Environmental Impact Assessment Item	Adequately Described and Fully Discussed?
Proposed Project Description and Need	More information could have been provided about the previous 2021 conservation subdivision proposal for this site - 158 lots f 158 ares, with offsite septic, not approved by Planning Bd.
Describe the overall project in detail, including all proposed phases.	Included. (One phase only) Is the Minter family piece (1.5 acres) part of this project or not?
Provide a project location map showing surrounding areas.	Included
Provide a project site plan showing existing and proposed facilities.	Included No amenity area [clubhouse & pool] in this revision.
 Describe how this project fits into larger plans or connects with adjacent projects. 	Included Error on page 2, 2.2 "conservation subdivision"
 List and describe public facilities or benefits provided by the project. 	Included: Housing; 40% open space affords wetland and stream protections School crosswalks on Moncure School Road was a concern noted at community meeting. Any follow-up?Are locations known?
6. Discuss the land acreage to be disturbed during each phase.	Included. 36.5 acres, one phase only
7. List square footage and height (in stores) of new buildings.	Included - 1200- 4000 sq.ft. homes, 1-2 stories
8. Describe proposed uses of all buildings and proposed facilities.	Included Residential. 2 mail kiosks with 2 spaces each. [Total of 4] One of the mail kiosks is located on Orleans Dr. cul-de-sac. Out-of-the way location? Is this left over from original design with the second entrance to Jordan Dam Road?
9. Show number of parking spaces in parking lots and decks.	Included 2 spaces at each home site and mail kiosk 160 spaces No on-street parking - where will guests park?
10. Show areas to be cleared, graded, filled, paved and landscaped.	Areas (60%) not protected as open space will be timbered and grubbed to create roads, lots, septic fields

11. Show connections to existing utility and sewer lines or new utilities.	Included for county water, no sewer shown. Comments from Jeannie A. p. 2. Preliminary calculations show the project water demand is 28,080 GPD. • Append A Fig.2 Existing water lines & power line: 16" along Jordan Dam Road; 6" waterline & 2 sections of 8" along Moncure School Road (one crosses HWY 1). • Proposed 8" connection to existing water mains [6" & 8"] at each of the two entrances on Moncure School Rd. -Water tie-in to 16" water main at intersection of Jordan Dam Road & Moncure School Road? Appears to be a gap between 6" and 8" water lines on Moncure School Road. -How will 8" water line cross perennial stream? • Proposed permanent blowoff hydrant at Orleans Dr. cul de sac. Why located there? [Blowoff hydrant is used for flushing dead end water mains. Dead end water mains do not provide enough flow to keep water fresh & chlorine levels present.] Only one needed? Not at another cul-de-sac.How often is a dead end main flushed? [Once a year?
12. Show wastewater management systems on a map.	 Fig. 3: Will existing power line remain in place? Showed septic soils; 3 lots (#59, 71, 72) have septic fields not proximate to homes. Community septic? What happens if lot fails septic evaluation by the county health department? Redesign lot size? p. 47. Lists min. distances [in ft.] from features. What type of septic system design is typically used near wetlands and delineated streams? #59 property is going around Minter property #71 is on top of 50' wetland buffer
13. Show proposed areas of impervious and semi-pervious surfaces.	Narrative states 15.7 acres (10.3%)of impervious post-construction, but not designated on map.
14. Show and describe any proposed stormwater control devices.	Four on site plan, but #1 and #4 are close to perennial stream. #4 is hidden from street view, behind a house - will it be maintained properly?
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 is a substitute for the Conservation Subdivision for 158 lots on this site that was denied by Planning Board in 2021. Application withdrawn prior to BOC public hearing, therefore eligible to file new plan, this time as conventional subdivision of 78 lots. p. 2. A permanent road will impact ~60 LF of stream. Why did USACE not grant proposed access to Jordan Dam Road? [See 1. Under Alternatives Analysis.] What alternative if stream crossing not approved?
2.	Discuss how the preferred alternative was selected and its benefits relative to other alternatives (including a no-build alternative, if applicable).	Generic, need housing in area because of growth. A no-build alternative would have benefits to community and ecology that are not discussed.
_	g Environment and Project Impacts h resource topic below, describe:	
A.	Existing resources and conditions.	Included
В.	Anticipated impacts (short-term construction impacts, long-term operation impacts, and indirect or secondary impacts.)	Conventional subdivision, no long-term impacts since wetlands and streams will be protected As is typical of EIAs, this is not an adequate discussion of 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.	Included
D.	For unavoidable impacts, describe whether any compensatory mitigation is planned or required.	Included p. 9. If proposed impacts exceed mitigation thresholds compensatory mitigation will be sought through a private mitigation bank, provided that credits are available. If credits are not available, payment to the In-Lieu Fee program can be made.
1.	Geography	
•	Discuss the geographic setting, geology, and topography of the project area and adjacent areas.	Included
•	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.).	Included

•	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.	None project site is located within Zone X-Area of Minimal Flood Hazard (Appendix A, Fig. 5).
•	Show areas that will be graded or filled, and provide estimated cut/fill volumes.	Not answered, says just timbering and grubbing.
•	If the project includes pond or dam work, show areas that will be flooded.	None
2.	Soils and Prime Farmlands	Included
•	Identify dominant soils in the project area (county GIS or NRCS website) and show on a map.	Included
•	Discuss any soil constraints (fill, wetland soils, septic suitability, slopes, etc.) and indicate those areas on a map.	Included
•	Describe any soil disturbance or contamination expected as a result of this project.	Included
•	If contamination is expected, discuss containment plans and procedures.	included
•	If soil will be relocated, specify the number of square yards/feet to be moved, and its relocation site.	Page 10 "not anticipated" but it would be relocated to "upland areas". No amount specified.
•	Describe runoff management plans for the project.	Included for construction 4 Stormwater Control Management devices described Should name Chatham County S&EC as local program
•	If soil disturbance is proposed, describe the off-site impacts expected from this activity.	Included
•	Provide a map of any prime or unique farmland soils in the project or service areas, and include reference used to make this determination.	41.4 acres of prime farmland and farmland of state importance identified.

•	Describe impacts to prime or unique farmland soils, including acreage estimates of lost farmland soils and retained farmland soils.	Project will impact 35.2 acres of prime farmland soils will be impacted by home construction, 4.9 as septic fields and 1.02 conserve for open space. EIS states that no agric. use now except for silvaculture because of rocky soils and steep slopes.
3.	Land Use	Included
•	Provide a map showing current use of land on the site and surrounding properties.	Included
•	Discuss how the current land use fits into the surrounding area (conservation, development, ecological function, etc.)	Timbering since 1999 Will the small area of dry mesic oak hickory forest with narrow strip along Moncure School Road be conserved for natural area?
•	Provide the current zoning of the project site and the surrounding area.	R-1
•	Discuss how the proposed uses fit into the intended land use of the area (conservation, development, ecological function, quality of life).	Housing. Protection of streams and wetlands that will conserve 40 % of tract as open space.
•	Indicate whether zoning or local land use plans will need to be changed after project completion.	No
4.	Wetlands	
•	Indicate whether wetlands are present, describe the basis for this determination and identity of the person who made the determination.	Yes, included
•	Show identified wetlands on a map, and describe all relevant details, such as acreage, types, delineation, function, etc.)	Included
•	If wetlands are to be filled, specify the number of acres that will be affected.	None
•	List all required permits and permitting agencies.	Included
•	If any diversions/additions/withdrawals of surface water will affect wetlands, describe those activities.	None
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.	Included
6.	Areas of Archaeological or Historical Value	
•	Discuss any archaeological or historical studies of the project location; provide relevant references.	Included
•	Describe and identify on a map any structures (i.e., walls, buildings, etc.) on the site and provide estimated ages of those structures.	Included
•	Describe all impacts to any archaeological or historical resources in the proposed project area.	Chatham Historical Society wants cemetery survey, even though relative signed-off. NC SHPO recommends archaeological evaluation.
•	Describe plans for demolishing or rebuilding any structures.	None
•	Provide photographs of any significant resources, including all structures older than 50-years.	None
•	Provide relevant correspondence with the Chatham County Historical Association and NC SHPO.	Included, request in 2021 from CCHA and SHPO to seek potential cemetery on this parcel since was early 1800s plantation
7.	Air Quality	
•	Describe the project's impacts on ambient air quality.	Included, no permits needed.
•	Describe plans for any open burning during or after construction.	Application mentions controlled burning, and since timbering/grubbing lots of acres, what is the intention? How much burning? What will impact be on air quality, neighboring properties and school?
•	Indicate the number of proposed parking spaces, if applicable.	Included: 2 per house in driveway; NONE on street.
•	Describe whether the project will increase odor levels, or the likelihood of odor complaints.	Included
•	Provide a copy of any required traffic studies.	DOT does not require TIA, but could provide later. Two exits on Moncure School Rd. US ACE will not permit entrance on Jordan Dam Rd.

8.	Noise Levels	
•	Discuss current noise levels; use a benchmark if possible.	Included
•	Describe any increases in noise levels expected from this project.	Included
•	Specify the distance at which the increased noise will be heard.	What will impact be on Moncure Elementary School?
•	Discuss whether surrounding properties will be affected by noise levels.	See above question
•	If commercial uses are proposed, specify the hours of operation.	N/A
9.	Light Levels	
•	Describe lighting plans for the project, including how lighting will impact adjacent residents and wildlife.	No lighting plan will use Duke Energy street lighting, cast downward. EIA states "no excessive amounts of artificial light. Therefore, the proposed project will have no significant impact on artificial light pollution or wildlife." This seems like opinion rather than fact, since we have no further info to understand what the actual impact will be.
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.	Included
•	Include names, locations, classifications, and use support ratings for surface waters.	Included
•	Specify and show on a map the river basin in which the project is located.	Included
•	Discuss any known groundwater quality issues.	Included
•	Discuss drinking water sources.	Included. Will use county water, EIA says groundwater quantity considered inadequate
11	. Fish and Aquatic Habitats	
•	Describe fish and aquatic habitats in and adjacent to the site/project area.	Included

•	Discuss impacts to fish and aquatic life and their habitats, including a map showing those habitats.	Discussed but no maps
12.	Wildlife and Natural Vegetation	
•	Describe and provide a map of natural community types on and adjacent to the site/project area.	Included
•	List the species of dominant plants and animals observed on the site that typify those communities.	Included, but little wildlife observed on visit. (on one visit in 2020)
•	Evaluate and discuss whether suitable habitat exists for rare, threatened, and /or endangered species, as described y the NC Natural Heritage Program.	Included USFWS said may affect northern long-eared bat
•	If wildlife will be displaced, discuss any limitation of adjacent areas to support them.	The EIA says "Wildlife is not anticipated to be displaced by the proposed project." Since area is currently forested, and will be timbered and grubbed, this has wildlife impact and displacement. Ray Bode's note in 2021 evaluation said "This acreage should be calculated for the area of tree removal regardless of the need for grading." Adjacent areas cannot adequately support wildlife displaced from development as that habitat is typically already inhabited by the number of species it can sustain, and other species such as box turtles or fledgling birds may not survive displacement.
•	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.	Included
•	If forest will be cleared, discuss the extent of planned deforestation and specify the forestry methods to be used, including BMPs.	EIA DID NOT DISCUSS THIS. We only know that area is completely forested now. How are they going to remove trees and grub the home sites and septic fields?
13.	Hazardous Materials	
•	List all hazardous materials to be stored or introduced during construction or operation.	Included

From Jeannie A. For each hazardous material, other than FYI • 6. Whole scrap tires, as provided in G.S. deminimis quantities or for routine 130A-309.58(b). The prohibition against landfilling housekeeping purposes, describe the whole tires applies to all whole pneumatic rubber procedures to be used to ensure their coverings but does not apply to whole solid rubber proper management, storage, and coverings. disposal. • Creosote is a registered pesticide used as a wood preservative; the EPA has approved it only for outdoor commercial use. Classified as hazardous waste, creosote and materials containing it, such as railroad ties, must be deposited in a special landfill. NC Newsline • Were the rail ties removed during the threemonth interval between the two site assessments? • • Misc. debris [~one truckload) to be removed. • Does this include tires? • Were the rail ties separated from tires and dwelling debris and disposed as Hazardous Solid Waste? Included References Included Exhibits (Maps, Figures, Tables, Photos, etc.) Included State and Federal Permits Required RECOMMENDATION ERAC considers this EIA to be acceptable. We would like to see the questions and comments we raised in this review to be addressed.