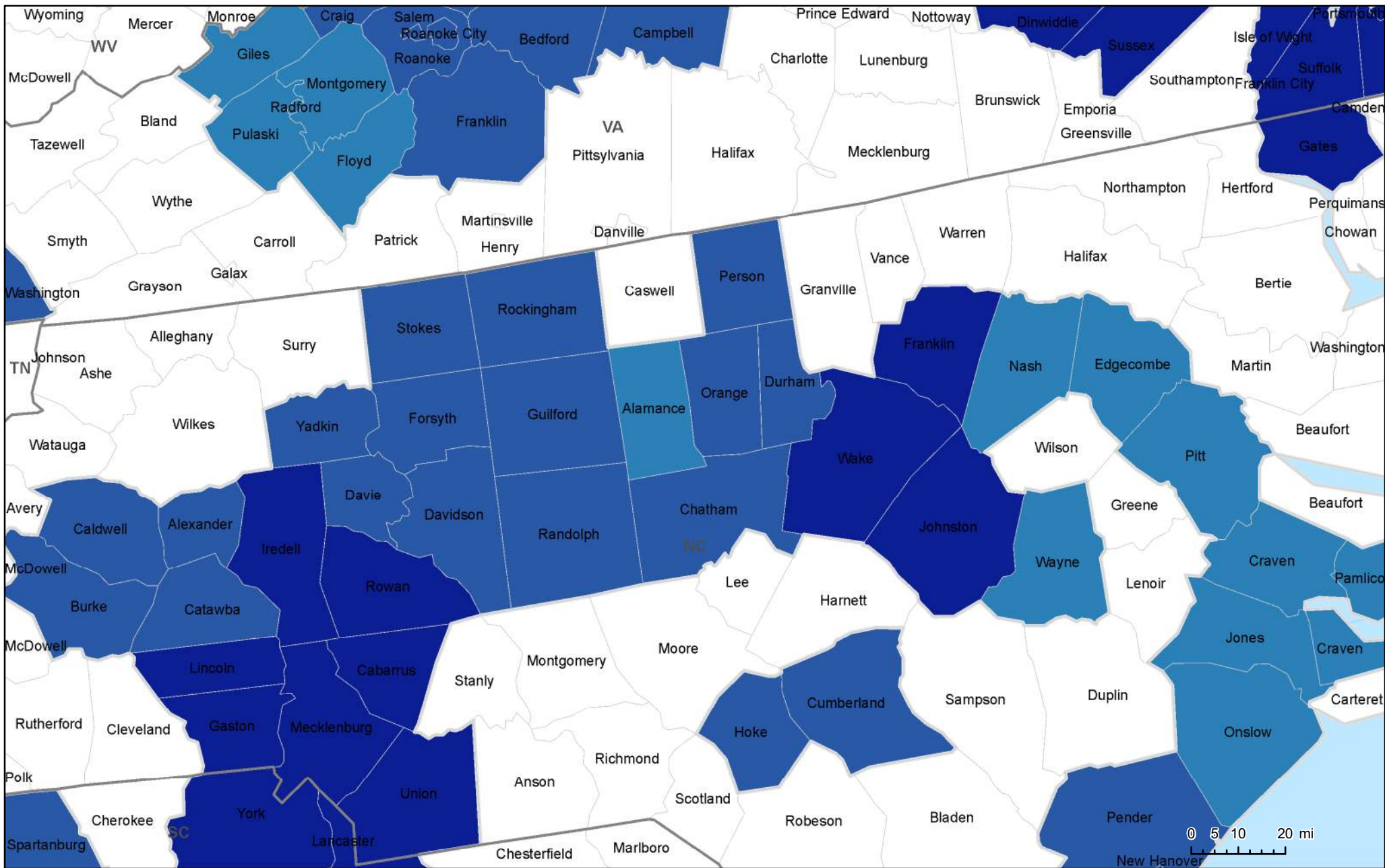
LYSTRA ROAD (SR 1721)

**SLOPE TABLE**

CATEGORY	COLOR	MINIMUM SLOPE	MAXIMUM SLOPE	AREA (SF)	AREA (ACRES)	PERCENT OF SITE
GRADUAL	Green	0.00%	15.00%	3,391,312.00	77.85	66%
MODERATE	Yellow	15.00%	25.00%	1,009,957.17	23.19	20%
STEEP	Red	25.00%	1000.00%	726,068.81	16.67	14%

## Exhibit 10

# USDA Rural-Urban Continuum Map



**Rural-urban continuum code, 2013**

- |  |  |
|--|--|
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #000080; border: 1px solid black;"></span> Metro - population 1 million or more | <span style="display: inline-block; width: 15px; height: 15px; background-color: #008080; border: 1px solid black;"></span> Urban pop. 20,000 + not adj.       |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #000080; border: 1px solid black;"></span> Metro - population 1 mil. - 250,000  | <span style="display: inline-block; width: 15px; height: 15px; background-color: #008080; border: 1px solid black;"></span> Urban pop. 2,500-19,999 adj.       |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #008080; border: 1px solid black;"></span> Metro - fewer than 250,000 pop.      | <span style="display: inline-block; width: 15px; height: 15px; background-color: #90EE90; border: 1px solid black;"></span> Urban pop. 2,500 - 19,999 not adj. |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #008080; border: 1px solid black;"></span> Urban pop. 20,000 + adj.             | <span style="display: inline-block; width: 15px; height: 15px; background-color: #90EE90; border: 1px solid black;"></span> Completely rural - adjacent        |
|  | <span style="display: inline-block; width: 15px; height: 15px; background-color: #FFFF00; border: 1px solid black;"></span> Completely rural - not adjacent    |

Note: map shows metro counties

Units: Classification Date: 7/28/2020

Source: USDA Economic Research Service, ESRI.

For more information:

<http://ers.usda.gov/data-products/atlas-of-rural-and-small-town-america.aspx>