ERAC Review of Environmental Impact Assessment
Chatham County

Environmental Impact Assessment Item	Adequately Described and Fully Discussed?
Proposed Project Description and Need	
1. Describe the overall project in detail, including all proposed phases.	"No long-term significant impacts" not a valid statement. Need to address impacts to stream buffers and wildlife corridors. 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.
2. Provide a project location map showing surrounding areas.	
3. Provide a project site plan showing existing and proposed facilities.	
4. Describe how this project fits into larger plans or connects with adjacent projects.	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.
5. List and describe public facilities or benefits provided by the project.	No discussion of public facilities.
6. Discuss the land acreage to be disturbed during each phase.	Says that will be a future discussion. Unacceptable. Provide more information.
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.

11. Show connections to existing utility and sewer lines or new utilities.	Connections are discussed in the text but not shown on site drawings. 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 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.
12. Show wastewater management systems on a map.	Not shown
13. Show proposed areas of impervious and semi-pervious surfaces.	
14. Show and describe any proposed stormwater control devices.	Inadequate discussion of post-construction stormwater controls Need to address increasing "flashy flows" from storms.
Alternatives Analysis	
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.	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.
2. Discuss how the preferred alternative was selected and its benefits relative to other alternatives (including a no-build alternative, if applicable).	This discussion is inadequate.
Existing Environment and Project Impacts	
For each resource topic below, describe:	
A. Existing resources and conditions.	
B. Anticipated impacts (short-term construction impacts, long-term operation impacts, and	Discussion of direct and indirect impacts is inadequate.

indirect or secondary impacts.)	
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.	Discussion is inadequate.
D. For unavoidable impacts, describe whether any compensatory mitigation is planned or required.	Discussion is inadequate. Two stream crossings are proposed but no indication where, discussions of impacts, or permits needed.
1. Geography	
Discuss the geographic setting, geology, and topography of the project area and adjacent areas.	
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', etc.).	
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.	
Show areas that will be graded or filled and provide estimated cut/fill volumes.	No. Provide estimates or conceptual planning at least. Where are your disposal areas? Where are you planning to cut?
If the project includes pond or dam work, show areas that will be flooded.	Not clear if existing pond (referred to as borrow pit) will be retained, though described as habitat for various wildlife species.
2. Soils and Prime Farmlands	

Identify dominant soils in the project area (county GIS or NRCS website) and show on a map.	
Discuss any soil constraints (fill, wetland soils, septic suitability, slopes, etc.) and indicate those areas on a map.	Provide more discussion about steep slopes and show on site maps.
Describe any soil disturbance or contamination expected as a result of this project.	Discussion is inadequate.
If contamination is expected, discuss containment plans and procedures.	No. How will contamination be contained? Reported? Provide more detail about your spill response. Also, discuss potential for future contamination issues.
If soil will be relocated, specify the number of square yards/feet to be moved, and its relocation site.	Discussion is inadequate.
Describe runoff management plans for the project.	
If soil disturbance is proposed, describe the off-site impacts expected from this activity.	Discussion is inadequate.
Provide a map of any prime or unique farmland soils in the project or service areas, and include reference used to make this determination.	
Describe impacts to prime or unique farmland soils, including acreage estimates of lost farmland soils and retained farmland soils.	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?
3. Land Use	
Provide a map showing current use of land on the site and surrounding properties.	

Discuss how the current land use fits into the surrounding area (conservation, development, ecological function, etc.)	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.
Provide the current zoning of the project site and the surrounding area.	
Discuss how the proposed uses fit into the intended land use of the area (conservation, development, ecological function, quality of life).	Discussion is inadequate.
Indicate whether zoning or local land use plans will need to be changed after project completion.	
4. Wetlands	
Indicate whether wetlands are present, describe the basis for this determination and identity of the person who made the determination.	Delineators not named in the report.
Show identified wetlands on a map, and describe all relevant details, such as acreage, types, delineation, function, etc.)	
If wetlands are to be filled, specify the number of acres that will be affected.	
List all required permits and permitting agencies.	Buffer impact approval from WRB, 404/401 permitting not discussed.
If any diversions/additions/withdrawals of surface water will affect wetlands, describe those activities.	Not discussed.
5. Public lands and Scenic, Recreational, and State Natural Areas	

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.	Text says that there are none on or near the site. Where are the nearest areas? Provide a map.
6. Areas of Archaeological or Historical Value	
Discuss any archaeological or historical studies of the project location; provide relevant references.	
Describe and identify on a map any structures (i.e., walls, buildings, etc.) on the site and provide estimated ages of those structures.	
Describe all impacts to any archaeological or historical resources in the proposed project area.	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?
Describe plans for demolishing or rebuilding any structures.	
Provide photographs of any significant resources, including all structures older than 50-years.	
Provide relevant correspondence with the Chatham County Historical Association and NC SHPO.	
7. Air Quality	
Describe the project's impacts on ambient air quality.	
Describe plans for any open burning during or after construction.	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.
Indicate the number of proposed parking spaces, if applicable.	

Describe whether the project will increase odor levels, or the likelihood of odor complaints.	
Provide a copy of any required traffic studies.	
8. Noise Levels	
Discuss current noise levels; use a benchmark if possible.	Benchmarks given are inadequate for comparison.
Describe any increases in noise levels expected from this project.	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.
Specify the distance at which the increased noise will be heard.	No
Discuss whether surrounding properties will be affected by noise levels.	No
If commercial uses are proposed, specify the hours of operation.	Typical hours for proposed commercial tenant are not provided. Are storage units accessible 24/7?
9. Light Levels	
Describe lighting plans for the project, including how lighting will impact adjacent residents and wildlife.	
10. Surface and Groundwater Resources (discuss separately)	
Identify and provide a map of surface waters in the project area. Describe groundwater (aquifers) in the project area.	
Include names, locations, classifications, and use support ratings for surface waters.	
Specify and show on a map the river basin in which the project is located.	
Discuss any known groundwater quality issues.	

Discuss drinking water sources.	
11. Fish and Aquatic Habitats	
Describe fish and aquatic habitats in and adjacent to the site/project area.	A surface water was identified as isolated and non-jurisdictional by USACE. Did DWR take a position on jurisdiction?
Discuss impacts to fish and aquatic life and their habitats, including a map showing those habitats.	
12. Wildlife and Natural Vegetation	
Describe and provide a map of natural community types on and adjacent to the site/project area.	Use the Fourth Approximation of Schafle & Weakley (2012)
List the species of dominant plants and animals observed on the site that typify those communities.	
Evaluate and discuss whether suitable habitat exists for rare, threatened, and /or endangered species, as described by the NC Natural Heritage Program.	
If wildlife will be displaced, discuss any limitation of adjacent areas to support them.	Conclusions are not realistic. Stating that the project won't have impacts because wildlife can move offsite to habitat 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.
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.	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?

If forest will be cleared, discuss the extent of planned deforestation and specify the forestry methods to be used, including BMPs.	Discussion is very minimal. Provide methods, BMPs, discuss SMZ, discuss leave trees, and species selection. What will be done with the timber post-harvest? How will slash be disposed of? Grinding on site is encouraged as an alternative to burning.
13. Hazardous Materials	
List all hazardous materials to be stored or introduced during construction or operation.	Insufficient. Provide more details. Provide more detail about your spill response. Also, discuss potential for future contamination issues.
For each hazardous material, other than deminimis quantities or for routine housekeeping purposes, describe the procedures to be used to ensure their proper management, storage, and disposal.	No
References	References listed at end. Provide citations in text.
Exhibits (Maps, Figures, Tables, Photos, etc.)	
State and Federal Permits Required	

Dear Committee Members,

My name is Charles Esther, and I am a homeowner in Chatham County adjacent to the proposed Williams Corner development. I am writing to express concerns about the Environmental Impact Assessment (EIA) that was submitted as part of the Williams Corner rezoning application.

Simply put, the submitted EIA is inadequate. The developer proposes a high density residential development, >10-fold increase over the previously approved site plan (up to 550 multi-family units vs. 40 townhomes), but provides minimal information on how this dense development will impact the local environment. In particular, the developer provides no details on the wastewater plan beyond the fact that it will be treated offsite. This leads to several defects in the EIA:

1. The developer provides no assessment of the environmental impact of the wastewater generated. Their EIA claims that the project will have a "minimal environmental footprint" (p4) due in part to the use of offsite wastewater treatment. This statement is false, since the environmental impact of wastewater does not disappear simply because it is moved offsite, nor is it necessarily more environmentally favorable than onsite treatment.
2. The developer provides no details about the offsite wastewater treatment, likely because the plant is not currently build. Offsite treatment is contingent on approval of increased wastewater treatment capacity through a plant in Briar Chapel owned by Old North State Water Company. This plant has had several environmental concerns, and due to these issues and others, the residents of Briar Chapel are strongly opposed to expansion to allow acceptance of offsite wastewater.
3. The developer provides no assessment of the environmental impact of transporting large quantities of wastewater to the proposed offsite wastewater treatment facility. No sewer plan is included to allow the committee to assess whether wastewater leaks over the nearly 4 miles between Williams Corner and the wastewater plant in Briar Chapel could risk contamination of Jordan lake or other sensitive areas.

Based on these problems, I believe that the Environmental Review Committee should advise the Board of Commissioners that the EIA is incomplete and require submission of an amended EIA addressing the relevant concerns. Although developers are often provided some leeway on the details of wastewater plans, this proposal is unique in its reliance on offsite treatment for such a large residential community. Comparable multi-family developments have all been part of larger communities (e.g., Briar Chapel, Governors Village) in which the wastewater treatment was part of a robust onsite infrastructure that was described in detail in the EIA.

Sincerely, Charles R. Esther, Jr

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Environmental Impact Assessment Item	Adequately Described and Fully Discussed?
Proposed Project Description and Need	
1. Describe the overall project in detail, including all proposed phases.	• p. 1, ¶3: *no significant long-term impacts to the environment*. Loss of connectivity that supports biodiversity? Each of the retail and residential sections are "isolated" by streams. Riparian buffers and two stream crossings are barriers reducing the movement of wildlife between habitat areas. Describe impacts that will result since streams serve as wildlife corridors. • p. 1, ¶4: *ensuring there are no lasting impacts to the urban wildlife of the region*. More likely, there will be an expansion of urban wildlife such as squirrels, deer, raccoons, and house mice that live and thrive in urban environments. • p. 2, last ¶: . . . *+/- 13.2 acres of multi-family units north of Cub Creek and adjacent to Legend Oaks Drive (construction phase IV); +/- 14.4 acres of multi-family units south of Cub Creek (construction phase I); +/- 19.1 acres of retail (construction phase I), office and storage uses (based on final end users; construction phase III); and +/- 71.3 acres of common area/riparian buffers.* Show construction Phase II. • Attachment A, Site Plan. Mckim&Creed shows riparian and conservation area in green. I am not sure where I read these numbers: *89 of 118 acres undisturbed . . . 71 of 89 acres will be continuous open space including 59 acres of conservation land.* Is there an actual conservation easement for the 59 acres? Who holds the conservation easement?
2. Provide a project location map showing surrounding areas.	Yes
3. Provide a project site plan showing existing and proposed facilities.	Yes
4. Describe how this project fits into larger plans or connects with adjacent projects.	How does this fit with other similar-sized and large-scale [Chatham Park] competing projects proposed or currently under construction along the 15-501 corridor and its connector roads? Will the C-19 crisis affect potential growth opportunities in the real estate market? • p. 2, III, ¶3: *The Project is not part of a larger*

	master plan. Will there be future expansion into property below/south of undisturbed land in the eastern section? Would this affect the 59 acres of conservation land? [See Exhibits 3.4., 4.1.]
5. List and describe public facilities or benefits provided by the project.	Benefits in general. Public facilities?
6. Discuss the land acreage to be disturbed during each phase.	Uncertain about construction phases. See 1. Need more information.
7. List square footage and height (in stores) of new buildings.	Yes
8. Describe proposed uses of all buildings and proposed facilities.	Yes.
9. Show number of parking spaces in parking lots and decks.	Yes if conceptual plan is not altered.
10. Show areas to be cleared, graded, filled, paved and landscaped.	Yes, in general.
11. Show connections to existing utility and sewer lines or new utilities.	Not shown. See below.
12. Show wastewater management systems on a map.	Not shown. • p. 3, last ¶: *Wastewater disposal generated from the Project will tie into existing infrastructure for treatment and disposal offsite by Old North State Water Company.* ONSWC has had a number of sewage spills/ violations, odor complaints from spraying fields, and erosion/sinkhole problems at Briar Chapel. Residents have expressed health concerns about these matters. If NC Public Utilities determines that the ONSWC in Briar Chapel will not serve as the regional WWTP for northern Chatham County, how would this decision change the conceptual design layout? Location of potential onsite WWTP and spray fields? • p. 1, I. Executive Summary, ¶4: *Williams Corner is designed with high-density vertical development where allowable, further reducing the footprint of environmental impacts.* Change vol. of wastewater processed? • p. 4, ii. Previously Approved Site Plan: *Williams Corner has an existing site approval that provides a suitable, although less desirable, alternative.* Update proposed technology? Apply current WW regulations? [See Attachment C, 2005 letter on Williams Corner

	Reclaim WTP.]
13. Show proposed areas of impervious and semi-pervious surfaces.	Yes. See above for possible changes if an onsite WWTP will be built.
14. Show and describe any proposed stormwater control devices.	Yes.
Alternatives Analysis	
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.	Besides an outdated plan that will need to be re-submitted to meet current codes and regulations, other alternatives should have been considered.
2. Discuss how the preferred alternative was selected and its benefits relative to other alternatives (including a no-build alternative, if applicable).	• p. 4, iii. Preferred Alternative, ¶: *The availability of existing infrastructure such as water supply and offsite wastewater treatment ensures the project will have a minimal environmental footprint, . . .* [See 12 and 1. above.]
Existing Environment and Project 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.)	Direct and indirect impacts if addressed are limited in scope.
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.	?
D. For unavoidable impacts, describe whether any compensatory mitigation is planned or required.	?
1. Geography	
• Discuss the geographic setting, geology, and topography of the project area and adjacent areas.	Yes
• 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’, etc.).	Yes
• 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	Yes

Program.	
• Show areas that will be graded or filled, and provide estimated cut/fill volumes.	No. • p. 5, 1.4 Anticipated Cut/Fill Volumes [New in red]: *Select areas of the site will need to be graded and/or filled to support the proposed project. Cut and fill volume estimates will be available at a later date, and any required land disturbance and grading permits will be acquired at a later date. It is anticipated that soil will be neither imported to nor exported from the site.*
• If the project includes pond or dam work, show areas that will be flooded.	p. 6, 1.5 Pond/Dam Work: *No pond or dam work is anticipated at this time.*
2. Soils and Prime Farmlands	
• Identify dominant soils in the project area (county GIS or NRCS website) and show on a map.	Yes
• Discuss any soil constraints (fill, wetland soils, septic suitability, slopes, etc.) and indicate those areas on a map.	Indicate steep slopes of particular concern near land disturbance areas in Exhibit 1.2.
• Describe any soil disturbance or contamination expected as a result of this project.	No
• If contamination is expected, discuss containment plans and procedures.	No. How will contamination be contained? Reported?
• If soil will be relocated, specify the number of square yards/feet to be moved, and its relocation site.	No
• Describe runoff management plans for the project.	Yes
• If soil disturbance is proposed, describe the off-site impacts expected from this activity.	No
• Provide a map of any prime or unique farmland soils in the project or service areas, and include reference used to make this determination.	Yes.
• Describe impacts to prime or unique farmland soils, including acreage estimates of lost farmland soils and retained farmland soils.	Yes. p. 7, ¶ 1, [New]: *Based on this data, approximately 1.05 acres of prime farmland will be retained and approximately 23.06 acres of prime farmland will be lost within the project area. Of the total estimated acreage lost, approximately 2.4 acres of the GIS-indicated prime farmland are mapped at the location of an existing pond.* 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?
3. Land Use	
• Provide a map showing current use of land on the site and surrounding properties.	Yes
• Discuss how the current land use fits into the surrounding area (conservation, development, ecological function, etc.)	Current map shows adjacent areas to be mostly forested and not dense urban centers with impervious areas similar to the proposed Williams Corner design.
• Provide the current zoning of the project site and the surrounding area.	Yes. CC BoC will meet in August to discuss text amendment and rezoning of Williams Corner to a mixed-use conditional district and hold public input session. [See p. 8, ¶1.]
• Discuss how the proposed uses fit into the intended land use of the area (conservation, development, ecological function, quality of life).	Yes but could be more detailed.
• Indicate whether zoning or local land use plans will need to be changed after project completion.	See two sections above on current zoning requests.
4. Wetlands	
• Indicate whether wetlands are present, describe the basis for this determination and identity of the person who made the determination.	Yes
• Show identified wetlands on a map, and describe all relevant details, such as acreage, types, delineation, function, etc.)	Yes
• If wetlands are to be filled, specify the number of acres that will be affected.	p. 8, 4.0 Existing and Natural Resources, ¶2: *No wetland fills are proposed.*
• List all required permits and permitting agencies.	Will WRB need to review and approve proposed changes to riparian buffers if developer request waivers?
• If any diversions/additions/withdrawals of surface water will affect wetlands, describe those activities.	No discussion provided.
5. Public lands and Scenic, Recreational, and State Natural Areas	
• 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.	• p. 8, 5.0 Public Lands and Scenic, Recreational, and State Natural Areas: *There are no public lands or scenic, recreational, or state natural areas located on or adjacent to the site (Exhibit 5.1).* Show nearest SNHAs, State or Federal Forests? • Attachment J, p. 4, Map of natural areas within a one-mile radius of project area.
6. Areas of Archaeological or Historical Value	
• Discuss any archaeological or historical studies of the project location; provide	Yes

relevant references.	
• Describe and identify on a map any structures (i.e., walls, buildings, etc.) on the site and provide estimated ages of those structures.	Yes
• Describe all impacts to any archaeological or historical resources in the proposed project area.	Yes. See Attachment H, Letter dated 23 September 2019, from Environmental Services, Inc.: *Although the current investigation indicated that the graves from this cemetery had been removed, there is always a possibility that unmarked graves may be inadvertently encountered during construction outside of the suspected cemetery boundaries.* • Construction firm should be aware of the possibility of undiscovered graves south of isolated pond during road and office construction in the north campus area. See Attachment H, series of aerial photos showing approximate location of former cemetery. • p. 9, ¶1: The current location of the Cole Family Cemetery is shown on the Williams Corner site plan. The proposed trail loop in the conservation land area is located near one edge of the cemetery. How will the cemetery be maintained and protected?
• Describe plans for demolishing or rebuilding any structures.	Yes.
• Provide photographs of any significant resources, including all structures older than 50-years.	Yes
• Provide relevant correspondence with the Chatham County Historical Association and NC SHPO.	Yes
7. Air Quality	
• Describe the project's impacts on ambient air quality.	Yes
• Describe plans for any open burning during or after construction.	Not described in detail. Isn't grinding debris into mulch better for the environment than open burning that releases toxic substances and PM 2.5 in wood smoke? Adverse health impacts to residents of surrounding community? [See 12. Wildlife and Natural Vegetation, item 6 – deforestation.]
• Indicate the number of proposed parking spaces, if applicable.	Yes. Are there onsite bus stops? If so, show proposed

	location(s) on Attachment A-conceptual design map.
• Describe whether the project will increase odor levels, or the likelihood of odor complaints.	Yes.
• Provide a copy of any required traffic studies.	p. 9, Section 7 Air Quality, ¶2 [New]: *A Traffic Impact Analysis (TIA), developed by Kimley-Horn and Associates, has been submitted to, reviewed and approved by DOT Congestion Management and the District Office.* TIA is included as a supplementary document for William's Corner Mixed Use Rezoning, on Planning Dept. website. Not included on flash drive? Are road traffic crash data used in any assessment? A number of serious car accidents have occurred at the intersection of 15-501 and Lystra Road. There will be more exits and entrances for this mixed-use development near this busy intersection. Some traffic upgrade [turn lanes, stop lights] recommendations are included in the TIA.
8. Noise Levels	
• Discuss current noise levels; use a benchmark if possible.	• p. 10, ¶2 - New: *Uses within the project area are subject to the requirements and noise level limitations set forth under the Chatham County Noise Ordinance.* Stores in the current shopping centers are not comparable in height to the proposed mixed-use retail ones.
• Describe any increases in noise levels expected from this project.	No. Expected noise level in this mixed-use development will be somewhat dependent on design of buildings and the businesses that occupy them. Williams Corner residents may be attracted to a lively night environment. Adjacent property owners may be opposed to late night noise levels.
• Specify the distance at which the increased noise will be heard.	No
• Discuss whether surrounding properties will be affected by noise levels.	No
• If commercial uses are proposed, specify the hours of operation.	No. Typical hours for proposed commercial tenant are not provided. Are storage units accessible 24/7?
9. Light Levels	
• Describe lighting plans for the project, including how lighting will impact adjacent residents and wildlife.	Yes. Reducing night lighting after midnight saves on energy cost and avoids harmful impacts to

	nocturnal pollinator insects such as moths.
10. Surface and Groundwater Resources (discuss separately)	
• Identify and provide a map of surface waters in the project area. Describe groundwater (aquifers) in the project area.	Yes
• Include names, locations, classifications, and use support ratings for surface waters.	Yes
• Specify and show on a map the river basin in which the project is located.	Yes
• Discuss any known groundwater quality issues.	Yes.
• Discuss drinking water sources.	Yes.
11. Fish and Aquatic Habitats	
• Describe fish and aquatic habitats in and adjacent to the site/project area.	Yes. P. 12, 11.0 Fish and Aquatic Habitats, ¶ 3. Since the USACE determined that the isolated open water feature is non-regulated, are there any state permits/certifications needed for site modifications, i.e., during road construction phase?
• Discuss impacts to fish and aquatic life and their habitats, including a map showing those habitats.	Yes
12. Wildlife and Natural Vegetation	
• Describe and provide a map of natural community types on and adjacent to the site/project area.	Yes. • p. 13, 12.1-12-2 Natural Community Types and Dominant Species. Use 2012 Fourth Approximation.
• List the species of dominant plants and animals observed on the site that typify those communities.	Yes
• Evaluate and discuss whether suitable habitat exists for rare, threatened, and /or endangered species, as described by the NC Natural Heritage Program.	Yes. p. 15: . . . *perennial stream systems within the review area provide suitable habitat for the species* [C. davidi]. The presence of a significantly rare, endangered or threatened species is always a challenge to observe. Keep habitat destruction and degradation at a minimum to protect any present.
• If wildlife will be displaced, discuss any limitation of adjacent areas to support them.	p. 15, 12.4. Wildlife Displacement: *After development is complete, undisturbed areas will serve as permanent wildlife habitat and dispersal corridors.* More wildlife habitat fragmentation, habitat destruction, and decline in biodiversity will occur as human land use increases along the US 15-501

	corridor. More competition results as territorial and home ranges overlap.
• 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.	• p. 5, ¶ 3: *In some areas, existing loblolly pine and deciduous vegetation will be preserved with additional evergreen plantings to supplement existing vegetation in order to meet perimeter buffer planting requirements.* What are the proposed supplemental plantings? Use only native plants for landscaping. See Attachment A, landscape plan. • p. 15, 12.5 Invasive Species, ¶ 2: *Long-term management of exotic species will improve the ecological value of the undisturbed riparian areas and uplands.* Invasive plant species can spread from disturbed areas to riparian and conservation lands, outcompeting and replacing native plant communities. Provide an eco-friendly recommendation plan on how to remove exotic invasive species in the disturbed and undisturbed areas. A management plan can increase overall biodiversity throughout the development.
• If forest will be cleared, discuss the extent of planned deforestation and specify the forestry methods to be used, including BMPs.	Provide more details on proposed clearing and grubbing methods for deforestation before grading and construction phase. What happens to the timbers harvested? [See 7. AQ., item 2 - open burning.]
13. Hazardous Materials	
• List all hazardous materials to be stored or introduced during construction or operation.	Provide more details.
• For each hazardous material, other than deminimis quantities or for routine housekeeping purposes, describe the procedures to be used to ensure their proper management, storage, and disposal.	No
References	References listed at end. Provide citations in text.
Exhibits (Maps, Figures, Tables, Photos, etc.)	Yes
State and Federal Permits Required	Yes

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Chatham County

Environmental Impact Assessment Item	Adequately Described and Fully Discussed?
Proposed Project Description and Need	
1. Describe the overall project in detail, including all proposed phases.	Introduction did not mention the original plan for Williams Corner was different (not as dense). This is covered later in the document, including that the wastewater would be treated on site with the original plan.
2. Provide a project location map showing surrounding areas.	Yes
3. Provide a project site plan showing existing and proposed facilities.	Yes, includes the nearby shopping center with Harris Teeter and shows the entrance road to Legend Oaks subdivision.
4. Describe how this project fits into larger plans or connects with adjacent projects.	Yes, but does not describe that there is a very busy intersection at 15-501 and Lystra which has been the location of traffic accidents. This intersection is already very busy and dangerous and the traffic impacts of Williams Corner should be addressed. There would also be traffic entering the development at the entrance of Legend Oaks, increasing traffic in two different locations.
5. List and describe public facilities or benefits provided by the project.	Yes, it describes that RTP and Chapel Hill are nearby and there is a park and ride down the road on 15-501.see above. Also lists the amenities provided by the project, such as more shopping and commercial.
6. Discuss the land acreage to be disturbed during each phase.	Yes, 28 acres out of 118 acres will be impervious surface, 23%. The site will be located very close to highway 15-501 and Lystra Road. There should be more setback with a larger tree buffer to shield the inhabitants from the highway and to create an aesthetic buffer for the residents of Legend Oaks.
7. List square footage and height (in stores) of new buildings.	Yes, there will be high density and 2 to 4 story high buildings.
8. Describe proposed uses of all buildings and proposed facilities.	High density vertical buildings are in the plan, which are not aesthetic for the surrounding areas. This also puts a strain on the existing resources, shopping, etc, nearby.
9. Show number of parking spaces in parking lots and decks.	
10. Show areas to be cleared, graded, filled, paved and landscaped.	There is a concern with storm water run off if there is too much impervious surface.
11. Show connections to existing utility and sewer lines or new utilities.	The description regarding wastewater treatment on page 3 is very inadequate. Does “existing infrastructure” mean the wastewater treatment facility in Briar Chapel? If so, this facility has not been enlarged or upgraded and many residents are against doing so. It is a very controversial issue for

	county citizens. Where will the waste water be treated? The document says off site, however on page 4, the previous approved site plan says treated waste water will be done on site. Is there an existing off site waste water treatment facility? The new plan says waste water will be treated off site. I am skeptical waste water is being treated by "existing infrastructure". If this refers to the BC neighborhood facility, that decision has been opposed by many citizens. In Attachment C, the letter dated 2005 states that on site treatment of waste water is environmentally safe. A major environmental concern would be if the treated waste water eventually goes to a stream which indirectly goes to Jordan Lake, which may be the plan if the BC facility is used. What is the environmental impact to Jordan Lake if waste water is sent off site?
12. Show wastewater management systems on a map.	No, I did not see this map about waste water management systems.
13. Show proposed areas of impervious and semi-pervious surfaces.	Yes, 28 acres out of 118 acres will be impervious surface, 23%.
14. Show and describe any proposed stormwater control devices.	Y
Alternatives Analysis	
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.	
2. Discuss how the preferred alternative was selected and its benefits relative to other alternatives (including a no-build alternative, if applicable).	
Existing Environment and Project Impacts For each resource topic below, describe:	
A. Existing resources and conditions.	y
B. Anticipated impacts (short-term construction impacts, long-term operation impacts, and indirect or secondary impacts.)	Yes, the noise and dust from the construction will impact the nearby shopping center and the neighborhood, Legend Oaks. Heavy equipment and timber harvesting will be used. They may utilize dust suppression, if needed. They may need to do controlled open burning. There may be noise level disturbances to the nearby shopping center and neighborhood.
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.	
D. For unavoidable impacts, describe whether any compensatory mitigation is planned or required.	
1. Geography	
• Discuss the geographic setting, geology, and topography of the project area and adjacent areas.	y
• 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', etc.).	y
• 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.	y
• Show areas that will be graded or filled, and provide estimated cut/fill volumes.	y
• If the project includes pond or dam work, show areas that will be flooded.	y
2. Soils and Prime Farmlands	
• Identify dominant soils in the project area (county GIS or NRCS website) and show on a map.	y
• Discuss any soil constraints (fill, wetland soils, septic suitability, slopes, etc.) and indicate those areas on a map.	y
• Describe any soil disturbance or contamination expected as a result of this project.	y
• If contamination is expected, discuss containment plans and procedures.	y
• If soil will be relocated, specify the number of square yards/feet to be moved, and its relocation site.	y
• Describe runoff management plans for the project.	y
• If soil disturbance is proposed, describe the off-site impacts expected from this activity.	
• Provide a map of any prime or unique	y

farmland soils in the project or service areas, and include reference used to make this determination.	
• Describe impacts to prime or unique farmland soils, including acreage estimates of lost farmland soils and retained farmland soils.	y
3. Land Use	
• Provide a map showing current use of land on the site and surrounding properties.	y
• Discuss how the current land use fits into the surrounding area (conservation, development, ecological function, etc.)	Y, it is described as a high density vertical development. It is located in a busy area, so this will have an impact on traffic, etc.
• Provide the current zoning of the project site and the surrounding area.	Zoning was different for the original plan.
• Discuss how the proposed uses fit into the intended land use of the area (conservation, development, ecological function, quality of life).	
• Indicate whether zoning or local land use plans will need to be changed after project completion.	This plan is different from the original plan.
4. Wetlands	
• Indicate whether wetlands are present, describe the basis for this determination and identity of the person who made the determination.	y
• Show identified wetlands on a map, and describe all relevant details, such as acreage, types, delineation, function, etc.)	y
• If wetlands are to be filled, specify the number of acres that will be affected.	y
• List all required permits and permitting agencies.	y
• If any diversions/additions/withdrawals of surface water will affect wetlands, describe those activities.	y
5. Public lands and Scenic, Recreational, and State Natural Areas	
• 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.	y
6. Areas of Archaeological or Historical Value	
• Discuss any archaeological or historical	Y, an investigation of the existence of a Cole Family Cemetery and whether the graves were moved

studies of the project location; provide relevant references.	showed many documents.
• Describe and identify on a map any structures (i.e., walls, buildings, etc.) on the site and provide estimated ages of those structures.	y
• Describe all impacts to any archaeological or historical resources in the proposed project area.	Y, see above about the unmarked grave sites that were moved.
• Describe plans for demolishing or rebuilding any structures.	y
• Provide photographs of any significant resources, including all structures older than 50-years.	y
• Provide relevant correspondence with the Chatham County Historical Association and NC SHPO.	y
7. Air Quality	
• Describe the project's impacts on ambient air quality.	Y, there could be dust during construction and controlled burning.
• Describe plans for any open burning during or after construction.	Y, this is a possibility.
• Indicate the number of proposed parking spaces, if applicable.	y
• Describe whether the project will increase odor levels, or the likelihood of odor complaints.	
• Provide a copy of any required traffic studies.	? The intersection at 15-501 and Lystra Road is already busy and dangerous and the site of accidents.
8. Noise Levels	
• Discuss current noise levels; use a benchmark if possible.	
• Describe any increases in noise levels expected from this project.	Yes, there will be noise during construction, impacting the shopping center.
• Specify the distance at which the increased noise will be heard.	Y, the shopping center and possibly the nearby neighborhood.
• Discuss whether surrounding properties will be affected by noise levels.	y
• If commercial uses are proposed, specify the hours of operation.	
9. Light Levels	
• Describe lighting plans for the project, including how lighting will impact adjacent residents and wildlife.	
10. Surface and Groundwater Resources	

(discuss separately)	
• Identify and provide a map of surface waters in the project area. Describe groundwater (aquifers) in the project area.	y
• Include names, locations, classifications, and use support ratings for surface waters.	y
• Specify and show on a map the river basin in which the project is located.	y
• Discuss any known groundwater quality issues.	y
• Discuss drinking water sources.	y
11. Fish and Aquatic Habitats	
• Describe fish and aquatic habitats in and adjacent to the site/project area.	y
• Discuss impacts to fish and aquatic life and their habitats, including a map showing those habitats.	y
12. Wildlife and Natural Vegetation	
• Describe and provide a map of natural community types on and adjacent to the site/project area.	y
• List the species of dominant plants and animals observed on the site that typify those communities.	y
• Evaluate and discuss whether suitable habitat exists for rare, threatened, and /or endangered species, as described y the NC Natural Heritage Program.	y
• If wildlife will be displaced, discuss any limitation of adjacent areas to support them.	y
• 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.	y
• If forest will be cleared, discuss the extent of planned deforestation and specify the forestry methods to be used, including BMPs.	y
13. Hazardous Materials	
• List all hazardous materials to be stored or introduced during construction or operation.	y
• For each hazardous material, other than	y

deminimis quantities or for routine housekeeping purposes, describe the procedures to be used to ensure their proper management, storage, and disposal.	
References	y
Exhibits (Maps, Figures, Tables, Photos, etc.)	y
State and Federal Permits Required	y

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Environmental Impact Assessment Item	Adequately Described and Fully Discussed?
Proposed Project Description and Need	
1. Describe the overall project in detail, including all proposed phases.	The statement in the Executive Summary (pg. 1, para. 3) that the Project will have "no significant long-term impacts to the environment" is meaningless. Needs to describe what the impacts will be, regardless of what is permitted under regulations. For example, what is the expected impact and degradation to Cub Creek from the nearly 24% impervious surface that will built? In para. 4 , another statement without meaning concerning impacts to wildlife - and what is meant by "urban" wildlife? Presumably this currently forested and field succession 118 acres of land has many wildlife species endemic to NC with habitats that will be destroyed by construction of the Project. Wildlife species whose habitats have been destroyed have a poor prognosis for survival, since "migration" means competing for territory already established as habitat by other individuals.
2. Provide a project location map showing surrounding areas.	Yes
3. Provide a project site plan showing existing and proposed facilities.	Yes
4. Describe how this project fits into larger plans or connects with adjacent projects.	Saying that this project (page 1) fits into the larger plans by being consistent with uses along a transportation corridor doesn't refute the problems of increased traffic, noise, water, air and light pollution that it will cause. A highway development such as this, could be considered urban sprawl. On page 2 they conclude that this project will provide needed housing and commercial space for a growing Chatham,but how does that fit into the larger picture of competing developments (including Chatham Park). How will it be impacted by the expected economic recession due to Covid-19. Will Chatham County be facing another group of unfinished "zombie developments" as happened after the 2008 recession?
5. List and describe public facilities or benefits provided by the project.	No mention of public facilities.

6. Discuss the land acreage to be disturbed during each phase.	No. There is not sufficient information (provided to evaluate land disturbance during each phase. Page 5, 1.4 says information will be provided at a later date which does not seem adequate for this purpose.
7. List square footage and height (in stores) of new buildings.	Yes
8. Describe proposed uses of all buildings and proposed facilities.	Yes, in general
9. Show number of parking spaces in parking lots and decks.	Yes
10. Show areas to be cleared, graded, filled, paved and landscaped.	Areas, but not exact.
11. Show connections to existing utility and sewer lines or new utilities.	No actual connections are shown. Old North State's facilities at Briar Chapel are to be used for treatment and disposal offsite. There is not sufficient discussion of what these volumes and other details are. The frequent violations happening with sewer breaks at Briar Chapel from Old North State's lines are not discussed. This should be a serious concern for the county before approving this project. Sending wastewater offsite does not diminish or remove the polluting impacts that may be caused elsewhere.
12. Show wastewater management systems on a map.	Not shown.
13. Show proposed areas of impervious and semi-pervious surfaces.	Yes
14. Show and describe any proposed stormwater control devices.	Yes, but I would disagree that there will be no downstream impacts from stormwater because it will be treated first. Heavy storms with higher rates of rainfall per hour are becoming more frequent due to climate change. These storms overwhelm control systems built to current standards, when impervious surfaces have replaced natural vegetated lands.
Alternatives Analysis	

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.	This discussion is inadequate, as it does not look at other alternatives other than an out of date plan that would no longer meet county standards.
2. Discuss how the preferred alternative was selected and its benefits relative to other alternatives (including a no-build alternative, if applicable).	See above.
Existing Environment and Project Impacts For each resource topic below, describe:	
A. Existing resources and conditions.	Adequate discussion of existing resources, but anticipated short and long term construction impacts are minimized or not discussed at all.
B. Anticipated impacts (short-term construction impacts, long-term operation impacts, and indirect or secondary impacts.)	See above.
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.	
D. For unavoidable impacts, describe whether any compensatory mitigation is planned or required.	Mitigation for stream impacts under 404 permit if needed. They expect to do 2 stream crossings but do not indicate exactly where.
1. Geography	
• Discuss the geographic setting, geology, and topography of the project area and adjacent areas.	Yes
• 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’, etc.).	Yes

• 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.	Yes
• Show areas that will be graded or filled, and provide estimated cut/fill volumes.	No (see previous comment on this)
• If the project includes pond or dam work, show areas that will be flooded.	Not clear if existing pond (referred to as borrow pit) will be retained, though described as habitat for various wildlife species.
2. Soils and Prime Farmlands	
• Identify dominant soils in the project area (county GIS or NRCS website) and show on a map.	Yes
• Discuss any soil constraints (fill, wetland soils, septic suitability, slopes, etc.) and indicate those areas on a map.	Not enough information on steep slopes
• Describe any soil disturbance or contamination expected as a result of this project.	No
• If contamination is expected, discuss containment plans and procedures.	No
• If soil will be relocated, specify the number of square yards/feet to be moved, and its relocation site.	No
• Describe runoff management plans for the project.	Yes
• If soil disturbance is proposed, describe the off-site impacts expected from this activity.	No
• Provide a map of any prime or unique farmland soils in the project or service areas, and include reference used to make this determination.	Yes
• Describe impacts to prime or unique farmland soils, including acreage estimates of lost farmland soils and retained farmland soils.	Yes - revised V.4 states that 23.06 acres of prime farmland will be lost.

3. Land Use	
• Provide a map showing current use of land on the site and surrounding properties.	Yes
• Discuss how the current land use fits into the surrounding area (conservation, development, ecological function, etc.)	Reading this report would lead you to believe the surrounding areas are more urbanized than they are, rather misleading, as many other properties are still in forested land. At the same time, the report seems to think that wildlife can migrate to habitat in these adjacent properties, thus relieving the developer of responsibility for their destruction.
• Provide the current zoning of the project site and the surrounding area.	Yes
• Discuss how the proposed uses fit into the intended land use of the area (conservation, development, ecological function, quality of life).	Not adequate, see comment above.
• Indicate whether zoning or local land use plans will need to be changed after project completion.	Yes
4. Wetlands	
• Indicate whether wetlands are present, describe the basis for this determination and identity of the person who made the determination.	Yes
• Show identified wetlands on a map, and describe all relevant details, such as acreage, types, delineation, function, etc.)	Yes
• If wetlands are to be filled, specify the number of acres that will be affected.	No wetland impacts are proposed.
• List all required permits and permitting agencies.	May need riparian buffer approval from WRB depending on impact. No details given.
• If any diversions/additions/withdrawals of surface water will affect wetlands, describe those activities.	No discussion given
5. Public lands and Scenic, Recreational, and State Natural Areas	

• 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.	Text says that there are none on or near the site. Where are the nearest areas? Provide a map.
6. Areas of Archaeological or Historical Value	
• Discuss any archaeological or historical studies of the project location; provide relevant references.	Yes
• Describe and identify on a map any structures (i.e., walls, buildings, etc.) on the site and provide estimated ages of those structures.	Yes
• Describe all impacts to any archaeological or historical resources in the proposed project area.	Yes
• Describe plans for demolishing or rebuilding any structures.	Yes
• Provide photographs of any significant resources, including all structures older than 50-years.	Yes
• Provide relevant correspondence with the Chatham County Historical Association and NC SHPO.	Yes
7. Air Quality	
• Describe the project's impacts on ambient air quality.	Yes
• Describe plans for any open burning during or after construction.	What will impacts to air quality be from open burning during deforestation for construction sites? Impacts to adjacent properties? Grinding or wood chipping would rather than
• Indicate the number of proposed parking spaces, if applicable.	Yes
• Describe whether the project will increase odor levels, or the likelihood of odor complaints.	Yes

• Provide a copy of any required traffic studies.	No
8. Noise Levels	
• Discuss current noise levels; use a benchmark if possible.	Inadequate comparison.
• Describe any increases in noise levels expected from this project.	No, future noise levels are simply discussed as typical for increased development.
• Specify the distance at which the increased noise will be heard.	No
• Discuss whether surrounding properties will be affected by noise levels.	No
• If commercial uses are proposed, specify the hours of operation.	No
9. Light Levels	
• Describe lighting plans for the project, including how lighting will impact adjacent residents and wildlife.	Yes
10. Surface and Groundwater Resources (discuss separately)	
• Identify and provide a map of surface waters in the project area. Describe groundwater (aquifers) in the project area.	Yes
• Include names, locations, classifications, and use support ratings for surface waters.	Yes
• Specify and show on a map the river basin in which the project is located.	Yes
• Discuss any known groundwater quality issues.	Yes
• Discuss drinking water sources.	Yes
11. Fish and Aquatic Habitats	
• Describe fish and aquatic habitats in and adjacent to the site/project area.	Yes

• Discuss impacts to fish and aquatic life and their habitats, including a map showing those habitats.	Yes
12. Wildlife and Natural Vegetation	
• Describe and provide a map of natural community types on and adjacent to the site/project area.	Needs current reference
• List the species of dominant plants and animals observed on the site that typify those communities.	Yes
• Evaluate and discuss whether suitable habitat exists for rare, threatened, and /or endangered species, as described y the NC Natural Heritage Program.	Discussed, but it is clear from the letter from Natural Heritage Program that habitat exists for some rare species within the project area, though not observed by consultants to this report.
• If wildlife will be displaced, discuss any limitation of adjacent areas to support them.	No, not sufficient answers. Wildlife forced to flee their habitat must compete with others of their species for diminishing resources leading to starvation or other causes of death. Some animals such as box turtles have very specific home ranges they will try to return to regardless of the habitat having been removed. Any deforestation for construction should not be allowed during the spring nesting season for birds.
• 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.	It would be important to know if the landscaping plans include use of native plants only, and if cultivated species that are considered invasive will be banned from use.
• If forest will be cleared, discuss the extent of planned deforestation and specify the forestry methods to be used, including BMPs.	No details given.
13. Hazardous Materials	
• List all hazardous materials to be stored or introduced during construction or operation.	Not sufficient information.

• For each hazardous material, other than deminimis quantities or for routine housekeeping purposes, describe the procedures to be used to ensure their proper management, storage, and disposal.	No
References	Yes but should be used as citations throughout report.
Exhibits (Maps, Figures, Tables, Photos, etc.)	Yes
State and Federal Permits Required	Yes

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Environmental Impact Assessment Item	Adequately Described and Fully Discussed?
Proposed Project Description and Need	
1. Describe the overall project in detail, including all proposed phases.	Are wildlife impact statements based on risk or what assumptions go into that diagnosis beyond the speculation presented? Clearing habitat will impact wildlife in its current state, please tell us how you came to the diagnosis that wildlife will not be impacted long-term – will habitat be restored over time or is the conservation area attributing this statement?
2. Provide a project location map showing surrounding areas.	Yes
3. Provide a project site plan showing existing and proposed facilities.	Yes
4. Describe how this project fits into larger plans or connects with adjacent projects.	How does the project fit into the larger picture of competing developments (e.g. Chatham Park). Are there impacts due to COVID-19 or economy. How confident are they that they will be able to fund the project.
5. List and describe public facilities or benefits provided by the project.	No.
6. Discuss the land acreage to be disturbed during each phase.	No. Provide more information.
7. List square footage and height (in stores) of new buildings.	Yes.
8. Describe proposed uses of all buildings and proposed facilities.	Yes.
9. Show number of parking spaces in parking lots and decks.	Yes.
10. Show areas to be cleared, graded, filled, paved and landscaped.	Yes.
11. Show connections to existing utility and sewer lines or new utilities.	No. Need more information and drawings.

12. Show wastewater management systems on a map.	Not shown.
13. Show proposed areas of impervious and semi-pervious surfaces.	Yes
14. Show and describe any proposed stormwater control devices.	Yes.
Alternatives Analysis	
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.	This discussion is inadequate. Compare to recent development and how this development is either superior or on par. Also include how it will impact compared to others.
2. Discuss how the preferred alternative was selected and its benefits relative to other alternatives (including a no-build alternative, if applicable).	This discussion is inadequate.
Existing Environment and Project 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.)	
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.	
D. For unavoidable impacts, describe whether any compensatory mitigation is planned or required.	Mitigation for stream impacts under 404 permit if needed. They expect to do 2 stream crossings but do not indicate exactly where.
1. Geography	

• Discuss the geographic setting, geology, and topography of the project area and adjacent areas.	Yes
• 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', etc.).	Yes
• 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.	Yes
• Show areas that will be graded or filled, and provide estimated cut/fill volumes.	No. Hard to believe that soils wont leave or be imported.
• If the project includes pond or dam work, show areas that will be flooded.	No.
2. Soils and Prime Farmlands	
• Identify dominant soils in the project area (county GIS or NRCS website) and show on a map.	Yes
• Discuss any soil constraints (fill, wetland soils, septic suitability, slopes, etc.) and indicate those areas on a map.	Not enough information on steep slopes
• Describe any soil disturbance or contamination expected as a result of this project.	No
• If contamination is expected, discuss containment plans and procedures.	Need SPCC or similar
• If soil will be relocated, specify the number of square yards/feet to be moved, and its relocation site.	No
• Describe runoff management plans for the project.	Yes

• If soil disturbance is proposed, describe the off-site impacts expected from this activity.	No
• Provide a map of any prime or unique farmland soils in the project or service areas, and include reference used to make this determination.	Yes
• Describe impacts to prime or unique farmland soils, including acreage estimates of lost farmland soils and retained farmland soils.	Yes.
3. Land Use	
• Provide a map showing current use of land on the site and surrounding properties.	Yes
• Discuss how the current land use fits into the surrounding area (conservation, development, ecological function, etc.)	Current use has lower impervious most notably.
• Provide the current zoning of the project site and the surrounding area.	Yes
• Discuss how the proposed uses fit into the intended land use of the area (conservation, development, ecological function, quality of life).	Could use more thought into how the 'purposeful' development design interacts with wildlife.
• Indicate whether zoning or local land use plans will need to be changed after project completion.	Yes
4. Wetlands	
• Indicate whether wetlands are present, describe the basis for this determination and identity of the person who made the determination.	Yes
• Show identified wetlands on a map, and describe all relevant details, such as acreage, types, delineation, function, etc.)	Yes
• If wetlands are to be filled, specify the number of acres that will be affected.	No wetland impacts are proposed.

• List all required permits and permitting agencies.	
• If any diversions/additions/withdrawals of surface water will affect wetlands, describe those activities.	No.
5. Public lands and Scenic, Recreational, and State Natural Areas	
• 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.	Provide a map.
6. Areas of Archaeological or Historical Value	
• Discuss any archaeological or historical studies of the project location; provide relevant references.	Yes
• Describe and identify on a map any structures (i.e., walls, buildings, etc.) on the site and provide estimated ages of those structures.	Yes
• Describe all impacts to any archaeological or historical resources in the proposed project area.	Yes
• Describe plans for demolishing or rebuilding any structures.	Yes
• Provide photographs of any significant resources, including all structures older than 50-years.	Yes
• Provide relevant correspondence with the Chatham County Historical Association and NC SHPO.	Yes
7. Air Quality	
• Describe the project's impacts on ambient air quality.	Yes

• Describe plans for any open burning during or after construction.	Yes.
• Indicate the number of proposed parking spaces, if applicable.	Yes
• Describe whether the project will increase odor levels, or the likelihood of odor complaints.	Yes
• Provide a copy of any required traffic studies.	No
8. Noise Levels	
• Discuss current noise levels; use a benchmark if possible.	Yes. But compare apples to apples in the area.
• Describe any increases in noise levels expected from this project.	No. Are there any long term impacts to local residents.
• Specify the distance at which the increased noise will be heard.	No
• Discuss whether surrounding properties will be affected by noise levels.	No
• If commercial uses are proposed, specify the hours of operation.	No
9. Light Levels	
• Describe lighting plans for the project, including how lighting will impact adjacent residents and wildlife.	Yes
10. Surface and Groundwater Resources (discuss separately)	
• Identify and provide a map of surface waters in the project area. Describe groundwater (aquifers) in the project area.	Yes
• Include names, locations, classifications, and use support ratings for surface waters.	Yes

• Specify and show on a map the river basin in which the project is located.	Yes
• Discuss any known groundwater quality issues.	Yes
• Discuss drinking water sources.	Yes
11. Fish and Aquatic Habitats	
• Describe fish and aquatic habitats in and adjacent to the site/project area.	Yes
• Discuss impacts to fish and aquatic life and their habitats, including a map showing those habitats.	Yes
12. Wildlife and Natural Vegetation	
• Describe and provide a map of natural community types on and adjacent to the site/project area.	Yes.
• List the species of dominant plants and animals observed on the site that typify those communities.	Yes
• Evaluate and discuss whether suitable habitat exists for rare, threatened, and /or endangered species, as described y the NC Natural Heritage Program.	They need to honestly discuss this issue. Their discussion is misleading.
• If wildlife will be displaced, discuss any limitation of adjacent areas to support them.	Need more detailed explanations of management practices.
• 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.	Provide more detail on this approach.
• If forest will be cleared, discuss the extent of planned deforestation and specify the forestry methods to be used, including BMPs.	No details given.
13. Hazardous Materials	

• List all hazardous materials to be stored or introduced during construction or operation.	
• For each hazardous material, other than deminimis quantities or for routine housekeeping purposes, describe the procedures to be used to ensure their proper management, storage, and disposal.	No
References	Provide.
Exhibits (Maps, Figures, Tables, Photos, etc.)	Yes
State and Federal Permits Required	Yes

ERAC Review of Environmental Impact Assessment
Chatham County

Environmental Impact Assessment Item	Adequately Described and Fully Discussed?
Proposed Project Description and Need	
1. Describe the overall project in detail, including all proposed phases.	Total impervious is given as 23.73%. Awfully close to the threshold. Site layout shows the eastern portion as a "conservation area" Is it going into a conservation easement? What guarantee are they giving that it won't be developed in the future? Please stop saying that wildlife will not be impacted. Please don't tell us that a 118 acre mixed use development will have "no significant long-term impacts to the environment".
2. Provide a project location map showing surrounding areas.	yes
3. Provide a project site plan showing existing and proposed facilities.	yes
4. Describe how this project fits into larger plans or connects with adjacent projects.	Sort of, could provide more detail.
5. List and describe public facilities or benefits provided by the project.	No discussion of public facilities.
6. Discuss the land acreage to be disturbed during each phase.	Says that will be a future discussion. Unacceptable. Provide more information.
7. List square footage and height (in stores) of new buildings.	yes
8. Describe proposed uses of all buildings and proposed facilities.	yes
9. Show number of parking spaces in parking lots and decks.	yes
10. Show areas to be cleared, graded, filled, paved and landscaped.	yes
11. Show connections to existing utility and sewer lines or new utilities.	No. Discussed in the text but not shown on site drawings. Just says that it will be turned over to Old North State for treatment and disposal offsite. No discussion of expected volume, treatment methods, cumulative or indirect effects. Has the connection to Old North State been approved? If not, what is the plan? Not discussed.
12. Show wastewater management systems on a map.	Not shown.
13. Show proposed areas of impervious and semi-pervious surfaces.	yes
14. Show and describe any proposed stormwater control devices.	yes
Alternatives Analysis	
1. Discuss and compare all reasonable development alternatives (site selection, facility layout, utilities, stormwater management, construction methods, open	Not enough to say they covered *all* development alternatives. Provide more options. Also, you can't compare your current plan to one that developed 20 years ago. The rules have changed substantially

space preservation, any other pertinent alternative considerations.	since then and that old plan likely would have to be re-designed. Also, there's no mention of impact to traffic and infrastructure – just that you plan to use it. Provide. TIA is mentioned in the Air Quality section below, provide statement here as well.
2. Discuss how the preferred alternative was selected and its benefits relative to other alternatives (including a no-build alternative, if applicable).	See above.
Existing Environment and Project 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.)	
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.	
D. For unavoidable impacts, describe whether any compensatory mitigation is planned or required.	
1. Geography	
• Discuss the geographic setting, geology, and topography of the project area and adjacent areas.	Yes
• 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', etc.).	Yes
• 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.	Yes
• Show areas that will be graded or filled, and provide estimated cut/fill volumes.	No. They say that will be a future discussion, but they don't plan to bring soil in or dispose of any off site. Provide estimates or conceptual planning at least. Where are your disposal areas? Where are you planning to cut?
• If the project includes pond or dam work, show areas that will be flooded.	N/A
2. Soils and Prime Farmlands	

• Identify dominant soils in the project area (county GIS or NRCS website) and show on a map.	Yes
• Discuss any soil constraints (fill, wetland soils, septic suitability, slopes, etc.) and indicate those areas on a map.	Wetlands and surface waters are shown but steep slope areas are not.
• Describe any soil disturbance or contamination expected as a result of this project.	No
• If contamination is expected, discuss containment plans and procedures.	Minimal. Provide more detail about your spill response. Also, discuss potential for future contamination issues.
• If soil will be relocated, specify the number of square yards/feet to be moved, and its relocation site.	No
• Describe runoff management plans for the project.	Yes
• If soil disturbance is proposed, describe the off-site impacts expected from this activity.	No
• Provide a map of any prime or unique farmland soils in the project or service areas, and include reference used to make this determination.	Yes
• Describe impacts to prime or unique farmland soils, including acreage estimates of lost farmland soils and retained farmland soils.	Yes. Explain this statement from page 6-7 "…existing conditions of some of these soil areas preclude them from being suitable for agricultural use due to existing site conditions and relict soil disturbance". Existing site conditions are described as predominantly forested land and fields reverting from past agricultural use. Contradictory.
3. Land Use	
• Provide a map showing current use of land on the site and surrounding properties.	Yes
• Discuss how the current land use fits into the surrounding area (conservation, development, ecological function, etc.)	Current land use in the area is considerably less dense and lower impervious.
• Provide the current zoning of the project site and the surrounding area.	Yes
• Discuss how the proposed uses fit into the intended land use of the area (conservation, development, ecological function, quality of life).	Yes
• Indicate whether zoning or local land use plans will need to be changed after project completion.	Yes
4. Wetlands	

• Indicate whether wetlands are present, describe the basis for this determination and identity of the person who made the determination.	Yes. Delineators not named.
• Show identified wetlands on a map, and describe all relevant details, such as acreage, types, delineation, function, etc.)	Yes
• If wetlands are to be filled, specify the number of acres that will be affected.	No wetland impacts proposed. Two stream crossings proposed, but no quantities given.
• List all required permits and permitting agencies.	May need riparian buffer approval from WRB depending on impact. No details given.
• If any diversions/additions/withdrawals of surface water will affect wetlands, describe those activities.	No discussion given
5. Public lands and Scenic, Recreational, and State Natural Areas	
• 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.	Text says that there are none on or near the site. Where are the nearest areas? Provide a map.
6. Areas of Archaeological or Historical Value	
• Discuss any archaeological or historical studies of the project location; provide relevant references.	Yes
• Describe and identify on a map any structures (i.e., walls, buildings, etc.) on the site and provide estimated ages of those structures.	Yes
• Describe all impacts to any archaeological or historical resources in the proposed project area.	Yes
• Describe plans for demolishing or rebuilding any structures.	Yes
• Provide photographs of any significant resources, including all structures older than 50-years.	Yes
• Provide relevant correspondence with the Chatham County Historical Association and NC SHPO.	Yes
7. Air Quality	
• Describe the project's impacts on ambient air quality.	Yes
• Describe plans for any open burning during or after construction.	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.
• Indicate the number of proposed parking spaces, if applicable.	Yes
• Describe whether the project will increase odor levels, or the likelihood of odor complaints.	yes
• Provide a copy of any required traffic studies.	TIA is being developed.
8. Noise Levels	
• Discuss current noise levels; use a benchmark if possible.	Yes but benchmarks given are inadequate. You're comparing a shopping center with several stores to a mixed use development easily 5 times bigger.
• Describe any increases in noise levels expected from this project.	Not really. Construction noise is addressed, but long term increases are not detailed in a realistic way. What will the noise impacts realistically be to the residential properties adjacent to the site?
• Specify the distance at which the increased noise will be heard.	No
• Discuss whether surrounding properties will be affected by noise levels.	No
• If commercial uses are proposed, specify the hours of operation.	No
9. Light Levels	
• Describe lighting plans for the project, including how lighting will impact adjacent residents and wildlife.	Yes
10. Surface and Groundwater Resources (discuss separately)	
• Identify and provide a map of surface waters in the project area. Describe groundwater (aquifers) in the project area.	Yes
• Include names, locations, classifications, and use support ratings for surface waters.	Yes
• Specify and show on a map the river basin in which the project is located.	Yes
• Discuss any known groundwater quality issues.	Yes
• Discuss drinking water sources.	Yes
11. Fish and Aquatic Habitats	
• Describe fish and aquatic habitats in and adjacent to the site/project area.	Yes. A surface water was identified as isolated and non-jurisdictional by USACE. Did DWR take a position on jurisdiction?
• Discuss impacts to fish and aquatic life and their habitats, including a map showing those habitats.	Yes
12. Wildlife and Natural Vegetation	

• Describe and provide a map of natural community types on and adjacent to the site/project area.	Yes but an out of date refence is used. Use the Fourth Approximation of Schafle & Weakley (2012)
• List the species of dominant plants and animals observed on the site that typify those communities.	yes
• Evaluate and discuss whether suitable habitat exists for rare, threatened, and /or endangered species, as described y the NC Natural Heritage Program.	Yes
• If wildlife will be displaced, discuss any limitation of adjacent areas to support them.	It is discussed, but conclusions are not realistic. At all. There will be displacement impacts and habitat loss. See previous comments. Also, you can't say that the project won't have impacts because wildlife can move offsite to habitat on adjacent properties.
• 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.	Yes but distribution is not discussed in detail. Also, long -term management is mentioned as a positive result of the proposed project, 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. If you are committing to long-term invasive species management, are you also proposing to landscape with only native vegetation?
• If forest will be cleared, discuss the extent of planned deforestation and specify the forestry methods to be used, including BMPs.	Discussion is very minimal. Provide methods, BMPs, discuss SMZ, discuss leave trees, and species selection. What will be done with the timber post-harvest? How will slash be disposed of? Grinding on site is encouraged as an alternative to burning.
13. Hazardous Materials	
• List all hazardous materials to be stored or introduced during construction or operation.	Construction phase is discussed but not the long term.
• For each hazardous material, other than deminimis quantities or for routine housekeeping purposes, describe the procedures to be used to ensure their proper management, storage, and disposal.	
References	No citations are given though references are cited in the text. Provide.
Exhibits (Maps, Figures, Tables, Photos, etc.)	Yes
State and Federal Permits Required	Yes

ERAC Review of Environmental Impact Assessment
Chatham County - Williams Corner Version 4

Environmental Impact Assessment Item	Adequately Described and Fully Discussed?
Proposed Project Description and Need	
1. Describe the overall project in detail, including all proposed phases.	The project has been described in detail but not in a manner that addresses the cumulative impacts of development in this portion of the county or differentiates this project from continuing sprawl along 15-501
2. Provide a project location map showing surrounding areas.	Yes
3. Provide a project site plan showing existing and proposed facilities.	Yes
4. Describe how this project fits into larger plans or connects with adjacent projects.	Once again this assessment seems not to take into account county-wide development when accounting for its impacts.
5. List and describe public facilities or benefits provided by the project.	Public open space would be a welcome feature.

6. Discuss the land acreage to be disturbed during each phase.	Yes
7. List square footage and height (in stores) of new buildings.	Yes
8. Describe proposed uses of all buildings and proposed facilities.	Yes, in general
9. Show number of parking spaces in parking lots and decks.	Yes
10. Show areas to be cleared, graded, filled, paved and landscaped.	Areas, but not exact.
11. Show connections to existing utility and sewer lines or new utilities.	I am concerned about the "moving target" aspect regarding number of units and usage given the already stressed wastewater treatment options.
12. Show wastewater management systems on a map.	No
13. Show proposed areas of impervious and semi-pervious surfaces.	Yes
14. Show and describe any proposed stormwater control devices.	Devices are shown but once again I feel they fail to address the larger picture of development in the corridor and increasing "flashy flows" from storms.
Alternatives Analysis	

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.	In my view the development, to its detriment ,fails to offer any innovative ideas to preserve open space, protect water quality or maintain the rural character of out county.
2. Discuss how the preferred alternative was selected and its benefits relative to other alternatives (including a no-build alternative, if applicable).	
Existing Environment and Project 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.)	
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.	
D. For unavoidable impacts, describe whether any compensatory mitigation is planned or required.	Mitigation for stream impacts under 404 permit if needed. They expect to do 2 stream crossings but do not indicate exactly where.
1. Geography	
• Discuss the geographic setting, geology, and topography of the project area and adjacent areas.	Yes
• 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’, etc.).	Yes

• 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.	Yes
• Show areas that will be graded or filled, and provide estimated cut/fill volumes.	Yes
• If the project includes pond or dam work, show areas that will be flooded.	Yes
2. Soils and Prime Farmlands	
• Identify dominant soils in the project area (county GIS or NRCS website) and show on a map.	Yes
• Discuss any soil constraints (fill, wetland soils, septic suitability, slopes, etc.) and indicate those areas on a map.	Yes
• Describe any soil disturbance or contamination expected as a result of this project.	No
• If contamination is expected, discuss containment plans and procedures.	No
• If soil will be relocated, specify the number of square yards/feet to be moved, and its relocation site.	No
• Describe runoff management plans for the project.	Yes
• If soil disturbance is proposed, describe the off-site impacts expected from this activity.	No
• Provide a map of any prime or unique farmland soils in the project or service areas, and include reference used to make this determination.	Yes
• Describe impacts to prime or unique farmland soils, including acreage estimates of lost farmland soils and retained farmland soils.	Yes - revised V.4 states that 23.06 acres of prime farmland will be lost.

3. Land Use	
• Provide a map showing current use of land on the site and surrounding properties.	Yes
• Discuss how the current land use fits into the surrounding area (conservation, development, ecological function, etc.)	This report fails to address its position in the increasing sprawl of a critical area.
• Provide the current zoning of the project site and the surrounding area.	Yes
• Discuss how the proposed uses fit into the intended land use of the area (conservation, development, ecological function, quality of life).	
• Indicate whether zoning or local land use plans will need to be changed after project completion.	Yes
4. Wetlands	
• Indicate whether wetlands are present, describe the basis for this determination and identity of the person who made the determination.	Yes
• Show identified wetlands on a map, and describe all relevant details, such as acreage, types, delineation, function, etc.)	Yes
• If wetlands are to be filled, specify the number of acres that will be affected.	None
• List all required permits and permitting agencies.	Unsure
• If any diversions/additions/withdrawals of surface water will affect wetlands, describe those activities.	Unclear
5. Public lands and Scenic, Recreational, and State Natural Areas	

• 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.	?
6. Areas of Archaeological or Historical Value	
• Discuss any archaeological or historical studies of the project location; provide relevant references.	Yes
• Describe and identify on a map any structures (i.e., walls, buildings, etc.) on the site and provide estimated ages of those structures.	Yes
• Describe all impacts to any archaeological or historical resources in the proposed project area.	Yes
• Describe plans for demolishing or rebuilding any structures.	Yes
• Provide photographs of any significant resources, including all structures older than 50-years.	Yes
• Provide relevant correspondence with the Chatham County Historical Association and NC SHPO.	Yes
7. Air Quality	
• Describe the project's impacts on ambient air quality.	Yes
• Describe plans for any open burning during or after construction.	Yes
• Indicate the number of proposed parking spaces, if applicable.	Yes
• Describe whether the project will increase odor levels, or the likelihood of odor complaints.	Yes

• Provide a copy of any required traffic studies.	No
8. Noise Levels	
• Discuss current noise levels; use a benchmark if possible.	No adequate benchmark
• Describe any increases in noise levels expected from this project.	See above
• Specify the distance at which the increased noise will be heard.	No
• Discuss whether surrounding properties will be affected by noise levels.	No
• If commercial uses are proposed, specify the hours of operation.	No
9. Light Levels	
• Describe lighting plans for the project, including how lighting will impact adjacent residents and wildlife.	Yes
10. Surface and Groundwater Resources (discuss separately)	
• Identify and provide a map of surface waters in the project area. Describe groundwater (aquifers) in the project area.	Yes
• Include names, locations, classifications, and use support ratings for surface waters.	Yes
• Specify and show on a map the river basin in which the project is located.	Yes
• Discuss any known groundwater quality issues.	Yes
• Discuss drinking water sources.	Yes
11. Fish and Aquatic Habitats	
• Describe fish and aquatic habitats in and adjacent to the site/project area.	Yes

• Discuss impacts to fish and aquatic life and their habitats, including a map showing those habitats.	Yes
12. Wildlife and Natural Vegetation	
• Describe and provide a map of natural community types on and adjacent to the site/project area.	Yes
• List the species of dominant plants and animals observed on the site that typify those communities.	Yes
• Evaluate and discuss whether suitable habitat exists for rare, threatened, and /or endangered species, as described y the NC Natural Heritage Program.	Yes
• If wildlife will be displaced, discuss any limitation of adjacent areas to support them.	This assessment absolutely does not take into account the increasingly fractured ecosystems of this corner of the county.
• 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.	
• If forest will be cleared, discuss the extent of planned deforestation and specify the forestry methods to be used, including BMPs.	No details given.
13. Hazardous Materials	
• List all hazardous materials to be stored or introduced during construction or operation.	

• For each hazardous material, other than deminimis quantities or for routine housekeeping purposes, describe the procedures to be used to ensure their proper management, storage, and disposal.	No
References	
Exhibits (Maps, Figures, Tables, Photos, etc.)	
State and Federal Permits Required	

ERAC Review of Environmental Impact Assessment
Chatham County - Williams Corner Version 4

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July 9, 2020

Dear Environmental Review Advisory Committee,

My name is Dr. Alicia Koblansky and I am a resident of Chatham County. Thank you for this opportunity to speak in regarding the Williams Corner EIA review.

I would like to bring to the attention of the committee, issues with the existing topography of the Williams Corner site, specifically the area that will be used in the Phase 1 apartments in the Southeast quadrant of the site (Figure 1A). In the revised EIA from Williams Corner they mentioned that "the existing topography on site will be altered during site preparation, including clearing and grading activities, although not substantially compared with the site's existing disposition". However, looking at the topography of the southeastern area (Figure 1B) you can see that the highest point is found in this quadrant in addition to steep slopes of 15 to 25% composed of Wedowee sandy loam directly into the backyards of adjacent homes. As seen in Figure 2A, you can see an example of a portion of the slope behind one of the adjacent homes. As a reference, the blue arrow points to an adult of 5'5". Figure 2B- Facing south toward Lystra Rd, and nearly 50 ft below the grade level of the proposal, you can see the slope into additional adjacent homeowners in addition to a tributary that runs below this slope among the adjacent homes that runs into Cub creek. This distinction is much more drastic in the winter.

Within the EIA there is no evaluation of the plan for grading and for bringing in the back-fill required to reinforce the ground. This will be directly adjacent to nearby homes and as stated by the engineer at the December 23 community meeting, will almost certainly require large retaining walls and hundreds of thousands of tons of fill dirt with the impervious surface being less than two hundred feet from the nearest property owner. There is no information regarding runoff, drainage, or the erosion that will occur due to the work proposed.

This project is proposed to be completed in phases that could take over 10 years to be completed. The developer defines no strategy in any of the supplied documents about how clearing and grading of the site will be handled, nor is this addressed in the EIA. This developer has already set a precedent for clearcutting and leaving lots vacant that were stripped without regard to its environmental effect. Please see Figure 3 taken in Governors Village as evidence of a lot that has been cleared and left vacant by Bold Development.

Thank you for your time and consideration.

Figures 1-3

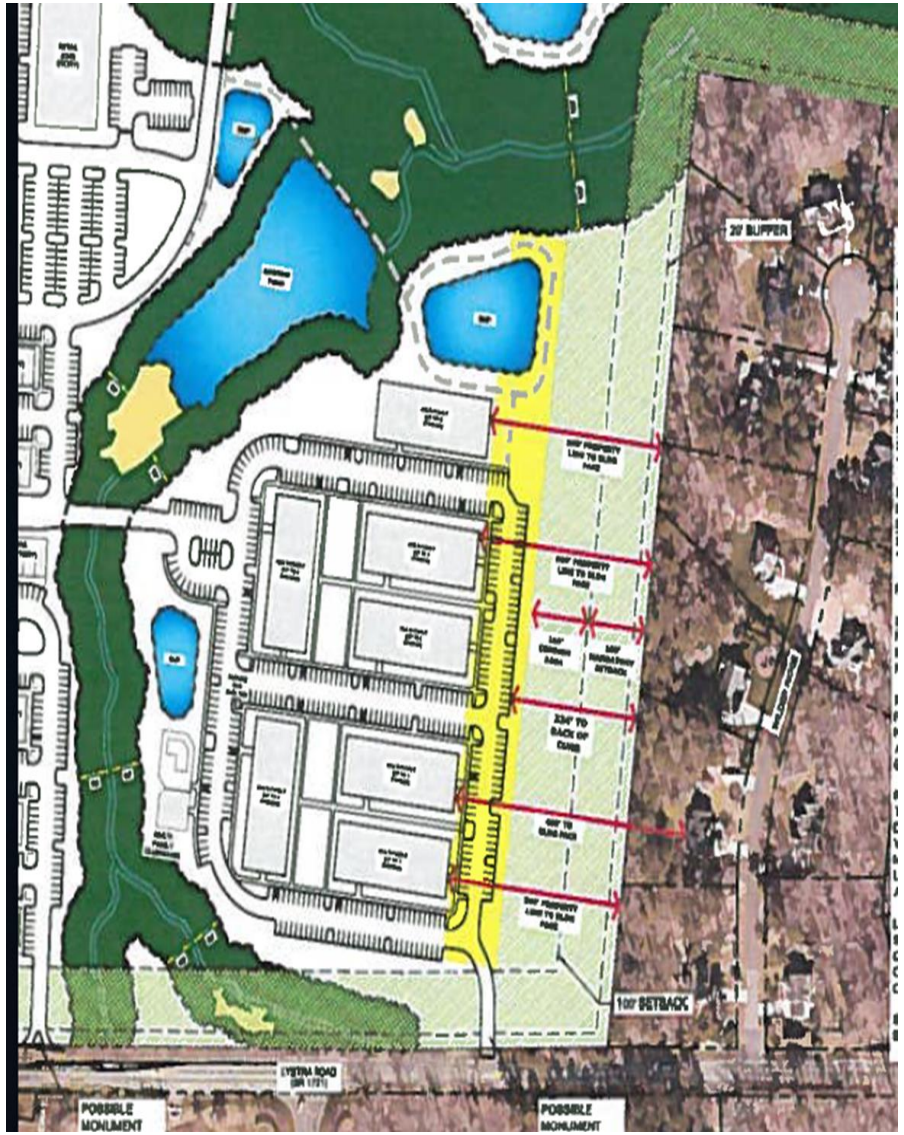
Dr. Alicia Koblansky

ERAC Comments

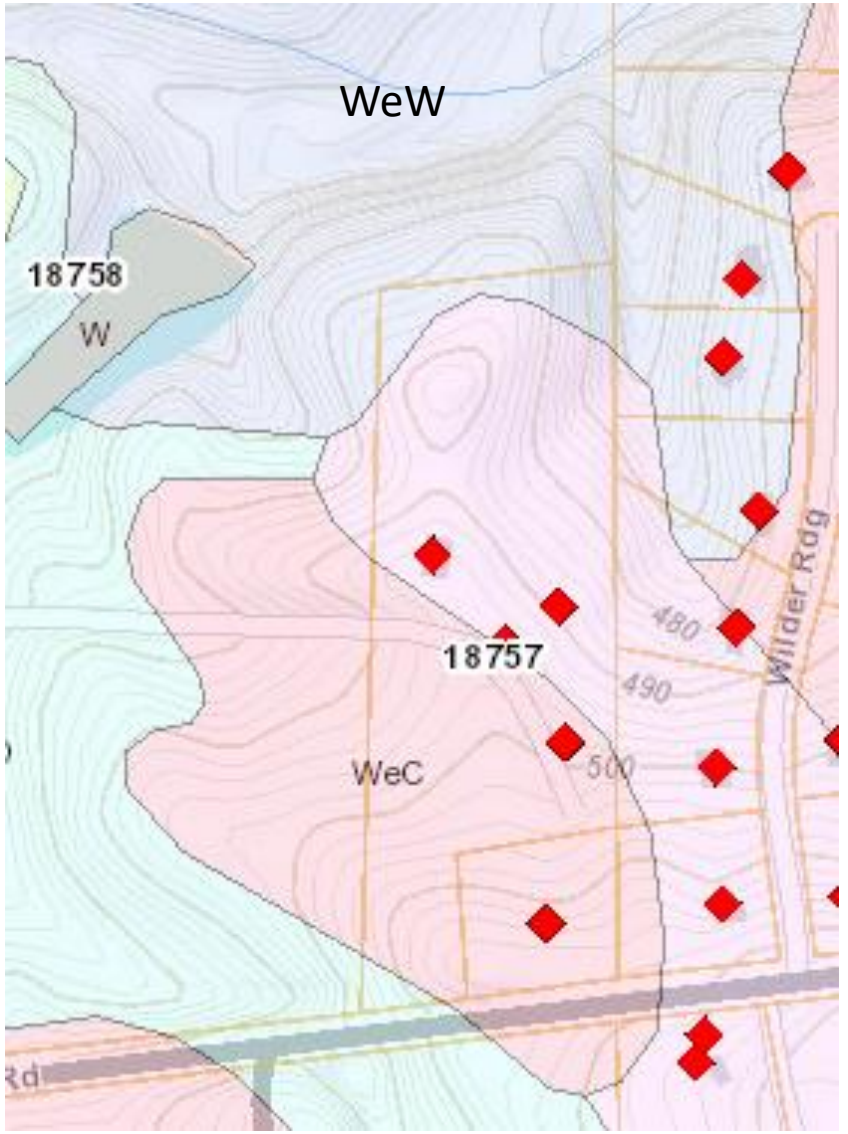
July 09 2020

Figure 1: Topography of Phase 1 Apartments in the Southeast quadrant

A



B



Topography map

Figure 2: Pictures from behind properties adjacent to Phase 1 Apartment proposal

A

Looking up from adjacent property to mid-rise of slope. Blue arrow indicates adult 5’5”

B

Adjacent properties are below slope and creek bed running along property edges

Figure 3: Picture of Clear-cut lot in Governors Village.

Dear Environmental Review Board,

I am speaking tonight about the Environmental Impact Assessment for the Williams Corner project.

It is beyond clear that many of these references within the EIA were simply cut and pasted from historic documents and do not evaluate current environmental considerations for this area.

I have received information that there is a small population of the federally endangered Pond Berry(Lindera *melissifolia*) as well as a population of the rare Yellow Fringed Orchid (Platanthera *ciliaris*). These were both excluded from the review, as would be expected of a survey conducted during a time when both of these would be dormant. Based on the presence of species indicative of older growth areas, it would be safe to assume that there may be many more species that could not have been effectively reviewed.

Further, the US Fish and Wildlife Service is currently collecting and documenting reports of suspected Red Cockaded Woodpecker sightings in the near vicinity as would be expected near a property that has been managed by fire suppression as evidenced in Paragraph 12.0 on page 13 of the EIA. This suggests that the RCW may very well be present on this track of land. The first paragraph of page 14 states that the area was surveyed for the types of habitat that are preferred by the RCW and only details the fire maintained type of habitat. This omits up to 50 percent of types of forest suitable, and often chosen, for RCW cavity selection as detailed in some studies. These conveniently omitted habitats, comprise a majority of the property in the proposal, including the old growth pines required by the species. Additionally, this EIA completely omits the confirmed 2015 sighting nearby, further supporting the fact that it is incomplete.

It is clear that this EIA is either deliberately incomplete or severely deficient in its findings and must be re-evaluated in its accuracy.

My wife has been having trouble getting this email to send to you, so I am forwarding it on her behalf. Apologies if you receive it more than once.

-Chuck Esther

Begin forwarded message:

Dear Ms. Thorn,

I have attached below my comments to be read aloud by the Chair during the ERAC meeting tonight. Please let me know if there is any additional information you need. My husband is emailing it to you because it has failed to go through each time I have tried to send it to you.

Thank you,

Julie Esther

To: Chatham County Environmental Review Advisory Committee

From: Julie Esther

Dear Committee Members,

Thank you for allowing me the opportunity to share my concerns about the Williams Corner Environmental Impact Assessment. I live on Wilder Ridge next to the property where Bold Development Group is proposing to build 14 high-density apartment buildings.

One of the most concerning aspects of the current Williams Corner EIA is the lack of any meaningful description or analysis of the wastewater plans and the environmental impact of those plans. Bold has failed to provide crucial details:

-They have not presented a credible wastewater plan. Their assertion that they will use Briar Chapel's system is speculative due to the pending case in front of the North Carolina Utilities Commission.

-They have not indicated where sewer pipes will be located relative to Cub Creek, how many gallons per day of wastewater will be generated, where the wastewater will go after it is treated at Briar Chapel, and whether it will be sent back to be sprayed on Williams Corner.

-They have not indicated why Old North State can be trusted with raw sewage lines on a watershed area in light of the number of raw sewage leaks Old North State has had in Briar Chapel.

-They have not given any description of the wastewater plan they will use if they are not able to send their wastewater to Briar Chapel. They simply state that the wastewater will be treated on site. There is no evidence that the Williams Corner land can handle the wastewater for 540 apartments. The permit for wastewater approved in 2006 was based on 40 townhomes rather than 540 apartments, involved a different site layout, and was terminated ten years ago. Where will the treatment plants and spray fields be located? What will be the GPD capacity? How much effluent can be sprayed on the Williams Corner land? They have not provided verifiable answers to any of these questions.

Furthermore, the EIA has provided no analysis at all of the environmental impact of the wastewater. The EIA states that since they plan to pump away the wastewater for the 540 apartments it will have little environmental impact. Whether they pump the wastewater to Briar Chapel to be sprayed, send it to Fearrington to be discharged into surface waters, or spray the effluent on Williams Corner, it is going to have an environmental impact somewhere. The EIA provides no discussion or analysis of the impact of any of these proposed disposal methods and thus is incomplete.

Please require this developer to answer the above questions and provide data regarding the impact of their wastewater plans on the environment before proceeding so that the community and Commissioners can have the information needed to accurately assess Bold's proposal.

Thank you,
Julie Esther

ERAC Review of Environmental Impact Assessment
Chatham County

Environmental Impact Assessment Item	Adequately Described and Fully Discussed?
Proposed Project Description and Need	
1. Describe the overall project in detail, including all proposed phases.	Some – phases are not complete (acreage for Phases I, III, and IV)
2. Provide a project location map showing surrounding areas.	Yes
3. Provide a project site plan showing existing and proposed facilities.	Yes
4. Describe how this project fits into larger plans or connects with adjacent projects.	Yes
5. List and describe public facilities or benefits provided by the project.	Yes
6. Discuss the land acreage to be disturbed during each phase.	Yes (except for Phase II)
7. List square footage and height (in stores) of new buildings.	Yes
8. Describe proposed uses of all buildings and proposed facilities.	Yes
9. Show number of parking spaces in parking lots and decks.	Yes
10. Show areas to be cleared, graded, filled, paved and landscaped.	Yes
11. Show connections to existing utility and sewer lines or new utilities.	Yes (letter proof?)
12. Show wastewater management systems on a map.	No
13. Show proposed areas of impervious and semi-pervious surfaces.	No – at least not clear to me
14. Show and describe any proposed stormwater control devices.	No
Alternatives Analysis	
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.	More or less – does mention no active and a previously approved site plan (not many details)
2. Discuss how the preferred alternative was selected and its benefits relative to other alternatives (including a no-build alternative, if applicable).	Yes
Existing Environment and Project 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.)	
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.	
D. For unavoidable impacts, describe whether any compensatory mitigation is planned or required.	
1. Geography	
• Discuss the geographic setting, geology, and topography of the project area and adjacent areas.	Yes
• 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', etc.).	Yes
• 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.	Yes
• Show areas that will be graded or filled, and provide estimated cut/fill volumes.	Yes
• If the project includes pond or dam work, show areas that will be flooded.	NA
2. Soils and Prime Farmlands	
• Identify dominant soils in the project area (county GIS or NRCS website) and show on a map.	Yes
• Discuss any soil constraints (fill, wetland soils, septic suitability, slopes, etc.) and indicate those areas on a map.	Somewhat – briefly mentioned in second paragraph, does show on map
• Describe any soil disturbance or contamination expected as a result of this project.	Yes
• If contamination is expected, discuss containment plans and procedures.	Briefly
• If soil will be relocated, specify the number of square yards/feet to be moved, and its relocation site.	NA – all on site
• Describe runoff management plans for the project.	Yes
• If soil disturbance is proposed, describe the off-site impacts expected from this	Yes

activity.	
• Provide a map of any prime or unique farmland soils in the project or service areas, and include reference used to make this determination.	Yes
• Describe impacts to prime or unique farmland soils, including acreage estimates of lost farmland soils and retained farmland soils.	Yes
3. Land Use	
• Provide a map showing current use of land on the site and surrounding properties.	Unclear – not sure
• Discuss how the current land use fits into the surrounding area (conservation, development, ecological function, etc.)	Yes
• Provide the current zoning of the project site and the surrounding area.	Yes
• Discuss how the proposed uses fit into the intended land use of the area (conservation, development, ecological function, quality of life).	Yes
• Indicate whether zoning or local land use plans will need to be changed after project completion.	Yes
4. Wetlands	
• Indicate whether wetlands are present, describe the basis for this determination and identity of the person who made the determination.	Yes
• Show identified wetlands on a map, and describe all relevant details, such as acreage, types, delineation, function, etc.)	Yes
• If wetlands are to be filled, specify the number of acres that will be affected.	Yes
• List all required permits and permitting agencies.	Yes
• If any diversions/additions/withdrawals of surface water will affect wetlands, describe those activities.	Not mentioned
5. Public lands and Scenic, Recreational, and State Natural Areas	
• 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.	Yes

6. Areas of Archaeological or Historical Value	
• Discuss any archaeological or historical studies of the project location; provide relevant references.	Yes
• Describe and identify on a map any structures (i.e., walls, buildings, etc.) on the site and provide estimated ages of those structures.	Yes
• Describe all impacts to any archaeological or historical resources in the proposed project area.	Yes
• Describe plans for demolishing or rebuilding any structures.	No
• Provide photographs of any significant resources, including all structures older than 50-years.	Yes
• Provide relevant correspondence with the Chatham County Historical Association and NC SHPO.	Yes
7. Air Quality	
• Describe the project's impacts on ambient air quality.	Yes
• Describe plans for any open burning during or after construction.	Yes
• Indicate the number of proposed parking spaces, if applicable.	Mentioned earlier but not in this section
• Describe whether the project will increase odor levels, or the likelihood of odor complaints.	Yes
• Provide a copy of any required traffic studies.	TIA in progress
8. Noise Levels	
• Discuss current noise levels; use a benchmark if possible.	Yes
• Describe any increases in noise levels expected from this project.	Yes
• Specify the distance at which the increased noise will be heard.	No
• Discuss whether surrounding properties will be affected by noise levels.	Yes
• If commercial uses are proposed, specify the hours of operation.	Yes
9. Light Levels	
• Describe lighting plans for the project, including how lighting will impact adjacent residents and wildlife.	Yes

10. Surface and Groundwater Resources (discuss separately)	
• Identify and provide a map of surface waters in the project area. Describe groundwater (aquifers) in the project area.	Yes
• Include names, locations, classifications, and use support ratings for surface waters.	Yes
• Specify and show on a map the river basin in which the project is located.	Yes
• Discuss any known groundwater quality issues.	Yes
• Discuss drinking water sources.	Yes
11. Fish and Aquatic Habitats	
• Describe fish and aquatic habitats in and adjacent to the site/project area.	
• Discuss impacts to fish and aquatic life and their habitats, including a map showing those habitats.	
12. Wildlife and Natural Vegetation	
• Describe and provide a map of natural community types on and adjacent to the site/project area.	
• List the species of dominant plants and animals observed on the site that typify those communities.	
• Evaluate and discuss whether suitable habitat exists for rare, threatened, and /or endangered species, as described y the NC Natural Heritage Program.	
• If wildlife will be displaced, discuss any limitation of adjacent areas to support them.	
• 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.	
• If forest will be cleared, discuss the extent of planned deforestation and specify the forestry methods to be used, including BMPs.	
13. Hazardous Materials	
• List all hazardous materials to be stored or introduced during construction or operation.	Yes

• For each hazardous material, other than deminimis quantities or for routine housekeeping purposes, describe the procedures to be used to ensure their proper management, storage, and disposal.	Yes
References	
Exhibits (Maps, Figures, Tables, Photos, etc.)	
State and Federal Permits Required	